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# ANNUAL REPORT

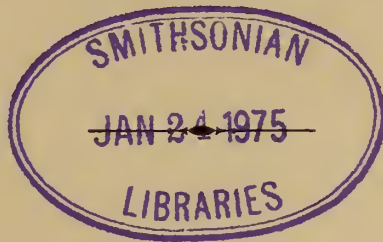


OF THE

# COMMISSIONER OF PATENTS

FOR

THE YEAR 1883.



WASHINGTON:  
GOVERNMENT PRINTING OFFICE.  
1884.





LETTER  
FROM  
THE SECRETARY OF THE INTERIOR  
TRANSMITTING  
REPORT OF THE COMMISSIONER OF PATENTS.

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JANUARY 31, 1884.—Referred to the Committee on Patents and ordered to be printed.

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DEPARTMENT OF THE INTERIOR,  
WASHINGTON, *January 30, 1884.*

*The Speaker of the House of Representatives:*

SIR: I have the honor to transmit herewith the report of the Commissioner of Patents, showing the operations of his Office for the year ending December 31, 1883, as required by section 494 of the Revised Statutes.

Very respectfully,

H. M. TELLER,  
*Secretary.*





# ANNUAL REPORT

## OF THE

# COMMISSIONER OF PATENTS

## TO CONGRESS,

FOR THE YEAR ENDING DECEMBER 31, 1883.

Laid before the House of Representatives by the Speaker *pro tempore* January 31, 1884, referred to the Committee on Patents, and ordered to be printed.

### DEPARTMENT OF THE INTERIOR, UNITED STATES PATENT OFFICE, Washington, D. C., January 29, 1884.

*To the Senate and House of Representatives of the United States of America in Congress assembled:*

In compliance with the requirements of section 494 of the Revised Statutes, I have the honor to submit the following report of the business of this Office for the year ending December 31, 1883.

#### RECEIPTS.

*Detailed statement of all moneys received for patents, for copies of records or drawings, or from any source whatever.*

Applications (including caveats, trade-marks, and disclaimers):  
Cash received ..... \$961,785 00  
Cash refunded ..... 2,160 00

Net cash ..... 959,625 00  
Certificates of deposit ..... 61,040 00

Total cash and certificates ..... 1,020,665 00

Copies:  
Cash received ..... 79,549 15  
Cash refunded ..... 1,910 75

Net cash ..... 77,638 40  
Certificates of deposit ..... 923 65

Total cash and certificates ..... 78,562 05

Recording assignments:  
Cash received ..... 28,405 90  
Cash refunded ..... 1,390 05

Net cash ..... 27,015 85  
Certificates of deposit ..... 603 50

Total cash and certificates ..... 27,619 35

Subscription to Official Gazette:  
Cash received ..... 13,134 70  
Cash refunded ..... 55 90

Net cash ..... 13,078 80  
Certificates of deposit ..... 65 30

Total cash and certificates ..... 13,144 10

Registration of labels:  
Cash received ..... 5,483 00  
Cash refunded ..... 120 00

Net cash ..... 5,363 00  
Certificates of deposit ..... 126 00

Total cash and certificates ..... 5,489 00

Proceeds of sale of rejected models ..... 760 50

#### *Aggregates.*

Cash received ..... \$1,089,118 25  
Cash refunded ..... 5,636 70

Net cash ..... 1,083,481 55  
Certificates of deposit ..... 62,758 45

Total cash and certificates ..... 1,146,240 00

#### EXPENDITURES.

*Amount expended under the several appropriations from January 1, 1883, to January 1, 1884.*

Salaries ..... \$543,160 15  
Contingent expenses (to June 30, 1883) ..... 10,642 99

[By act of Congress, approved March 3, 1883, making appropriations for the legislative, executive, and judicial expenses of the Government for the fiscal year ending June 30, 1884, it was provided that the contingent funds of the various bureaus of the Department of the Interior be consolidated. The contingent expenses herein mentioned therefore only cover a period of six months.]

Official Gazette ..... 34,220 00  
Photolithographing ..... 66,091 49  
Copies of drawings ..... 14,990 18  
Scientific library ..... 6,130 05

Total ..... 675,234 86

#### *Statement of contingent expenses in detail.*

Stationery and books ..... \$267 52  
File-holders ..... 60 50  
Card-board ..... 257 00  
Furniture ..... 453 71  
Hardware ..... 175 33  
Painting ..... 139 00  
Carpets, &c ..... 498 84  
Services ..... 1,907 70  
Ice ..... 447 47  
Engraving and printing ..... 401 47  
Desks, cases, and repairing ..... 2,018 55  
Tin shelves ..... 14 00  
Washing towels, horse livery, paste, lumber, telephone, winding clocks, and sundries ..... 4,001 80

Total ..... 10,642 99

#### RECEIPTS OVER EXPENDITURES.

Total receipts ..... \$1,146,240 00  
Total expenditures ..... 675,234 86

Receipts over expenditures ..... 471,005 14

#### *Statement of balance in the Treasury of the United States on account of the Patent fund.*

Amount to the credit of the fund January 1, 1883... \$2,205,471 10  
Amount of receipts during the year 1883..... 1,146,240 00

Total ..... 3,351,711 10  
Deduct expenditures for year 1883..... 675,234 86

Balance January 1, 1884..... 2,676,476 24

#### SUMMARY OF THE BUSINESS OF THE OFFICE.

Number of applications for patents for inventions..... 33,073  
Number of applications for patents for designs..... 1,238  
Number of applications for reissues of patents..... 265

Total number of applications relating to patents..... 34,576

Number of caveats filed ..... 2,741  
Number of applications for registration of trade-marks..... 915  
Number of applications for registration of labels..... 834

Number of disclaimers filed.....	18
Number of appeals on the merits.....	640
Total.....	5, 148
Total number of applications requiring investigation and action.....	39, 724
Number of patents issued, including designs.....	22, 216
Number of patents reissued.....	167
Number of trade-marks registered.....	902
Number of labels registered.....	906
Total number of patents granted and certificates issued.....	24, 191
Number of patents expired during the year.....	8, 874
Number of patents withheld for non-payment of final fee..	2, 366

## PATENTS ISSUED.

*Patents issued to citizens of the United States, with the ratio of population to each patent granted.*

States and Territories.	Patents and Designs.	One to every—
Alabama.....	77	16, 396
Arizona Territory.....	14	2, 888
Arkansas.....	59	13, 602
California.....	596	1, 450
Colorado.....	119	1, 633
Connecticut.....	883	705
Dakota Territory.....	30	4, 505
Delaware.....	36	4, 070
District of Columbia.....	217	818
Florida.....	24	11, 228
Georgia.....	115	13, 410
Idaho Territory.....	6	5, 435
Illinois.....	1, 792	1, 717
Indiana.....	712	2, 777
Iowa.....	445	3, 650
Kansas.....	189	5, 270
Kentucky.....	228	7, 231
Louisiana.....	80	11, 749
Maine.....	183	3, 546
Maryland.....	260	3, 595
Massachusetts.....	273	820
Michigan.....	727	2, 251
Minnesota.....	210	3, 717
Mississippi.....	51	22, 188
Missouri.....	625	3, 469
Montana Territory.....	17	2, 303
Nebraska.....	87	5, 200
Nevada.....	23	2, 707
New Hampshire.....	139	2, 496
New Jersey.....	1, 066	1, 061
New Mexico Territory.....	11	10, 869
New York.....	4, 359	1, 166
North Carolina.....	87	16, 088
Ohio.....	1, 604	1, 993
Oregon.....	76	2, 239
Pennsylvania.....	2, 168	1, 975
Rhode Island.....	327	845
South Carolina.....	47	21, 182
Tennessee.....	124	12, 438
Texas.....	208	7, 652
Utah Territory.....	21	6, 855
Vermont.....	109	3, 048
Virginia.....	122	12, 398
Washington Territory.....	21	3, 576
West Virginia.....	82	7, 542
Wisconsin.....	394	3, 338
Wyoming Territory.....	5	4, 157
United States Army.....	6	.....
United States Navy.....	3	.....
Total.....	20, 957	.....

*Patents issued to citizens of foreign countries.*

Of patents issued to foreigners there were granted to citizens of—

Anstralia.....	10
Anstria.....	33
Belgium.....	20
Bermuda.....	1
Brazil.....	1
Canada.....	251
Central America.....	3
Cuba.....	5
Denmark.....	2
East Indies.....	2
England.....	435
France.....	179
Germany.....	235
Hawaiian Islands.....	2
Holland.....	2
Italy.....	3

*Patents issued to citizens, &c.—Continued.*

Japan.....	2
Mexico.....	2
Newfoundland.....	1
New Zealand.....	4
Norway.....	4
Peru.....	2
Russia.....	5
Spain.....	2
Sweden.....	12
Switzerland.....	22
Turkey.....	3
United States of Colombia.....	2
Venezuela.....	1
Victoria.....	4
West Indies.....	4
Total.....	1, 259

*Comparative statement of the business of the Office from 1837 to 1883, inclusive.*

Year.	Applica-tions.	Caveats filed.	Patents and re-issues.	Cash re-ceived.	Cash ex-pended.	Surplus.
1837.....	.....	.....	435	\$29, 289 08	\$33, 506 98	.....
1838.....	.....	.....	528	42, 123 54	37, 402 10	\$4, 721 44
1839.....	.....	.....	425	37, 260 00	34, 543 51	2, 716 49
1840.....	735	228	473	38, 056 51	39, 020 67	.....
1841.....	847	312	495	40, 413 01	52, 666 87	.....
1842.....	761	391	517	36, 505 68	31, 241 48	5, 264 20
1843.....	819	315	510	35, 315 81	30, 776 06	4, 538 85
1844.....	1, 045	380	495	42, 509 26	36, 244 73	6, 264 53
1845.....	1, 246	452	504	51, 076 14	39, 395 65	11, 680 49
1846.....	1, 272	448	638	50, 264 16	46, 158 71	4, 105 45
1847.....	1, 531	553	569	63, 111 19	41, 878 35	21, 232 84
1848.....	1, 628	607	652	67, 576 69	58, 905 84	8, 670 85
1849.....	1, 955	595	1, 068	80, 752 92	77, 716 44	3, 036 54
1850.....	2, 193	602	993	86, 927 05	80, 100 95	6, 816 10
1851.....	2, 258	760	872	95, 738 61	86, 916 93	8, 821 68
1852.....	2, 639	996	1, 019	112, 656 34	95, 916 91	16, 739 43
1853.....	2, 673	901	961	121, 527 45	132, 609 83	.....
1854.....	3, 328	868	1, 544	163, 789 84	167, 146 32	.....
1855.....	4, 435	906	2, 012	216, 459 35	179, 540 33	36, 919 02
1856.....	4, 960	1, 024	2, 506	192, 588 02	199, 931 02	.....
1857.....	4, 771	1, 010	2, 896	196, 132 01	211, 582 09	.....
1858.....	5, 364	934	3, 695	203, 716 16	193, 193 74	10, 522 42
1859.....	6, 225	1, 097	4, 504	245, 942 15	210, 278 41	35, 663 74
1860.....	7, 653	1, 084	4, 778	256, 352 59	252, 820 80	3, 531 79
1861.....	4, 643	700	3, 329	137, 354 44	221, 491 91	.....
1862.....	5, 038	824	3, 532	215, 754 99	182, 810 39	32, 944 60
1863.....	6, 014	787	4, 184	195, 593 29	189, 414 14	6, 179 15
1864.....	6, 932	1, 063	5, 025	240, 919 98	229, 868 00	11, 051 98
1865.....	10, 664	1, 937	6, 616	348, 791 84	274, 199 34	74, 592 50
1866.....	15, 269	2, 723	9, 458	495, 665 38	361, 724 28	133, 941 10
1867.....	21, 276	3, 597	13, 026	646, 581 92	639, 263 32	7, 318 60
1868.....	20, 420	3, 705	13, 410	681, 565 86	628, 679 77	52, 886 09
1869.....	19, 271	3, 624	13, 997	693, 145 81	486, 430 78	206, 715 03
1870.....	19, 171	3, 273	13, 333	669, 456 76	557, 149 19	112, 307 57
1871.....	19, 472	3, 366	13, 056	678, 716 46	560, 595 08	118, 121 38
1872.....	18, 246	3, 090	13, 613	699, 726 39	665, 591 36	34, 135 03
1873.....	20, 414	3, 248	12, 864	703, 191 77	691, 178 98	12, 012 79
1874.....	21, 602	3, 181	13, 599	738, 278 17	679, 258 41	58, 999 76
1875.....	21, 638	3, 094	14, 837	743, 453 36	721, 657 71	21, 795 65
1876.....	21, 425	2, 697	15, 595	757, 987 65	652, 542 60	105, 445 05
1877.....	20, 308	2, 809	14, 187	732, 342 85	613, 152 62	119, 190 23
1878.....	20, 260	2, 755	13, 444	725, 375 55	593, 082 89	132, 292 66
1879.....	20, 059	2, 620	13, 213	703, 931 47	529, 638 97	174, 292 50
1880.....	23, 012	2, 490	13, 947	749, 685 32	538, 865 17	210, 820 15
1881.....	26, 059	2, 406	16, 584	853, 665 89	605, 173 28	248, 492 61
1882.....	31, 522	2, 553	19, 267	1, 009, 219 45	683, 867 67	325, 351 78
1883.....	34, 576	2, 741	22, 383	1, 146, 240 00	675, 234 86	471, 005 14

It will be observed that the business of the Office has greatly increased during the past year, and it is now increasing in a steady ratio. With this increase of business there is, of course, a corresponding increase in the receipts of the Office, the amount paid in during the year ending December 31, 1883, being \$1,146,240.00, which is \$137,020.55 in excess of the amount received during the year 1882, and \$471,005.14 in excess of all expenditures by and for the bureau during the year last past.

## AN INCREASE OF FORCE NECESSARY.

I wish, in connection with the above exhibit, to respectfully call the attention of Congress to certain facts, which I trust may have some influence in securing the adoption of such measures as will in the future remove all just cause for the complaints that reach me from all



quarters and sections of the country touching the delay in dispatching the business which comes to this bureau.

I am daily in receipt of communications severely censuring the honorable Secretary and the Commissioner for not employing such additional force as is necessary to bring and keep the work of the bureau up to date. The impression seems to prevail that since the patrons of the Office have provided the funds for the prompt disposition of their business, some blame attaches to the Department or to this Office for not applying the money to the purpose for which it was received. I am daily appealed to by Senators and Members to make applications special, on the ground that if an examination is delayed until the case is reached in its regular order the value of the patent may be in large measure lost to the inventor. Although well disposed to oblige my friends, I cannot, without violating a well-considered rule of the bureau, comply with these requests. I know these delays are not only vexatious, but in some instances very disastrous to the interests involved. There is no valid reason why a single application should remain a week in the Office without being taken up for action, and as little excuse for compelling assignees of interests in patents to wait several months before their deeds can be recorded. Parties entitled to copies of records, which are indispensable as evidence on the trial of pending causes, are compelled to wait several weeks before they can be furnished.

The examining corps is greatly behind with its work simply because it is a physical impossibility with the number employed to keep it up. It has frequently been suggested that the force of the Office does not accomplish as much as ought to be required of it. Since I have taken charge of the Office I have been at pains to ascertain if those employed in the bureau are unfaithful or shirk duty in any wise. I note first that under the rules of the Office shirking is next to impossible, and absence in excess of the thirty days authorized by statute (unless in case of sickness) is not allowed, except in rare instances, and without pay. I am satisfied that no private employer in the country has more faithful and excellent service from his employes than is rendered by those employed in this bureau. There are exceptions, but they are very few, and, I may add, that in such cases what the individuals lack in earnest effort in the discharge of duty here they endeavor to make up by exceptional activity in securing influence and indorsement to induce the Department to retain them in the service and promote them.

It is evident that the Government never intended to make the Patent Office a source of revenue. It was and is desired to make it self-sustaining, and the fees were fixed and are as low as was and is deemed compatible with the possibility of providing ample revenue to secure all necessary facilities of every kind and character for the prompt and thorough dispatch of the business properly coming before it. Not a cent of money expended, directly or indirectly, for the support and maintenance of the Patent Office is raised by taxation. Every dollar is paid by those who have business before the Office—the inventors of the country. It is beyond question that not only the inventors and those immediately interested in inventions, but the great body of

the people as well, are interested in having the business of this bureau done promptly and thoroughly. The inventor does not want a worthless patent, nor are the people willing to pay a royalty when none can be justly claimed, nor do they wish to go into the courts to test the validity of a patent. The inventor not only wants to know whether he is legally entitled to a patent for the subject-matter of his application, but he desires and is entitled to have the question speedily determined.

To provide ample accommodations and a thoroughly-competent corps of examiners, clerks, and needful help, the inventors have paid to the Government a sufficient fund, which is held in trust for that purpose. Under these circumstances I respectfully submit that force enough should be employed to dispatch the business of the bureau thoroughly and without needless delay. The present force is utterly inadequate, nor will the increase suggested by my predecessor be sufficient.

#### INCREASE IN SALARIES.

I concur in what my predecessor said in his report, dated September 14, 1883, to the honorable the Secretary of the Interior in regard to salaries. The examining corps in this bureau should be composed of men of first-class ability and undoubted integrity. It is of consequence to inventors and to the people at large that patents should not be improvidently issued. The examining corps must, in the main, be relied upon to prevent this. Not one patent in fifty comes under the personal supervision of the Commissioner or his assistant. The examiners determine these important questions in the first instance, and in a great majority of cases *first* and *finally*. The Government, I submit, can afford (especially when inventors provide the funds) to pay as full compensation for first-class ability and strict integrity as a private individual or corporation. The experience of the Office is, that it is next to impossible to secure, with the hope of retaining for more than a short period, assistant examiners whose thorough fitness renders them especially valuable to the service. They are constantly leaving to accept more lucrative employment outside. Since every conceivable advantage is on the side of *just*, not to say *liberal*, compensation, I trust it may please Congress to adopt the suggestions of my predecessor and provide the increase of salaries indicated in the estimates submitted, as well as for the increase of the force employed.

#### ROOM.

I cannot refrain from repeating what Mr. Commissioner Marble said in regard to the rooms occupied by the bureau. They are inadequate. I am compelled to keep valuable documents and records piled on the floor; some are in rooms so damp that the papers are moldy.

Many of the employes occupy small, dark, and damp rooms, and in numerous cases their health has been seriously impaired. Within a few years the entire building now occupied by the Department of the Interior will be required by this Office for the proper accommodation of its force and the safe keeping of its records and files.

Very respectfully, your obedient servant,

BENJ. BUTTERWORTH,

Commissioner.



# ALPHABETICAL LIST

## OF

# PATENTEES FOR THE YEAR 1883.

[Patentees of Designs, Trade-Marks, and Labels, and parties who have filed Disclaimers follow this in separate indexes, but precede the Alphabetical List of Inventions.]

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Specification.	Drawing.	Volume.	Page.
Abadio, Egbert, Paris, France. Machine for printing endless paper .....	276,547	May 1	1	1	23	1627
Abbo, John R., South Windham, Conn. Buffing-wheel .....	277,097	May 8	740	{ 194 195 }	{ 23 23 }	1758
Abbe, John R., Manchester, N. H. Buffing-wheel .....	284,705	Sept. 11	673	189	24	1024
Abbot, Charlotte E., Portland, Mo. Folding table .....	286,891	Oct. 16	1398	384	25	267
Abbott, Alfred T., New York, N. Y. Mangle .....	289,034	Nov. 27	1588	439	25	807
Abbott, Benjamin R. (See Gray and Abbott.)						
Abbott, George. (See Armstrong and Abbott.)						
Abbott, George, Jr., Moorestown, N. J. Milk-can top .....	288,391	Nov. 13	768	207	25	648
Abbott, George F., Haverhill, Mass. Device for attaching neckties to collars .....	275,876	Apr. 17	1323	364	23	1468
Abbott, James H. (See Howland, Frederick L., assignor.)						
Abbott, Jonathan P., Cleveland, Ohio. Eaves-trough hanger .....	276,654	May 1	142	36	23	1650
Abbott, Jonathan P., Cleveland, Ohio. Eaves-trough hanger .....	285,371	Sept. 25	1485	419	24	1181
Abbott, Phillips, Brooklyn, N. Y. Cigar-cutter .....	275,009	Apr. 3	166	44	23	1254
Abbott, T. G., et al. (See Wenle, Henry P., assignor.)						
Abbott, Warren M., et al. (See Peck, Orrin B., assignor.)						
Abbott, Warren M., Chicago, Ill. Brake-shoe .....	277,098	May 8	742	195	23	1758
Abbott, William. (See Baker and Abbott.)						
Abel, William G., assignor of one-third to A. King, Titusville, Pa. Gate-valve .....	287,788	Nov. 6	1	1	25	507
Abel, William G., assignor of one-half to J. R. Barber, Titusville, Pa. Hose-coupling .....	290,195	Dec. 18	1017	287	25	1083
Abel, William G., assignor of one-half to J. R. Barber, Titusville, Pa. Ball and expansion-pipe connection .....	290,196	Dec. 18	1018	287	25	1083
Abele, William, Zanesville, Ohio. Sash-holder .....	284,993	Sept. 18	1031	289	24	1095
Abell, John, Woodbridge, Ontario, Canada. Steam-boiler furnace .....	273,421	Mar. 6	232	63	23	873
Abendroth Brothers. (See Fisher, George A., assignor.)						
Abercrombie, Frank P., Woodbury, N. J. Car-ventilator .....	272,371	Feb. 13	972	271	23	621
Aberle, Fredrick, assignor, by mesne assignments, to F. Egge, Bridgeport, Conn. Mechanical toy .....	289,491	Dec. 4	152	41	25	912
Abner, Christian. (See Hemje, Charles, assignor.)						
Abner, Christian, Washington, D. C. Machine for cutting, separating, and mixing tobacco .....	283,739	Aug. 28	1537	435	24	803
Aborn, Frank, assignor of one-half to F. H. Lumte, Cleveland, Ohio. Developing or tracing machine .....	282,831	Aug. 7	425	121	24	575
Aborn, James, Providence, R. I. Filtering-faucet .....	270,881	Jan. 23	1303	377	23	275
Abraham, John D. (See Herbert, Henry, assignor.)						
Abraham, Lewis. (See Knight, William H. H., assignor.)						
Abraham, William, Cincinnati, Ohio. Apparatus for measuring and cutting out garments .....	272,611	Feb. 20	1297	361	23	681
Abrams, George B. (See Knight, William H. H., assignor.)						
Abrams, Gustav, Stillwater, Minn. Register .....	286,671	Oct. 16	1122	302	25	219
Abt, Roman, Paris, France. Permanent way for mountain railways .....	2-4,790	Sept. 11	786	219	24	1043
Acaster, Amos J., Sheffield, county of York, England. Device for rolling railway-rails .....	276,322	Apr. 24	1877	521	23	1571
Acies, James G., assignor to Gatling Gun Company, Hartford, Conn. Feeder for machine-guns .....	290,622	Dec. 18	1583	{ 435 436 }	{ 25 25 }	1180
Acheson, Nathan B., Youngstown, Ohio. Stove-drum .....	271,758	Feb. 6	207	58	23	476
Acheson, William, et al. (See Phelan, John, assignor.)						
Acker, James C., et al. (See Depew, John H., assignor.)						
Ackerley, Aaron A., Chicago, Ill. Steam-engine cut-off valve .....	288,196	Nov. 13	507	141	25	605
Ackerly, Nathaniel S., Huntington, N. Y. Elevator-bucket .....	288,197	Nov. 13	508	141	25	605
Ackerman, Abram N., Passaic, N. J. Gudgeon-roller .....	283,551	Aug. 21	1303	365	24	748
Ackerman, John A. O. Mitchell, and F. M. Underwood, Columbus, Ohio. Saw-mill dog .....	274,099	Mar. 20	1097	303	23	1037
Ackerman, Lyman, Dexter, N. Y. Hay and grain unloader .....	273,422	Mar. 6	234	63	23	874
Ackermann, Hermann, Peru, Ill. Combined lid-lifter, tongs, and poker .....	277,531	May 15	1260	338	23	1855
Ackley, Thaddeus, Warren, Ohio. Speed indicator .....	273,423	Mar. 6	235	63	23	874
Acnff, William H., et al. (See Ferguson, Robert W., assignor.)						
Acnff, William H., et al. (See Foster, Hickman E., assignor.)						
Adair, James, Sewickley, Pa. Fire-place lining .....	272,013	Feb. 13	535	145	23	545
Adair, Robert G. (See McAlpin, Joseph, assignor.)						
Adam, August, Reno, Nev. Potato-digger .....	290,305	Dec. 18	1158	{ 324 325 }	{ 25 25 }	1106
Adam, William, Kidderminster, county of Worcester, England. Chenille weft and manufacturing the same .....	289,203	Nov. 27	1766	490	25	840
Adams, Albert J. (See Kells and Adams.)						
Adams, Alfred. (See Stockwell, Levi W., assignor.) (Reissue.)						
Adams, Alfred, Cleveland, Ohio. Machine for making paper bags .....	279,114	June 12	641	175	23	2243
Adams, Alonzo S., Boston, Mass. Automatic tongs .....	273,243	Mar. 6	1	1	23	835



## INDEX OF PATENTS ISSUED FROM THE

*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Adams, Alpheus E. (See Knapp and Adams.)						
Adams, Azro H., assignor of one-fourth to J. G. Hurley, Santa Rosa, Cal. Boring-brace ..	282,251	July 31	2426	667	24	444
Adams, Benjamin F., Brooklyn, N. Y. Refrigerator .....	271,391	Jan. 30	1940	561	23	390
Adams, Benjamin F., Brooklyn, N. Y. Refrigerator .....	290,306	Dec. 18	1159	325	25	1107
Adams & Co., F. F. (See Chapman, George, assignor.)						
Adams Company, F. F. (See Morris, John H. and T. D., assignors.)						
Adams, David E., administrator. (See Willoughby, James D.)						
Adams, Dewey F., Providence, R. I. Gem-setting .....	270,921	Jan. 23	1353	390	23	283
Adams Electric Company. (See Adams, Wellington, assignor.)						
Adams, Franklin F., Erie, Pa. Truck .....	284,586	Sept. 11	525	149	24	999
Adams, George, and M. M. Jenkins, Sherburne, Minn. Cockle-seed separator .....	271,392	Jan. 30	1941	562	23	390
Adams, George B., Newark, assignor of one-half to T. S. Crane, East Orange, N. J. Lead and crayon holder .....	270,197	Jan. 9	437	129	23	97
Adams, George B., Newark, assignor of one-fourth to T. S. Crane, East Orange, N. J. Lead or crayon holder .....	272,931	Feb. 27	1719	480	23	762
Adams, George B., Newark, assignor of one-half to J. Hardman, Jr., Belleville, N. J. Purse .....	288,539	Nov. 13	945	258	25	680
Adams, George E., Providence, R. I. Bar or toggle .....	273,792	Mar. 13	718	195	23	966
Adams, George E., Providence, R. I. Glove-fastener .....	275,796	Apr. 17	1235	335	23	1451
Adams, George E., Providence, R. I. Bar for jewelry-chains .....	288,592	Nov. 13	769	207	23	648
Adams, George H., Hill, N. H. Knitting-machine needle .....	282,029	July 31	2129	585	24	395
Adams, George L., assignor of one-half to J. C. Ellsworth, Fowlerville, Mich. Printing-press .....	276,207	Apr. 24	1718	475 476	23	1545
Adams, George Q. (See Comstock and Adams.)						
Adams, George Q. (See Merrick and Adams.)						
Adams, Henry. (See Davis, John H., assignor.)						
Adams, Hiram E., Boston, Mass., assignor to Adams Manufacturing Company, Portland, Me. Nail for boots and shoes .....	275,010	Apr. 3	167	44	23	1254
Adams, Isaac, Jr., Boston, Mass. Incandescent electric lamp .....	282,030	July 31	2150	585	24	395
Adams, J. McGregor. (See Harris, Arthur, assignor.)						
Adams, J. McGregor. (See Harris and Clark, assignors.)						
Adams, J. W., et al. (See Gates, Thomas, assignor.)						
Adams, James A., Falcon, Tenn. Horse and hand power .....	285,198	Sept. 18	1250	360	24	1138
Adams, John F., Eliza, Ill. Washing-machine .....	270,357	Jan. 9	631	186	23	133
Adams, John M. (See Carter and Adams.)						
Adams, John M., and W. F. Carter, San Francisco, Cal. Ore-concentrator .....	272,509	Feb. 20	1168	327	23	659
Adams, John Q., Kano, Ill. Nut-lock .....	277,866	May 22	1659	453	23	1931
Adams, John S., assignor to Elgin Tubular Iron Tower Company, Elgin, Ill. Tower for windmills. (Reissue) .....	10,292	Mar. 6	587	156	23	935
Adams, Joseph, Philadelphia, Pa. Knitting-machine .....	270,275	Jan. 9	527	155	23	113
Adams Manufacturing Company. (See Adams, Hiram R., assignor.)						
Adams, Marcus W. (See Harper, Nathan, assignor.)						
Adams, Nathaniel, Ickesburg, Pa. Bag-holder .....	277,651	May 15	1404	378	23	1879
Adams, Nelson B. (See Orvis and Adams.)						
Adams, Orasmus T. X., assignor to E. S. Pratt, Chicago, Ill. Boot or shoe clamp .....	278,385	May 29	2332	638	23	2056
Adams, Peter, Jr. (See Shepard and Adams.)						
Adams, Richard, Boston, Mass. Reclining-chair .....	279,115	June 12	642	175 176	23	2243
Adams, S. Jarvis, Pittsburg, Pa. Forming cores .....	272,612	Feb. 20	1298	302	23	082
Adams, S. Jarvis, Pittsburg, Pa. Method of and apparatus for forming molds .....	274,691	Mar. 27	1870	521 522	23	1180
Adams, Samuel. (See Simmons and Adams.)						
Adams, W. Irving, Montclair, N. J. Photographic developing pan or tray .....	289,951	Dec. 11	718	203	25	1019
Adams, Wellington, assignor to Adams Electric Company, St. Louis, Mo. Electric switch .....	285,778	Oct. 2	1	1	25	3
Adams & Westlake Manufacturing Company. (See Briggs and Robinson, assignors.)						
Adams & Westlake Manufacturing Company. (See Sloan, Frank, assignor.)						
Adams & Westlake Manufacturing Company. (See Van Hagen, Isaac, assignor.)						
Adams, William, Salem, Oreg. Car-coupling .....	270,171	Jan. 2	405	118	23	82
Adams, William H. (See Phillips, Russell, assignor.)						
Adams, William H., Boston, Mass. Car-brake .....	271,206	Jan. 30	1707	495	23	349
Adams, William Q., Portsmouth, Ohio. Brick .....	270,274	Jan. 9	526	155	23	113
Adams, William W., and D. R. Snelling, Ozark, Ark. Washing machine .....	269,984	Jan. 2	189	55	23	09
Adamson, Charles. (See Goodsell, Adamson, and Hering.)						
Adamson, J. Arthur, Philadelphia, Pa. Suspenders .....	279,306	June 12	858	238	23	2279
Adamson, Samuel E., Stapleton, N. Y. Branding-stamp .....	279,116	June 12	643	176	23	2243
Adcock, Joseph W., Utah, Ill. Corn-planter .....	272,111	Feb. 13	663	181	23	566
Addie, John, Boston, Mass., assignor of one-half to W. G. Bell, Hatchway-guard forelevators .....	272,932	Feb. 27	1721	481	23	762
Addy, Charles J., Malden, Mass., assignor to T. A. Dodge, trustee. Heel beading and wheeling tool .....	270,622	Jan. 16	981	283	23	208
Addy, Charles J., Malden, Mass., assignor to T. A. Dodge, trustee. Burnishing apparatus for boots or shoes .....	275,452	Apr. 10	772	207	23	1366
Adee, Frederick. (See Foley, James, assignor.)						
Adel, Wilmer T., San José, Cal. Two-wheeled vehicle .....	271,294	Jan. 30	1812	526	23	367
Ader, Clement, Paris, France. Telephonic transmitter .....	274,246	Mar. 20	1291	355 356	23	1072
Adgate, Joseph J., New York, N. Y. Wardrobe-bedstead .....	269,985	Jan. 2	190	55	23	40
Adgate, Joseph J., New York, N. Y. Wardrobe-bedstead .....	273,424	Mar. 6	236	64	23	874
Adie, Patrick, London, England. Lawn edge-trimmer .....	274,100	Mar. 20	1098	303	23	1037
Adjustable Cover Company. (See Goodwin, London R., assignor.)						
Adjustable Telephone Support Company. (See Loring, Charles T., assignor.)						
Adjustable Telephone Support Company. (See Tregurtha, James, assignor.)						
Adkisson, Duncan R., Corsicana, Tex. Bag holder and filler .....	271,759	Feb. 6	208	58	23	476
Adt, John B., Baltimore, Md. Apparatus for separating stems and dust from granulated tobacco .....	2 8,911	Nov. 20	1406	387	25	769
Afflerbach, Joseph. (See Schoonover and Afflerbach.)						
Ager, Upton A. (See Friend, Jesse L., assignor.)						
Agnew, Robert M., et al. (See Rote, Charles V., assignor.)						
Agnew, Thomas C., Creston, Ill. Harness-buckle .....	280,991	July 10	805	224	24	148
Ahearn, Thomas, Ottawa, Ontario, Canada. Fire-alarm telegraph .....	283,944	Aug. 28	1786	504	24	848
Ahearn, Thomas, Ottawa, Ontario, Canada. Electric time-detector .....	287,401	Oct. 30	2055	530	25	299
Ahern, John, et al. (See Lattimer, Francis, assignor.)						
Ahern, John A., et al. (See Lattimer, Francis, assignor.)						
Ahlert, John G. (See Ahlert, William F., J. P., and J. G.)						
Ahlert, Joseph P. (See Ahlert, William F., J. P., and J. G.)						
Ahlert, William F., J. P., and J. G., San Francisco, Cal. Velocipede .....	287,989	Nov. 6	257	73	25	552

## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.g.	Vol.	Page.
Ahrens, Christopher, Cincinnati, Ohio. Steam-generator	287,211	Oct. 23	1815	498	25	348
Aiken, Benjamin F., Jr., Millbury, assignor of one-half to C. W. Newhall, Jr., Worcester, Mass. Wire or metal cleaning bath	288,150	Nov. 6	439	.....	25	584
Aiken, George E. (See Parrish, William H., assignor.)						
Aiken, Walter, Franklin, N. H. Knitting-machine	279,902	June 26	1593	447	23	2417
Ainley, Thomas E., Golcar, near Huddersfield, county of York, England. Mechanism for feeding carding-machines	288,686	Nov. 20	1133	{ 311 312 }	25	719
Ainslie, James and R., Brooklyn, N. Y. Spring bed-bottom	277,652	May 15	1405	378	23	1879
Ainslie, Robert. (See Ainslie, James and R.)						
Ainsworth, Robert H., Montgomery, assignor of two-thirds to J. T. Hess and G. Housel, Lycoming County, Pa. Cutter-head	276,323	Apr. 24	1879	521	23	1571
Aitken, Alexander. (See Wetherbee, Albert C., assignor.)						
Aitken, Robert W., assignor of one-half to Pitts Agricultural Works, Buffalo, N. Y. Brake for traction-engines	288,753	Nov. 20	1220	333	25	734
Aitken, Thomas, Pittston, Pa. Coal and rock drilling machine	289,595	Dec. 4	281	78	25	937
Alamagny & Oriol. (See Rafer, Ernest E. and E. G., assignors.)						
Alapaw, Charles H. (See Halley, Samuel D., assignor.)						
Albach, W. Harrison, Mansfield, Ohio. Fruit-evaporator	283,552	Aug. 21	1304	365	24	748
Albany Aniline and Chemical Works. (See Wolff, Justus, assignor.)						
Albee, George H., Neenah, Wis. Loose pulley	276,208	Apr. 24	1719	476	23	1545
Albert, Charles F., Philadelphia, Pa. Retainer for violin-bows	277,653	May 15	1406	{ 378 379 }	23	1879
Albert, Henry, New Castle, Cal. Automatic safety-hatch for elevator-shafts	285,097	Sept. 18	1159	324	24	1116
Albertson, Albert, Jersey City, N. J., assignor to E. J. and G. Matthews, New York, N. Y. Apparatus for filling bottles with aerated beverages	282,481	Aug. 7	3	2	24	501
Albey, John, assignor to F. A. Wheeler & Co., Montclair, N. J. Automatic guide for paper-machines	270,718	Jan. 16	1108	317	23	232
Albien, Alexander, Mendota, Minn. Punching machine	283,740	Aug. 28	1538	435	24	803
Albies, Adolph, Atchison, Kans. Fire-wood circular saw	273,425	Mar. 6	237	64	23	874
Albies, Adolph, Atchison, Kans. Combined harrow and stalk-cutter	280,551	July 3	257	69	24	46
Albin, George W. (See McVey and Albin.)						
Albrecht, Charles H. (See Crawley and Albrecht.)						
Albrecht, Henry G., and C. Nielson, Wahpeton, Dak. Ter. Pad-tree for harness	284,160	Sept. 4	1	1	24	905
Albright, Andrew. (See Fox, Edward, assignor.)						
Albright, Andrew. (See Page, Clark D., assignor.)						
Albright, Andrew. (See Williams, Samuel T., assignor.)						
Albright, James H., Laurelton, Pa. Cultivator	289,055	Nov. 27	1588	439	25	808
Albright, Jonas C. (See Shute and Albright.)						
Albright, William L., assignor of one-third to H. Varwig, Cincinnati, Ohio. Car-coupling	271,674	Feb. 6	106	28	23	458
Albro, Charles E., Philadelphia, Pa. Machine for cutting teeth of metallic gear-wheels	281,819	July 24	1875	512	24	345
Albro, Charles E., Philadelphia, Pa. Gear-cutting machine	281,820	July 24	1876	512	24	346
Albro Company, E. D. (See Norton, Levi D., assignor.)						
Alcott, John H., Thomaston, Conn. Hat-hook	273,698	Mar. 13	591	159	23	943
Alday, John W. C., Dayton, Ohio. Archery-target	275,111	Apr. 3	301	83	23	1278
Alden, Albert S., assignor to Holyoke Machine Company, Holyoke, Mass. Paper-calendering machine	282,031	July 31	2131	585	24	395
Alden, Dana K., et al. (See Mower, Edwin F., assignor.)						
Alden, Enoch H., Alexandria, Minn. Portable fence	273,001	Feb. 27	1797	503	23	776
Alden, George C., et al. (See Benner, Lorenzo D., assignor.)						
Alden, Oakley W., et al. (See Mower, Edwin F., assignor.)						
Alden, Samuel R. (See Lacmmle, David, assignor.)						
Alderdyce, Thomas, Cambridge, Mich. Clothes-reel	271,675	Feb. 6	107	29	23	458
Alderman, Elbert E., Portville, N. Y. Bag-holder	277,654	May 15	1407	379	23	1879
Aldom, Edward, Brooklyn, N. Y. Spoon	275,112	Apr. 3	302	83	23	1278
Aldrich, Abbott L., Boston, Mass. Fire-escape	278,651	May 29	2654	726	23	2112
Aldrich, Andrew J., New York, N. Y. Strap-fastener	270,922	Jan. 23	1354	390	23	283
Aldrich, Frank E. (See Morrison, Caroline W., assignor.)						
Aldrich, Frank E., Boston, Mass. Machine for manufacturing rubber cloth. (Reissne)	10,325	May 15	1653	450	23	1924
Aldrich, Frank E., Boston, Mass. Rubber cloth or fabric	283,057	Aug. 14	697	.....	24	631
Aldrich, Hosea I., assignor of two-thirds to E. P. Drake and J. N. Lemon, St. Helena, Nebr. Eaves-gutter	280,111	June 26	1846	521	23	2461
Aldrich, James T., assignor to himself and W. H. Babcock, Norwich, Conn. Revolving fire-arm	283,185	Aug. 14	850	238	24	657
Aldrich, La Fayette, Milwaukee, Wis. Steam pipe and boiler covering	289,744	Dec. 4	468	132	25	968
Aldrich, Ralph W. E., Northampton, Mass. Fishing-float	270,358	Jan. 9	632	186	23	133
Aldrich, Wales, assignor to A. Hoover and W. Gamble, Miamisburg, Ohio. Grain-binder	274,692	Mar. 27	1874	522	23	1180
Aldrich, William H., and H. M. Lourie, Keokuk, Iowa. Windmill power-transmitter	272,014	Feb. 13	537	145	23	545
Aldrich, Wilson, Shortsville, N. Y. Cooling-rack for bent wooden bows	271,584	Feb. 6	1	1	23	441
Alexander, Alexander G., Detroit, Mich. Mechanism for operating discharge-valves	275,344	Apr. 10	621	167	23	1341
Alexander, Alexander G., Detroit, Mich., assignor to J. Gilliard, New York, N. Y. Valve	284,587	Sept. 11	526	149	24	999
Alexander, Eliza H., New York, N. Y. Braiding attachment for sewing-machines	281,225	July 17	1105	305	24	209
Alexander, George W., Reading, Pa. Lap-machine for hat-manufacturers	281,226	July 17	1106	305	24	209
Alexander, James H., Philadelphia, Pa. Spring-binge	269,926	Jan. 2	191	56	23	40
Alexander, John, Toronto, Ontario, Canada. Refrigerator	285,199	Sept. 18	1281	360	24	1138
Alexander, John W. (See Brock, William H., assignor.)						
Alexander, John W. (See Butler, Mount, and Alexander.)						
Alexander, John W., New York, N. Y. Car-coupling	272,399	Feb. 20	1025	287	23	635
Alexander, Lawrence M., Cavins, S. C. Cotton-seed planter	276,742	May 1	276	70	28	1672
Alexander, Louis, New York, N. Y. Piano attachment	277,824	May 15	1598	437	28	1914
Alexander, Robert B. (See Christopher and Alexander.)						
Alexander, Samuel G., assignor of two-thirds to P. Whipple, East Saginaw, and L. A. Trump, Reed City, Mich. Mold for making articles of felt	281,329	July 17	1240	344	24	282
Alexander, William A., Mobile, Ala. Galvanic battery	275,797	Apr. 17	1226	335	23	1451
Alexandre, Arthur, Paris, France. Fastening for closing purses	284,791	Sept. 11	786	219	24	1043
Alford, Byron. (See Van Campen, Harry D., assignor.)						
Alford, Samuel N., Portland, Oreg. Agricultural boiler	225,541	Sept. 25	1687	475	24	1217
Alfon, Andrew, Columbus, Ohio. Combined port-lid and hawse-pipe	280,552	July 3	258	69	24	47
Alfon, Andrew, assignor to himself, E. W. Turner, and H. K. Cowan, Columbus, Ohio. Iron-clad vessel	277,972	May 22	1779	{ 455 456 }	23	1951
Alger, Charles, Hndson, N. Y. Hot-blast stove for blast-furnaces	289,952	Dec. 11	719	203	25	1019
Alkin, Charles, Chicago, Ill. Draw-bar for cars	271,585	Feb. 6	2	1	23	441
Allaben, Orson M., Margaretville, N. Y. Ditching-machine	280,112	June 26	1847	521	23	2462
Allaben, Orson M., Margaretville, N. Y. Milk-can	284,792	Sept. 11	787	219	24	1043
Allaben, Orson M., Margaretville, N. Y. Saw	284,793	Sept. 11	788	219	24	1043



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Allaire, Charles B. (See McCarty and Johnson, assignors.)						
Allaire, Charles B., and C. M. Johnson, Peoria, Ill.; said Allaire assignor to said Johnson.						
Cash-carrier	286,571	Oct. 16	993	269	25	197
Alleman, Telesphore, Centerville, La. Plow	279,308	June 12	860	238	23	2280
Allen, Abraham J., Paskack, N. J. Thill-coupling for sleighs	277,099	May 8	742	195	23	1759
Allen, Albert A., Jackson, Mich. Folding bed	271,760	Feb. 6	209	58	23	476
Allen, Arthur M., Brooklyn, assignor, by mesne assignments, to L. L. Allen, New York, N. Y. Wheel	278,071	May 22	1894	519	23	1972
Allen, Charles A., Hillsdale, Mich. Bustle	280,553	July 3	259	60	24	47
Allen, Charles E., Putnam, Conn. Carpet-fastener	287,990	Nov. 6	259	74	25	552
Allen, Charles E., North Adams, Mass., assignor of one-half to I. J. Meagley, Binghamton, N. Y. Circuit for telephone apparatus	290,307	Dec. 18	1161	325	25	1107
Allen, Charles P., Denver, Col. Cut-off	271,761	Feb. 6	212	59	23	477
Allen, Charles W., et al. (See Holbrook, Byron, assignor.)						
Allen, Chauncey F., Waterbury, Conn. Corset	270,360	Jan. 9	635	187	23	134
Allen, Cotton H., St. Louis, Mo. Trace-hook	272,182	Feb. 13	741	205	23	580
Allen, Cotton H., St. Louis, Mo. Hame attachment	272,183	Feb. 13	742	205	23	580
Allen, Cotton H., St. Louis, Mo. Device for securing straps to buckles, &c.	285,200	Sept. 18	1283	361	24	1139
Allen, E. F. (See Baldwin, Charles W., assignor.)						
Allen, Edgar W., Rock Island, Ill. Horse-blanket	277,184	May 8	850	225	23	1777
Allen, Edwin F., Providence, R. I. Saw-guide	279,515	June 19	1137	315	23	2331
Allen, Edwin T. (See Rowe, Cyrenius, assignor.)						
Allen, Emma, Freeport, Ill. Retouching-machine	270,923	Jan. 23	1355	391	23	283
Allen, Ethan A. (See Woodbury, Clark, assignor.)						
Allen, Francis M., Knoxville, Tenn. Cultivator	273,426	Mar. 6	238	64	23	875
Allen, Frank H., Norwich, Conn. Revolving fire-arm	273,335	Mar. 6	122	35	23	855
Allen, Frederick E., North Grafton, Mass. Floor-clamp	250,113	June 26	1849	521	23	2462
Allen, George, New-Berne, N. C. Cultivator	269,987	Jan. 2	193	56	23	40
Allen, George D., Brooklyn, N. Y. Electric-arc lamp	273,336	Mar. 6	124	35	23	855
Allen, George H., Ayer, assignor to G. Draper & Sons, Hopedale, Mass. Spindle for spinning-machines	288,912	Nov. 20	1407	387	25	769
Allen, George H., Ayer, assignor to G. Draper & Sons, Hopedale, Mass. Bobbin	289,794	Dec. 11	527	147	25	985
Allen, George L., Worcester, Mass. Apparatus for extracting dyes	274,891	Apr. 3	1	1	23	1227
Allen, George S., and R. C. Ellich, Southington, Conn. Screw-driver	289,056	Nov. 27	1590	440	25	808
Allen, Gerald. (See Johnson and Wagner, assignors.)						
Allen, Gerard B. (See Furney, Elliott E., assignor.)						
Allen, Henry D. P., Brooklyn, N. Y. Still	279,071	June 5	561	154	23	2219
Allen, Horace R., Indianapolis, Ind. Chill	285,779	Oct. 2	2	1	25	3
Allen, Horace R., Indianapolis, Ind. Pulley	285,780	Oct. 2	2	1	25	3
Allen, James, Alliston, Ontario, Canada. Fifth-wheel for vehicles	273,427	Mar. 6	239	64	23	875
Allen, James, and W. R. Musser, Lynchburg, Va. Locomotive head-light	273,428	Mar. 6	240	65	23	875
Allen, James A., Philadelphia, Pa. Branding-tool	286,366	Oct. 9	742	199	25	145
Allen, James H., Wenona, Ill. Cultivator	271,586	Feb. 6	3	1	23	441
Allen, James H., Wenona, Ill. Cultivator	288,292	Nov. 13	632	170	25	624
Allen, James M. (See Rogers and Allen.)						
Allen, James W., St. Louis, Mo. Combination-lock	282,691	Aug. 7	260	75	24	544
Allen, James W., West Newton, Ind. Cooking-stove	286,248	Oct. 9	576	158	25	116
Allen, John, assignor of one-half to R. R. Smith, New Hartford, Conn. Band-cutter	287,212	Oct. 23	1817	498	25	348
Allen, John F., Brooklyn, N. Y. Riveting-machine	289,369	Dec. 4	1	1	25	887
Allen, John M., Washington Court-House, Ohio. Seed-drill	281,002	July 17	1578	431	24	288
Allen, Joseph B., Springfield, Ill. Electric-arc lamp	275,345	Apr. 10	622	167	23	1341
Allen, Leonora L. (See Allen, Arthur M., assignor.)						
Allen, Lester H., assignor, by mesne assignments, to himself and A. I. Nute, Farmington, N. H. Machinery for finishing boot-legs, &c.	284,265	Sept. 4	134	38	24	927
Allen, Marshall J., New York, N. Y., and W. E. Bradley, Frankfort, Ky. Making whisky	287,213	Oct. 23	1818	498	25	349
Allen, Myrick R., Lewisburg, Tenn. Car-coupling	288,754	Nov. 20	1221	334	25	734
Allen, Nathan R., Jr., et al. (See Holbrook, Byron, assignor.)						
Allen, Nathaniel, East Boston, Mass. Rudder-holding device for ferry-boats	286,367	Oct. 9	743	199	25	145
Allen, Norman, Rockaway Beach, N. Y. Railway-signal	272,613	Feb. 20	1300	362	23	682
Allen, Oscar, Mount Morris, N. Y. Spoke tenoning and tapering machine	279,117	June 12	644	176	23	2243
Allen, Percy R., Victoria Works, Belvedere Road, county of Surrey, England. Electric-arc lamp	270,361	Jan. 9	636	188	23	134
Allen, Percy R., Southwark, county of Surrey, England. Coupling for electrical conductors	273,429	Mar. 6	241	65	23	875
Allen, Philip F., London, England. Stud for shirts, &c.	288,293	Nov. 13	623	170	25	624
Allen, Richard, assignor of one-half to J. F. Thompson, Fredericksburg, Va. Key-fastener	277,991	Nov. 6	260	74	25	552
Allen, Richard N., Cleveland, Ohio. Car-wheel. (Reissue.)	10,306	Apr. 10	1208	331	23	1440
Allen, Robert W., Nelly's Ford, Va. Hilling and fertilizing machine	274,542	Mar. 27	1695	470	23	1148
Allen, Samuel F., assignor of two-thirds to T. R. Freeman and J. S. Toppan, Chicago, Ill. Mechanism for placing torpedoes on railway-tracks	286,249	Oct. 9	577	158	25	116
Allen, Samuel L., Cinnaminson, N. J. Sheet-metal standard for cultivator-teeth	280,114	June 26	1849	521	23	2462
Allen, Samuel L., Cinnaminson, N. J. Cultivator	281,426	July 17	1357	374	24	251
Allen, Samuel V., Freeport, Ill. Photographic camera	274,079	Mar. 13	1068	294	23	1025
Allen, Silas J., and J. B. Richardson, Providence, R. I.; said Allen assignor to said Richardson. Sleeve or collar button	288,964	Nov. 27	1475	469	25	789
Allen, Silas J., assignor to J. B. Richardson, Providence, R. I. Detachable button or stud	289,370	Dec. 4	2	1	25	887
Allen, Stephen M., Duxbury, Mass. Material for roofing purposes	278,481	May 29	2447		23	2076
Allen, Stephen M., Duxbury, Mass. Pipe and conduit for conveying liquids, &c.	254,794	Sept. 11	788	220	24	1043
Allen, Theodore E., New York, N. Y. Metallic wrapper	290,631	Dec. 25	1892	514	25	1236
Allen, Walter B., Andover, Mass. Powder-duster	277,655	May 15	1407	379	23	1879
Allen, William, assignor of one-half to A. M. Johnston, Rockford, Ill. Starch-table	275,318	Apr. 3	555	151	23	1320
Allen, William, assignor of one-half to A. M. Johnston, Rockford, Ill. Starch-washing machine	275,319	Apr. 3	556	152	23	1321
Allen, William, assignor of one-half to A. M. Johnston, Rockford, Ill. Starch-separator	275,320	Apr. 3	558	152	23	1321
Allen, William A., Jersey City, N. J. Drying house or kiln	270,359	Jan. 9	633	186	23	134
Allen, William B., Orleans, N. Y. Domestic steamer	272,015	Feb. 13	538	145	23	545
Allen, William H., Brooklyn, N. Y. Die for stamping and embossing boxes	279,118	June 12	646	176	23	2244
Alles, Henry. (See Bach, John C., assignor.)						
Alley, John H. (See Pearce, George R., assignor.)						
Alfree, James B., Cumberland, Md. Roller grinding-mill	280,992	July 10	805	224	24	148
Alfree, James B., Cumberland, Md. Balanced slide-valve	280,993	July 10	807	224	24	149
Allinder, William I., Minneapolis, Minn. Fire-escape	290,197	Dec. 18	1019	287	25	1083

## Alphabetical list of patentees—Continued.

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Alling, A. H. & C. B. (See Otis, Samuel L., assignor.)						
Alling, Charles B., Derby, Conn. Knit stocking	285,201	Sept. 18	1284	361	24	1139
Alling, Millicent B. (See Barnard, Henry H., assignor.)						
Allis, Abram Q., New York, N. Y. Spring bed-bottom	286,166	Oct. 9	473	131	25	99
Allis, Charles F., Erie, Pa. Fire-kindler attachment for stove and grates	287,402	Oct. 30	2058	559	25	399
Allis, Thomas V., New York, N. Y. Metallic-strip blank for barbed fencing	272,933	Feb. 27	1723	481	23	763
Allis, Thomas V., New York, N. Y. Manufacture of barbed metallic fencing	272,934	Feb. 27	1723	481	23	763
Allis, Thomas V., New York, N. Y. Manufacture of barbed metallic fencing	272,935	Feb. 27	1725	482	23	763
Allis, Thomas V., New York, N. Y. Metallic barbed fencing	272,936	Feb. 27	1726	482	23	763
Allison, Asa H., Knightstown, Ind. Straw-stacker	277,400	May 8	1094	294	25	1821
Allison, Asa H., Knightstown, Ind. Straw-stacker	289,204	Nov. 27	1767	490	25	840
Allison Brothers Company. (See Allison, Oscar W., assignor.)						
Allison, L. Sandridge, H. John, and T. E. Evans, Hazleton, Pa. Steam-actuated valve	274,247	Mar. 20	1292	356	23	1072
Allison, Oscar W., assignor to Allison Brothers Company, Rochester, N. Y. Cigarette-machine	290,166	Dec. 11	974	275	25	1067
Allison, John W., J. H. Wonnack, Marshfield, and W. M. Highfill, Fair Grove, Mo. Cider-mill	290,657	Dec. 25	1631	449	25	1195
Allton, Hiram, assignor of one-half to J. E. Hildreth, Wilmington, Del. Lubricator	275,971	Apr. 17	1424	372 393	23	1487
Allyn, John H., Redding, Iowa. Check-row corn-planter	271,676	Feb. 6	108	29	23	458
Allyn, Richard J. (See Brainard, Marvin N., assignor.)						
Almon, John M. (See Kennedy, Joseph B., assignor.)						
Almond, Thomas R., Brooklyn, N. Y. Polishing-tool	289,879	Dec. 11	635	177	25	1004
Alpaugh, John K., Kansas City, Mo. Soap compound	269,820	Jan. 2	1		23	3
Alpaugh, John K., Decatur, Ill. Soap-powder and process of making the same	282,032	July 31	2133		24	395
Alpress, Edward A., New Britain, Conn. Making screw-eyes	270,570	Jan. 16	919	265	23	197
Alpress, Edward A., assignor to Landers, Frary & Clark, New Britain, Conn. Machine for bending screw hooks and eyes	270,362	Jan. 9	637	188	23	135
Alrich, William A., Chatbam, Va. Ripping attachment for sewing-machines	281,330	July 17	1241	344	24	232
Alshouse, Cyrus S. (See McCready, and Alshouse.)						
Alshuler, Moses, Mattoon, Ill. Tag-fastener	284,706	Sept. 11	674	190	24	1624
Alsing, Johan K., Hoboken, N. J. Apparatus for pulverizing porcelain-paste. (Reissue.)	10,382	Sept. 18	1480	417	24	1173
Altenberg, John E. (See Paxton, Amos B., assignor.)						
Altenbrand, Henry, Brooklyn, N. Y., assignor to L. G. Fisher, Jr., Chicago, Ill. Malt-kiln	271,184	Jan. 23	1681	485	23	336
Alters, Joseph K., assignor of one-half to M. Ware, Maiden Rock, Wis. Button-fastening	271,185	Jan. 23	1682	485	23	336
Altham, George J., Swansea, Mass. Device for converting motion	273,699	Mar. 13	592	150	23	943
Altheide, Joseph H., Quincy, Ill. Camera-stand	280,776	July 10	555	155	24	105
Altman, Charles, New York, N. Y. Fur-sack fastening	278,072	May 22	1897	519	23	1972
Altman, Frank G. (See Pommer, Frederick, assignor.)						
Altman, Moritz, Camden, N. J. Suspenders	288,755	Nov. 20	1223	334	25	734
Altmeier, Jacob, Benwood, W. Va. Furnace	271,393	Jan. 30	1942	562	23	391
Alton, George H., assignor to Belle Patent Button Fastening Company, Lynn, Mass. Button-setting instrument	283,453	Aug. 21	1193	335	24	728
Alton, George H., Lynn, Mass., assignor to Belle Patent Button Fastener Company, Kennebunk, Me. Machine for attaching buttons	284,111	Aug. 28	2011	560	24	826
Alverson, James W., Union Springs, N. Y. Fertilizer-distributor	273,002	Feb. 27	1798	503	23	776
Alves, John, Dunedin, New Zealand. Amalgamator	273,003	Feb. 27	1800	504	23	776
Alves, John, Dunedin, New Zealand. Apparatus for amalgamating and concentrating ores	273,662	Mar. 6	537	144	23	926
Amazeen, Christopher, Boston, Mass. Leather-skiving machine	273,931	Mar. 13	892	244	23	994
Amborn, George, Jr., and E. D. Chaplin, Pawtucket, R. I. Calipers	277,973	May 22	1780	426	23	1951
Amborn, George, Jr., and E. D. Chaplin, Pawtucket, R. I. Hand-vise	282,033	July 31	2133	566	24	395
Ambrasius, Caroline, et al. (See Kleinschmidt, Charles, assignor.)						
Ambrose, Thomas H., Port Hope, Ontario, Canada. Car-coupling	279,307	June 12	859	238	23	2280
Ambschl, Nicholas, Lone Grove, Fayette County, Ill. Car-coupling	271,394	Jan. 30	1944	562	23	391
Anubuhl, Jacob, Bridgeport, Conn., assignor to S. J. Gordon, New York, N. Y. Coloring and hardening clay	274,543	Mar. 27	1697		23	1148
Amelotte, Edward, Spencer, Mass. Bolt-cutter	285,868	Oct. 2	110	33	25	22
American Automatic Organ Company. (See Arno, Oliver H., assignor.) (Reissue.)						
American Bag Company. (See Sawyer, Benjamin F., assignor.)						
American Bell Telephone Company. (See Anders, George L., assignor.)						
American Bell Telephone Company. (See Carty, John J., assignor.)						
American Bell Telephone Company. (See Coolidge, Ellery C., assignor.)						
American Bell Telephone Company. (See Flint, Edward, Jr., assignor.)						
American Bell Telephone Company. (See Jacques, William W., assignor.)						
American Bell Telephone Company. (See Loring and Pierce, assignors.)						
American Bell Telephone Company. (See Watson, Thomas A., assignor.)						
American Bell Telephone Company. (See Wilson, Edward L., assignor.)						
American Bell Telephone Company. (See Woelk, Edward A., assignor.)						
American Brake Company. (See Leigh, Edward B., assignor.)						
American Brake Company. (See Poor, George H., assignor.)						
American Brake Company. (See Schiller, Charles J., assignor.)						
American Buttonhole, Overseaming and Sewing Machine Company. (See Rominger, George S., assignor.)						
American Car Wheel Grinding Company. (See McIntyre, Augustin W., assignor.)						
American Chemical Company. (See Fraseh, Herman, assignor.)						
American Cloth Workers Company. (See Heddon, William, assignor.)						
American Coal Tar Color Company of New York. (See Kendall, Edward D., assignor.)						
American Diamond Rock Boring Company. (See Douglass, Samuel W., assignor.)						
American Diamond Rock Boring Company. (See Waring, John B., assignor.)						
American Electric Company. (See Houston, Edwin J., assignor.)						
American Electric Company. (See Thomson, Elthm, assignor.)						
American Electric Storage Company. (See Keith, Nathaniel S., assignor.)						
American Electrical Works. (See Lytle, Henry B., assignor.)						
American Electro Gas Telephone Company. (See Rogers, James H., assignor.)						
American Electrophore Company. (See Koyl, Charles H., assignor.)						
American Fence Machine Company. (See Ash and Fisk, assignors.)						
American Filter Company. (See Smart, James S., assignor.)						
American Fire Hose Manufacturing Company. (See Callahan, Cornelius, assignor.)						
American Gas Saving Company. (See De Palos, James S., assignor.)						
American Insulator Company. (See Oakman, Samuel, assignor.)						
American Iridium Company. (See Dudley and Rapp, assignors.)						
American Iridium Company. (See Holland, John, assignor.)						
American Iron Post and Construction Company. (See Dow, Lorenzo, assignor.) (Reissue.)						
American Lubricating Company, of New Jersey. (See Howard and Chance, assignors.)						



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American Optical Company. (See Wells and Preux, assignors.)						
American Package Company. (See Fancher, Alton H., assignor.)						
American Postal Telegraph Company. (See Lyon, Henry, assignor.)						
American Quick Transit Steamship Company. (See Bliven, Alonzo P., assignor.)						
American Railway Signal Company. (See Hadden, William, assignor.)						
American Railway Signal Company. (See Tisdale, Charles D., assignor.)						
American Saw Company. (See Risdon, William B., assignor.)						
American Sectional Electric Underground Company. (See Goebel, Christian H., assignor.)						
American Seed Oil Company. (See Massey, Albert P., assignor.)						
American Ship Windlass Company. (See Winter, Herman, assignor.)						
American Ship Windlass Company. (See Winter and Manton, assignors.)						
American Spring Car Motor Company. (See Jiencke, George, assignor.)						
American Staple Sewing Machine Company. (See Brown, Charles, assignor.)						
American Steam Gauge Company. (See Stanek, Ladislav, assignor.)						
American Union Electric Company. (See Hauss, McNamara, and Zerbe, assignors.)						
American Watch Company. (See Church, Duane H., assignor.)						
American Writing Machine Company. (See Yost, George W. N., assignor.)						
Ames, Charles L., and A. H. Frost, Chicago, Ill. Device for fastening springs to bed-slats.	276,548	May 1	2	1	23	1627
Ames, David J., Austin, assignor of one-half to McLaughlin, Sheldon & Co., Owatonna, Minn. Transmitting reciprocal to rotary motion.	285,943	Oct. 2	212	60	25	40
Ames, Hugh O., New Orleans, La. Evaporating-pan.	276,324	Apr. 24	1880	522	23	1571
Ames, Josiah, assignor to F. J. Knapp, East Saginaw, Mich. Sled.	281,171	July 10	1032	256	24	187
Ames, Samuel R., assignor of one-half to F. W. Steedman, Louisville, Ky. Whiffletree.	283,454	Aug. 21	1194	335	24	728
Ames, William C., Attleborough, Mass. Button.	287,992	Nov. 6	261	74	25	553
Amesbury, George W., Philadelphia, Pa. Holder for mortising-chisels.	275,346	Apr. 10	625	167	23	1341
Amet, Edward H., La Grange, Ill. Electric-arc lamp.	271,395	Jan. 30	1945	562 563	23	391
Amherst Hydraulic Motor Company. (See Benham and Richardson, assignors.)						
Amick, Myron J., assignor to Pacific Gas Governor Association, San Francisco, Cal. Automatic gas-regulator.	290,727	Dec. 25	1729	477	25	1213
Amick, Samuel, Pittsborough, Ind. Carpet-stretcher.	290,308	Dec. 18	1163	326	25	1107
Amidon, Charles. (See Lingley, John H., assignor.)						
Amidon, Charles H., Buffalo, N. Y. Bit-stock.	283,844	Aug. 28	1663	469	24	825
Amies, Joseph H. (See Colby, John N., assignor.)						
Ammerman, William M., Oakland, Ill. Mechanical movement.	290,383	Dec. 18	1237	353	25	1124
Amrock, Edward S. (See Larkin, Patrick, assignor.)						
Amrock, Edward S., Waltham, Mass. Combined settee and lounge.	271,762	Feb. 6	213	59	23	477
Amrock, Edward S., Waltham, Mass. Convertible settee, cot, and tent.	287,078	Oct. 23	1645	452	25	317
Ams, Max, and V. Litzelmann, New York, N. Y. Extracting glycerine from fatty matter.	272,510	Feb. 20	1169		23	659
Amundson, Hans, and A. Olson, St. Charles, Minn. Grain-binder.	279,309	June 12	860	239 240	23	2280
Amyot, Jean B., assignor of one-half to L. N. Carrier, Quebec, Quebec, Canada. Preparation of asbestos and articles or goods made therefrom.	281,951	July 24	2033		24	373
Ancl, Albert. (See Thiollier, Antonin, assignor.)						
Anden, Isaiah A., et al. (See Nyce and Hunsicker, assignors.)						
Anderberg, Erland, Mount Vernon, N. Y. String-bridge for guitars.	282,147	July 31	2297	631	24	422
Anders, George L., assignor to American Bell Telephone Company, Boston, Mass. Automatic indicator switch for telephone systems.	280,707	July 3	442	126	24	79
Anders, George L., assignor to American Bell Telephone Company, Boston, Mass. Telephonic system.	287,356	Oct. 23	1993	543	25	380
Andersen, Oluf S., and T. T. A. Hansen, Copenhagen, Denmark. Centrifugal machine.	272,185	Feb. 13	744	205	23	560
Andersen, Peter, Fort Wayne, Ind. End-gate for wagons.	270,363	Jan. 9	639	189	23	135
Anderson, A. G., et al. (See Cole, Wesley, assignor.)						
Anderson, Adolph V., Virginia City, Nev. Stock-car.	269,988	Jan. 2	194	56	23	40
Anderson, Alfred, Paris, France. Automatic advertising device.	272,164	Feb. 13	743	205	23	560
Anderson, Andrew, Elizabeth, N. J. Blacksmith's hammer.	273,793	Mar. 13	719	195	23	966
Anderson, Axel L. (See McDonnell and Anderson.)						
Anderson, Charles, assignor to South Bend Iron Works, South Bend, Ind. Plow.	277,185	May 8	851	226	23	1777
Anderson, Charles, and J. Oliver, assignors to South Bend Iron Works, South Bend, Ind. Plow.	275,744	Apr. 10	1139	312	23	1429
Anderson, Charles, and J. Oliver, assignors to South Bend Iron Works, South Bend, Ind. Plow.	275,745	Apr. 10	1141	313	23	1429
Anderson, Charles, and J. Oliver, assignors to South Bend Iron Works, South Bend, Ind. Plow.	275,972	Apr. 17	1425	393	23	1487
Anderson, Charles, and J. Oliver, assignors to South Bend Iron Works, South Bend, Ind. Plow.	280,777	July 10	556	155 156	24	105
Anderson, Charles, Ludlow, Ky., assignor to Post & Co., Cincinnati, Ohio. Signal for locomotive head-lights.	287,079	Oct. 23	1646	452	25	318
Anderson, Charles G., Columbus, assignor to N. Joseph, Zanesville, and J. McVay, Columbus, Ohio. Chain.	271,186	Jan. 23	1682	495	23	336
Anderson, Charles G., Columbus, Ohio, assignor to N. Josephs and J. McVay. Chain.	290,832	Dec. 25	1863	514	25	1236
Anderson, David H., Butte City, Mont. Ter. Machine for concentrating and amalgamating ores.	273,614	Feb. 20	1301	302 363	23	682
Anderson, David H., assignor of one-half to W. H. Young and H. Rondebash, Butte City, Mont. Ter. Concentrator.	285,098	Sept. 18	1160	324 325	24	1117
Anderson, E. W., et al. (See Brust, Albert G., assignor.)						
Anderson, Eli, Carpentersville, Ind. Straw-stacker.	275,453	Apr. 10	773	207	23	1366
Anderson, Eliza M. C., New York, N. Y. Green-corn cutter.	287,060	Oct. 23	1647	452	25	318
Anderson, Euclid, Peekskill, N. Y. Mechanical movement.	271,225	Jan. 30	1814	526	23	367
Anderson, Frederick L. C., New York, N. Y. Cooking stove or range.	273,004	Feb. 27	1802	504	23	776
Anderson, Henry B., St. Louis, Mo. Bottle-stopper.	279,310	June 12	863	240	23	2250
Anderson, Homer, Peekskill, N. Y. Telegraph-key.	288,609	Nov. 20	1033	285	25	703
Anderson, Homer B. (See Dutot and Anderson.)						
Anderson, James. (See Jowett, Thomas L., assignor.)						
Anderson, James C. (See Meagher and Anderson.)						
Anderson, James C., Highland Park, Ill. Ornamentation of brick, tile, &c.	271,587	Feb. 6	4		23	441
Anderson, James C., Highland Park, Ill. Clay reducer and disintegrator.	271,588	Feb. 6	5	2	23	441
Anderson, James C., Highland Park, Ill. Clay reducer and disintegrator.	271,589	Feb. 6	6	2	23	441
Anderson, James C., Highland Park, Ill. Ornamentation of brick, tile, &c.	271,590	Feb. 6	7		23	442
Anderson, James C., Highland Park, Ill. Preventing saltpeter-exudations upon facing-brick.	271,591	Feb. 6	8	2	23	442
Anderson, James C., Highland Park, Ill. Brick and tile machine.	276,549	May 1	5	2	23	1627
Anderson, James C., Highland Park, Ill. Brick-machine.	276,961	May 8	569	157	23	1735
Anderson, James C., Highland Park, Ill. Brick-machine.	276,992	May 8	602	158	23	1735



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Anderson, James C., Highland Park, Ill. Brick-machine	283,366	Aug. 21	1091	307	24	709
Anderson, John P., Philadelphia, Pa. Coconut-sheller	286,368	Oct. 9	744	199	25	145
Anderson, John W., South Bend, Ind. Vehicle-seat	288,610	Nov. 20	1035	285	25	703
Anderson, John W., South Bend, Ind. Axle-skein	290,511	Dec. 18	1444	399	25	1156
Anderson, Milton W. (See Snapp, James W., assignor.)						
Anderson, Nils P., Moline, Ill. Road-cart	288,965	Nov. 27	1476	409	25	789
Anderson, Robert C., Bayonne, N. J. Machine for forming the joints between the heads and bodies of cans	269,908	Jan. 2	101	30	23	21
Anderson, Robert C., Bayonne, N. J. Box-trimming machine	277,100	May 8	743	196	23	1759
Anderson, Robert C., London, England. Galvanic battery	269,795	Dec. 11	523		25	985
Anderson, Rufus, Peekskill, N. Y. Automatic telegraph	289,205	Nov. 27	1769	490	25	841
Anderson, Samuel J., Cazenovia, N. Y. Fire-escape	279,628	June 19	1266	351	23	2353
Anderson, Sven, Humboldt, Nebr. Harrow	282,692	Aug. 7	262	75	24	544
Anderson, Thomas B., Allegheny, Pa. Brick-kiln	290,512	Dec. 18	1444	399	25	1156
Anderson, Thomas N. (See Moore and Anderson.)						
Anderson, William G., Boston, Mass. Making window-screens	279,851	June 19	1524	426	23	2398
Anderson, William G., Boston, Mass. Window-screen	284,588	Sept. 11	526	149	24	999
Anderson, William H., assignor of one-half to I. C. Lindley, Elizabethtown, Ind. Straw-stacker	285,339	Sept. 18	1436	406	24	1167
Anderson, William S., Duncansby, Miss. Cotton-gin rib	273,073	May 22	1897	520	23	1972
Anderson, William T., Rock Hill, S. C. Vise	287,993	Nov. 6	261	74	25	553
Anderson, William W., New York, N. Y. Pivot-pin for clasps	287,605	Oct. 30	2330	629	25	452
Anderton, Adaline W. (See Whitcomb, Aaron J., assignor.)						
André, Alexandre, Fils, Paris, France. Purification of mineral oils	284,589	Sept. 11	527	149	24	999
Andrae, John M., Brockton, Mass. Device for frying cakes	280,778	July 10	558	156	24	105
Andrew, Charles, Cincinnati, Ohio. Automatic crayon-holder	276,128	Apr. 17	1621	446	23	1520
Andrew, Henry H., Sheffield, county of York, England. Reheating and reducing rods of metal	276,743	May 1	277	70	23	1672
Andrew, Richard E., Shepherdstown, W. Va. Fire-escape	285,542	Sept. 25	1689	476	24	1218
Andrews, Abiel W. K., Binghamton, and C. R. Teed, Syracuse, N. Y. Electro-therapeutic apparatus	292,431	July 31	2659	729 730	24	484
Andrews, Caleb M., Providence, R. I. Horse-blanket	277,867	May 22	1660	453	23	1931
Andrews, Edward W., assignor to G. M. Ingalls, Detroit, Mich. Mechanism for reefing sails	282,599	Aug. 7	150	45	24	527
Andrews, Emanuel, Williamsport, Pa. Bevel attachment for handsaws	283,319	Aug. 14	1015	284	24	689
Andrews, Emanuel, Williamsport, Pa. Apparatus for tempering and flattening sheet-metal plates	284,938	Sept. 11	954	268	24	1074
Andrews, Emery, Kennebunk, Me. Heel-stiffener for boots or shoes	276,550	May 1	7	3	23	1628
Andrews, George, Bellows Falls, Vt. Device for roughening grindstones	272,615	Feb. 20	1304	363	23	682
Andrews, Ichabod, Dundee, N. Y. Car-coupling	273,700	Mar. 13	593	159	23	943
Andrews, James S., Kalamazoo, Mich. Wheel-cultivator	286,436	July 3	125	33	24	23
Andrews, Joseph H., et al. (See Andrews, Oscar, assignor.)						
Andrews, Oscar, assignor of two-thirds to J. H. Andrews, Gloucester, and G. Tucker, Rockport, Mass. Preparing salt fish for market	275,973	Apr. 17	1427	394	23	1488
Andrews, Wallace C., et al. (See Rumble, William, assignor.)						
Andrews, William H., assignor to Mallory, Wheeler & Co., New Haven, Conn. Sliding-door pull	276,325	Apr. 24	1880	522	23	1571
Andrus, George S., Columbia, Colo. Sampling apparatus	280,994	July 10	807	225	24	149
Andrus, William, Keokuk, Iowa. Machine for pulverizing clay for making brick	276,147	Apr. 24	1647	455	23	1533
Andrus, William, Keokuk, Iowa. Clay-pulverizer	286,520	Oct. 9	924	249	25	178
Andrus, William, Keokuk, Iowa. Brick-machine	286,892	Oct. 16	1399	384 385	25	267
Andrus, William W. (See St. John, George H., assignor.)						
Angel, Joseph R., assignor to L. F. and E. E. Camp, Camptown, Pa. Wagen-jack	279,903	June 26	1594	447	23	2417
Angell, Albert, East Orange, N. J., assignor to C. F. A. Hinrichs, Brooklyn, N. Y. Student's lamp	270,719	Jan. 16	1109	317	23	232
Angell, Edward F., and A. Spear, Chicago, Ill. Clamp for sewing-machine attachments	279,516	June 19	1138	315	23	2331
Angell, Horace B., San Francisco, Cal. Dredger-chain	278,482	May 29	2448	668	23	2076
Angell, Lucius C. (See Weaver, Albert S., assignor.)						
Angell, Ransom S., Moorhead, Minn. Traction-engine	282,944	Aug. 14	559	159	24	607
Angell, Russell R., assignor of two-thirds to C. J. Blakely and L. N. Williamson, Janesville, Wis. Eccentric	272,511	Feb. 20	1170	327	23	659
Anger & Brother, John A. (See Anger, Louis J., assignor.)						
Anger, Louis J., assignor to J. A. Anger & Brother, New York, N. Y. Dough-cutting machine	274,892	Apr. 3	3	1	23	1227
Anger-vine, William, et al. (See Blass, Talmadge, assignor.)						
Angier, Albert W., San Francisco, Cal. Device for fastening paper bags	286,758	Oct. 16	1232	333	25	238
Angular Steel Nail Company. (See Taylor, William, assignor.)						
Angus, Robert B., Pottsville, assignor of one-half to C. W. Brower, Tremont, Pa. Steam-actuated valve	275,746	Apr. 10	1142	313	23	1429
Ankelen, Gustav, St. Louis, Mo. Index-tab for books, &c	274,248	Mar. 20	1293	356	23	1072
Ankrom, James A., et al. (See Kennedy, Thomas H., assignor.)						
Annan, Charles F., Boston, Mass. Paper-bag machine	276,744	May 1	278	70, 71	23	1672
Annan, Charles F., Boston, Mass. Railway-car	279,311	June 12	864	241	23	2230
Annan, Charles F., Boston, Mass. Method of making envelopes and mechanism therefor	283,945	Aug. 28	1787	505 506	24	848
Annibale, Allevi, Chicago, Ill. Force-pump	272,616	Feb. 20	1305	364	23	683
Annin, Joseph. (See Moore, John R., assignor.)						
Ansley, Alanson, Geneva, N. Y. Potato-digger	272,845	Feb. 27	1613	451	23	745
Anson, Silas, Bellevue, Mich. Barrel-heater	271,763	Feb. 6	214	50	23	477
Ansonia Brass and Copper Company. (See Cowles, Alfred A., assignor.)						
Ansonia Brass and Copper Company. (See Gilpin, Joseph F., assignor.)						
Ansonia Brass and Copper Company. (See Hull and Hoadley, assignors.)						
Ansonia Brass and Copper Company. (See Hull and Truesdell, assignors.)						
Ansonia Rubber Company. (See Smith, John J. C., assignor.)						
Ansozge, Wenzel R., Lexarkana, Ark. Obstruction indicator for boats	275,974	Apr. 17	1428	394	23	1488
Anset, Henry, New York, N. Y. Electric-arc lamp	279,517	June 19	1139	315	23	2331
Anthony & Co., E. & H. T. (See Anthony, Henry T., assignor.)						
Anthony & Co., E. & H. T. (See Barker, Erastus B., assignor.)						
Anthony & Co., E. & H. T. (See Lewis, William H., assignor.)						
Anthony & Co., E. & H. T. (See Schmid, William, assignor.)						
Anthony, Edgar W., Boston, Mass. Stove	271,013	Jan. 23	1471	423	23	301
Anthony, Edwyn, New York, N. Y. Printing-press	273,430	Mar. 6	243	66	23	876
Anthony, Edwyn, New York, N. Y. Printing	273,431	Mar. 6	247	67	23	876

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Anthony, Edwyn, New York, N. Y. Printing-machine .....	275,113	Apr. 3	302	83, 84	23	1278
Anthony, Frank H., Brooklyn, assignor to W. M. Ducker, New York, N. Y. Fire-escape ladder .....	288,756	Nov. 20	1224	334	25	735
Anthony, Henry T., assignor to E. & H. T. Anthony & Co., New York, N. Y. Case for transporting photographic plates .....	283,455	Aug. 21	1195	336	24	728
Anthony, James Y. (See Evans, William K., assignor.) .....						
Anthony, John R., Sherman City, Kans. Fertilizer-distributor .....	278,483	May 29	2449	668	23	2077
Anthony, Orren A., Mayfield, N. Y. Stump-pulling machine .....	287,606	Oct. 30	2331	629	25	452
Anthony, Wendell P. (See Handy and Anthony.) .....						
Anthony, Wendell P., Providence, R. I. Gearing for velocipedes .....	277,974	May 22	1781	486	23	1951
Antrim, B. Jay, Philadelphia, Pa. Fire and burglar alarm .....	278,386	May 29	2333	638	23	2056
Anunsen, Kittil, Winchester, Wis. Harrow .....	274,249	Mar. 20	1294	356	23	1072
Anunsen, Kittil, Winchester, Wis. Harvester-reel .....	276,148	Apr. 24	1648	455	23	1533
Anunsen, Kittil, Winchester, Wis. Pitman for harvesters .....	276,149	Apr. 24	1648	455	23	1533
Appel, Daniel, and R. G. McAuley, Cleveland, Ohio. Lubricator .....	290,728	Dec. 25	1730	478	25	1213
Appell, Charles E., Harrisburg, Tex. Car-coupling .....	279,312	June 12	866	241	23	2281
Appelquist, Frederick. (See Hanson, Charles, assignor.) .....						
Apple, G. W., et al. (See Cochran, William J., assignor.) .....						
Apple, J. Bernard. (See Clay, Henry, assignor.) .....						
Apple, Titus H., Evansburg, Pa. Scraper and elevator .....	289,331	Nov. 27	1918	533	25	870
Appleberg, John T., Baltimore, Md. Advertising match-box .....	283,741	Aug. 28	1539	435	24	803
Appleby, John F., assignor to Minneapolis Harvester Works, Minneapolis, Minn. Grain-binder .....	275,114	Apr. 3	304	85, 86	23	1278
Appleby, John F., assignor to Minneapolis Harvester Works, Minneapolis, Minn. Grain-binder .....	276,519	Apr. 24	2114	{ 587 588 }	23	1612
Appleby, John F., assignor to Minneapolis Harvester Works, Minneapolis, Minn. Twine-box for grain-binders .....	290,658	Dec. 25	1632	449	25	1195
Applegate, Benjamin F., assignor to himself and B. F. Lagel, New Albany, Ind. Thrashing-machine .....	282,693	Aug. 7	263	76	24	545
Applegate, Daniel H. (See Pintard, William, assignor.) .....						
Applegate, Daniel H., Red Bank, N. J. Automatic electrical railway-signal .....	285,944	Oct. 2	213	60	25	41
Applegate, Eugene W., Washington, D. C. District signal and messenger call-box .....	279,629	June 19	1366	{ 351 352 }	23	2353
Appleget, William S., Cranbury, N. J. Platform-gear for wagons .....	277,186	May 8	853	226	23	1778
Appleton, Robert M. (See Baldwin, Nathan H., assignor.) .....						
Appleton, William, Jr. (See Shepard, Charles T., assignor.) .....						
Appley, Harrison V., Upper Lisle, N. Y. Axle-box .....	271,764	Feb. 6	215	60	23	477
Aram, Jonathan G., assignor of one-half to R. Ellis, Moline, Ill. Wagon-brake lever .....	282,432	July 31	2662	730	24	485
Arbogast, George, assignor to A. Shoening, Chicago, Ill. Locomotive-chair .....	287,789	Nov. 6	2	1	25	507
Archbold, George, Oswego, N. Y. Manufacture of paper-pulp .....	274,250	Mar. 20	1294		23	1072
Archbold, George, Oswego, N. Y. Manufacture of paper-pulp. (Reissue) .....	10,328	May 22	2217		23	2027
Archer Automatic Car Coupler Company. (See Archer, Samuel B., assignor.) .....						
Archer, Charles W. (See Fosdick, Jesse T., assignor.) .....						
Archer, John B., Washington, D. C. Hydrocarbon-furnace .....	279,904	June 26	1595	447	23	2417
Archer, Samuel B., Pittsburg, Pa. assignor to Archer Automatic Car Coupler Company, Saratoga Springs, N. Y. Car-coupling .....	283,245	Aug. 28	1664	470	24	825
Archer, Thomas, New York, N. Y. Machine for grinding, smoothing, and polishing glass .....	286,672	Oct. 16	1124	302	25	220
Archer, William S., New York, N. Y. Process of and machine for separating fiber, wool, &c .....	283,246	Aug. 28	1666	470	24	826
Archibald, Andrew, assignor to M. H. Archibald, Yonkers, N. Y. Automatic safety-cock for gas-burners .....	277,975	May 22	1782	486	23	1952
Archibald, Mary H. (See Archibald, Andrew, assignor.) .....						
Arday, Robert, assignor of one-half to W. Talbot, Philadelphia, Pa. Paper-roll cutter or edge-trimmer .....	273,244	Mar. 6	2	1	23	835
Arend, John J., assignor of one-half to G. E. Robinson and A. A. Halter, Akron, Ohio. Key-fastener .....	290,623	Dec. 18	1584	436	25	1180
Arendt, Martin E., Buffalo, N. Y., and A. L. Weil, Bradford, Pa. Obtaining lubricating-oil from crude petroleum .....	278,844	June 5	233	68	23	2163
Arens, August, assignor to P. & F. Corbin, New Britain, Conn. Reversible store-door latch .....	286,250	Oct. 9	578	159	25	116
Arff, Hans F., and D. Bornholdt, Arcadia, Iowa. Game-table .....	279,313	June 12	866	{ 241 242 }	23	2281
Argerbright, Daniel, Troy, Ohio. Vehicle-spring .....	279,686	June 19	1338	372	23	2365
Argerbright, Daniel, Troy, Ohio. Two-wheeled vehicle .....	285,202	Sept. 18	1284	361	24	1139
Armant, Edmond. (See Salomon, Etienne, assignor.) .....						
Armington, William W., Providence, R. I. Slate and blackboard cleaner .....	282,148	July 31	2298	631	24	422
Armistead, Thomas J., Lancaster, assignor of one-half to S. A. Middleton and C. C. McClure, Crab Orchard, Ky. Time-shell .....	280,492	Dec. 4	153	42	25	913
Armour, James H., and J. Schott, Kansas City, Mo. Fastening for adjustable head-rests .....	289,596	Dec. 4	282	79	25	937
Armour, Lawrence H., Gateshead-on-Tyne, county of Durham, England. Method of and apparatus for the treatment of spoil-heaps of collieries .....	285,945	Oct. 2	215	60	25	41
Armour, Michael C., Chicago, Ill. Stove .....	273,005	Feb. 27	1803	{ 504 505 }	23	777
Armour, Michael C., Chicago, Ill. Stove .....	284,112	Aug. 28	2012	560	24	886
Armour, Michael C., Chicago, Ill. Stove .....	284,113	Aug. 28	2014	560	24	887
Armstrong, Alexander. (See Bronson and Armstrong.) .....						
Armstrong, Alexander F., Edinburgh, and M. K. Waite, Northville; said Waite assignor to L. Balch, Albany, N. Y. Horse-blanket fastener .....	290,198	Dec. 18	1020	287	25	1083
Armstrong, Arthur H., Plainville, Conn. Car-coupling .....	274,893	Apr. 3	4	1	23	1227
Armstrong, Benjamin A. (See MacKay and Armstrong.) .....						
Armstrong, Charles, and G. Abbott, Galveston, Tex. Chair for railway-rails .....	272,617	Feb. 20	1306	364	23	683
Armstrong, Charles T., Corunna, Mich. Carboy-stand .....	272,512	Feb. 20	1171	327	23	659
Armstrong, Christian D., St. Bernard, La. Cane-mill .....	273,432	Mar. 6	249	67	23	876
Armstrong, Edwin A., Detroit, Mich. Rock-drill .....	290,309	Dec. 18	1164	326	25	1107
Armstrong, Frank. (See Chase, George S., assignor.) .....						
Armstrong, Frank. (See Stever, Jeremiah, assignor.) .....						
Armstrong, Frank, Bridgeport, Conn. Wrench .....	274,544	Mar. 27	1697	471	23	1148
Armstrong, Frank, Bridgeport, Conn. Stock and die .....	286,673	Oct. 16	1125	303	25	220
Armstrong, Frank, Bridgeport, Conn. Buckle .....	287,081	Oct. 23	1648	452	25	318
Armstrong, Frank, and J. H. Hine, Bridgeport, Conn.; said Hine assignor to said Armstrong. Wrench .....	274,545	Mar. 27	1698	471	23	1148
Armstrong, Frank L., Philadelphia, Pa. Combination-tool .....	280,995	July 10	808	225	24	149
Armstrong, Frederick W., New York, N. Y. Composition for restoring paints .....	286,167	Oct. 9	474		25	99
Armstrong, Harry C., Detroit, Mich. Liquid-measure .....	269,969	Jan. 2	102	30	23	22
Armstrong, Harry W., Verona, assignor to Metcalf, Paul & Co., Pittsburg, Pa. Machine for making nut-locks, &c .....	274,251	Mar. 20	1295	357	23	1072



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Armstrong, Harry W., assignor to Metcalf, Paul & Co., Pittsburg, Pa. Machine for making washers	284,707	Sept. 11	676	190	24	1024
Armstrong, Henry, Darlington, county of Durham, and J. A. Loudon, Exeter, county of Devon, England. Boiler-covering	287,994	Nov. 6	262	.....	25	553
Armstrong, Jacob S., Republic, Ohio. Truck for handling brick	277,187	May 8	853	227	23	1778
Armstrong, James, assignor to J. C. Armstrong, Bridgewater, N. Y. Feed-water heater and smoke-stack combined	276,150	Apr. 24	1649	{ 455 456 }	{ 23 23 }	{ 1533 1533 }
Armstrong, James H., Pinconning, Mich. Chain-fastener	290,833	Dec. 25	1863	515	25	1236
Armstrong, Jane C. (See Armstrong, James, assignor.)						
Armstrong, John, Cleveland, Ohio., assignor to B. Gloekler, Pittsburg, Pa. Machine for stuffing sausages	288,540	Nov. 13	946	259	25	680
Armstrong, John B., Guelph, Ontario, Canada. Bearing-plate	280,597	Dec. 4	284	79	25	937
Armstrong, Ransom H., Hudson, Mich. Halter	281,952	July 24	2034	556	24	373
Armstrong, Robert C., Alexandria, Va., assignor of one-half to W. Small, Washington, D. C. Filtering apparatus	271,396	Jan. 30	1946	563	23	391
Armstrong, Robert W., Belleek, county of Fermanagh, Ireland. Trap	277,656	May 15	1408	379	23	1879
Armstrong, Samuel, Newark, N. J. Metal packing for piston-rods	274,165	Mar. 20	1186	327	23	1053
Armstrong, Samuel, Newark, N. J. Metallic wire packing	287,751	Oct. 30	2519	679	25	488
Armstrong, Walter T., Andes, N. Y. Machine for notching sheet metal	280,996	July 10	809	225	24	150
Armstrong, William, Martinsburg, W. Va., assignor of one-half to D. M. Newbold, Baltimore, Md. Signal head-light	279,072	June 5	562	{ 154 155 }	{ 23 23 }	{ 2220 2220 }
Armstrong, William T., Soledad, assignor to Baker & Hamilton, San Francisco, Cal. Seed-sower attachment	280,437	July 3	126	34	24	23
Arnand, Pierre, and L. Gayt��, La Ciotat, France. Steelyard	280,779	July 10	559	156	24	105
Arnd, Henry. (See Kukukuck and Arnd.)						
Arnd Manufacturing Company. (See Kukukuck and Arnd, assignors.)						
Arndt, Theophilus, Florin, assignor of one-half to H. H. Heise, Columbia, Pa. Automatic railway-signal	289,953	Dec. 11	719	203	25	1019
Arndt, William J., Detroit, Mich. Grain-car door	271,677	Feb. 6	109	29	23	459
Arner, Irving E., Halloway, Mich. Attachment for harvesters	272,016	Feb. 13	539	146	23	546
Arner, Irving E., Halloway, Mich. Self-binding harvester	281,227	July 17	1108	305	24	209
Arnett, John. (See Bodifield and Arnett.)						
Arnheim, Marks, New York, N. Y. Supporting-cable used in propelling cars	283,058	Aug. 14	698	196	24	631
Arnn, Crispin D. (See Parker and Arnn.)						
Arno, Oliver H., Wilmington, assignor to American Automatic Organ Company, Boston, Mass. Mechanical musical instrument. (Reissue.)	10,279	Jan. 30	2186	{ 628 629 }	{ 23 23 }	{ 433 433 }
Arnold, Abbott, Houston, Tex. Bale-tie	281,821	July 24	1877	513	24	346
Arnold, Albert F., Providence, R. I. Ear-ring	276,993	May 8	605	158	23	1736
Arnold, Amos W. C., Providence, R. I., and C. Morrill, New York, N. Y. Metal-shearing machine	279,314	June 12	867	242	23	2281
Arnold, Anna M. (See Arnold, Satterlee, assignor.)						
Arnold, Craig R. (See Simmons, John B., assignor.)						
Arnold, Craig R., Philadelphia, Pa. Current-regulator for electric-light circuits	288,393	Nov. 13	770	208	25	648
Arnold, Don Juan, Brownville, Nebr. End-gate	279,687	June 19	1339	372	23	2365
Arnold, Fred E. (See Arnold, George W. and F. E.)						
Arnold, George W. and F. E., Ionia, Mich. Harrow-tooth fastening	276,209	Apr. 24	1721	476	23	1545
Arnold, George W., Knoxville, Ill. Sash-balance	283,946	Aug. 28	1791	507	24	849
Arnold, John P., Philadelphia, Pa. Whip	284,351	Sept. 4	234	66	24	944
Arnold, Nathaniel W. (See Packard and Arnold.)						
Arnold, Noah S., San Francisco, Cal., assignor to Dighton Furnace Company, Dighton, Mass. Cooking stove and range	284,795	Sept. 11	789	220	24	1043
Arnold, Oliver, assignor to T. K. Earle Manufacturing Company, Worcester, Mass. Oscillating cutter for card-setting machines	284,161	Sept. 4	1	1	24	905
Arnold, Oliver, assignor of one-half to J. L. Truax, Worcester, Mass. Roller-skate	287,007	Oct. 30	2331	630	25	452
Arnold, Satterlee, assignor to A. M. Arnold, Troy, N. Y. Uniting fabrics	278,484	May 29	2449	668	23	2077
Arnold, Satterlee, assignor to A. M. Arnold, New York, N. Y. Manufacture of knit goods	278,486	May 29	2454	669	23	2077
Arnold, Satterlee, Troy, assignor to A. M. Arnold, New York, N. Y. Method of and apparatus for trimming and sewing fabrics	278,485	May 29	2451	{ 668 669 }	{ 23 23 }	{ 2077 2077 }
Arnold & Wendt. (See Brock, William E., assignor.)						
Arnold, William J., Providence, R. I. Music-leaf turner	288,966	Nov. 27	1477	409	25	789
Aron, Joseph. (See Rosenfield, William W., assignor.)						
Aronson, Albert, New York, N. Y. Fabric	281,172	July 10	1024	286	24	188
Aronson, Joseph N., London, England. Electric brush	279,315	June 12	871	{ 242 243 }	{ 23 23 }	{ 2281 2281 }
Arras, John D., Findlay, assignor of one-half to P. D. Arras, Cannonsburg, Ohio. Corn-drill	282,433	July 31	2663	730	24	485
Arras, Peter D. (See Arras, John D., assignor.)						
Arter, Alpheus, New Lisbon, Ohio. Hame-tug	284,590	Sept. 11	528	150	24	999
Arthur, Alexander A., E. F. Spaulding, Boston, Mass., and W. Davison, Hoboken, N. J. Fence-post	277,657	May 15	1409	380	23	1880
Arthur, Alexander A., E. F. Spaulding, Boston, Mass., and W. Davison, Hoboken, N. J. Fence-post	277,658	May 15	1410	380	23	1880
Arthur, Joseph A., Logan County, W. Va. Reciprocating propeller	274,693	Mar. 27	1875	522	23	1180
Arthur, Joseph A., Catlettsburg, Ky., assignor of one-third to E. Robinson, Kanawha Station, W. Va. Sewing-machine motor	283,742	Aug. 28	1540	436	24	804
Arthur, Lee Roy, assignor of one-half to J. Fowler, Glens Falls, N. Y. Sack-turner	287,214	Oct. 23	1820	499	25	349
Artmann, Richard. (See Fechteler, Henry, assignor.)						
Artz, George L., Columbus, Ohio. Top-prop for carriages	283,553	Aug. 21	1306	366	24	748
Arzt, Frederick, New York, N. Y. Candle-holder for Christmas-trees	286,572	Oct. 16	995	269	25	197
Ashby, Henry B., Germantown, F. A. Neider and G. Grossmann, Augusta, Ky. Culinary vessel	282,252	July 31	2427	667	24	444
Asbury, William, Boston, Mass. Tricycle	285,946	Oct. 2	216	61	25	41
Ash, Charles W., Boston, Mass., assignor of one-half to J. N. Lander, Concord, N. H. Lewis	277,532	May 15	1261	338	23	1855
Ash, Joseph, and J. Fisk, assignors to American Fence Machine Company, Quincy, Ill. Wire-fence machine	288,913	Nov. 20	1468	388	25	769
Ash, William F., Walnut, Kans. Fence	279,073	June 5	564	155	23	2220
Ashbury, Thomas, et al. (See Sumner, Herbert, assignor.)						
Ashbury, Thomas, H. Sumner, W. Lees, and R. W. B. Sanderson, Manchester, county of Lancaster, England. Gas-motor engine	282,832	Aug. 7	426	121	24	576
Ashby, William W., Boreman, W. Va. Potato-planter	283,059	Aug. 14	699	196	24	631
Ashcroft Manufacturing Company. (See See, James W., assignor.)						
Ashcroft, William F., Lovely Dale, Ind. Carpet-stretcher	270,720	Jan. 16	1110	317	23	232
Asher, Morris, and G. Minck, assignors to said Morris Asher and S. Ashner, New York, N. Y. Cigar	288,151	Nov. 6	440	124	25	584

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Ashley, James R., Joliet, Ill. Wire bale-tie.....	285,947	Oct. 2	217	61	25	41
Ashley, William E. (See Bodenhamer and Ashley.)						
Ashman, George, Cincinnati, Ohio. Aquatic glove.....	286,106	Oct. 2	401	110	25	74
Ashner, Sigmund. (See Asher and Minck, assignors.)						
Ashtabula Bolt and Shaft Company. (See Castle, William H., assignor.)						
Ashtabula Carriage Bow Company. (See Castle, Samuel N., assignor.)						
Ashton, William H., Seward, Neb. Paper-bag holder.....	288,967	Nov. 27	1478	{ 409 410 }	25	789
Ashworth, Edmund, Bolton le Moors, county of Lancaster, England. Machine for wind- ing yarn, thread, &c.....	285,203	Sept. 18	1285	{ 361 362 }	24	1139
Asimont, Henry H., assignor of one-half to A. H. Harston, Duluth, Minn. Sash-holder.....	288,611	Nov. 20	1035	285	25	703
Asire, George H., South Bend, Ind. Steam-boiler.....	289,796	Dec. 11	529	{ 147 148 }	25	985
Askrens, Joseph H. (See Howe, Albert D., assignor.)						
Asper, Benjamin F., Pittsburg, Pa. Coal-mining machine.....	289,745	Dec. 4	469	{ 132 133 }	25	968
Aspin, Robert. (See Porter, Bloom, and Aspin.)						
Aspinwall, L. Augustus, Trenton, N. J. Potato-planter.....	276,994	May 8	606	159	23	1736
Asselstine, Elnathan M., East Saginaw, Mich. Recording device.....	275,454	Apr. 10	775	207	23	1367
Assmann, Franz A., assignor of one-half to J. H. Seheel, New York, N. Y. Can for oil, &c.....	273,794	Mar. 13	720	195	23	966
Assmus, Adolph, Chicago, Ill. Drive-chain.....	280,760	July 10	559	157	24	106
Athearn, William E., Philadelphia, Pa. Telegraphic repeater.....	286,107	Oct. 2	401	110	25	74
Atherton, Abel T. (See Potter, James, assignor.)						
Atherton, Abel T. (See Walker, George P., assignor.)						
Atherton, Abel T., Lowell, Mass. Seed-cotton cleaner.....	288,152	Nov. 6	440	124	25	584
Atherton, Abel T., assignor to Phenix Machine Company, Lowell, Mass. Bobbin-holder for spooling-machines.....	270,721	Jan. 16	1111	{ 317 318 }	23	232
Atherton, Robert, and J. Newby, Paterson, N. J. Thread-guide for spooling-machines.....	278,487	May 29	2455	669	23	2078
Athey, Isaac H., Paola, Kans. Corn-dropping attachment.....	276,151	Apr. 24	1651	456	23	1534
Atbol Machine Company. (See Hickok, Samuel, assignor.)						
Atkins, Callahill, Pikeville, assignor of one-half to S. M. Ferguson, Floyd County, Ky. Medicine for scrofula.....	280,281	June 26	2044	-----	23	2496
Atkins, Elias C. (See Hood, Harrison P., assignor.)						
Atkins, Elias C., Indianapolis, Ind. Auxiliary saw-handle.....	287,790	Nov. 6	4	2	25	507
Atkins, Elias C., Indianapolis, Ind. Furnace for heating saws.....	288,968	Nov. 27	1478	410	25	789
Atkins, James I. (See Powell and Atkins.)						
Atkins, Sophronia, River Falls, Wis. Cordage to be used for bale bands or ties.....	279,852	June 19	1525	-----	23	2398
Atkins, Sullivan H., et al. (See Carter, Alba B., assignor.)						
Atkinson, Claude M., Milwankee, Wis. Glue compound.....	282,034	July 31	2134	-----	24	396
Atkinson, Henry C., Franklin, Ky. Lamp.....	284,796	Sept. 11	790	220	24	1043
Atkinson, Henry C., Franklin, Ky., assignor of part to T. B. McKenzie & Harris, J. Black, J. G. Harris, R. B. Phillips, G. S. Black, L. J. Jones, and I. H. & T. M. Goodknight. Car-axle.....	277,825	May 15	1599	437	23	1914
Atkinson, Philip, Chicago, Ill. Frictional electrical machine.....	275,347	Apr. 10	627	{ 169 168 }	23	1342
Atkinson, William B., assignor of one-half to J. H. Foster, Franklin, Ky. Combination-lock.....	277,188	May 8	854	227	23	1778
Atkinson, William H., assignor to Somers Brothers, Brooklyn, N. Y. Box.....	277,401	May 8	1095	294	23	1821
Atkinson, William H., assignor to Somers Brothers, Brooklyn, N. Y. Machine for seam- ing irregular-shaped cans.....	279,853	June 19	1526	427	23	2398
Atkiss, James, Brooklyn, N. Y. Machine for plotting soap.....	276,326	Apr. 24	1881	522	23	1571
Atlantic and Pacific Electric Manufacturing Company. (See Rabl, Franz, assignor.)						
Atlas Engine Works. (See Moore, Matthew R., assignor.)						
Atlas Manufacturing Company. (See McCollum, Matthew C., assignor.)						
Atterbury, Thomas B., Pittsburg, Pa. Mold for forming glass articles.....	275,562	Apr. 10	910	247	23	1390
Atterbury, Thomas B., Pittsburg, Pa. Mold for manufacturing glass lamps and other ar- ticles.....	275,563	Apr. 10	912	247	23	1390
Atterbury, Thomas B., Pittsburg, Pa. Manufacture of glass articles.....	275,564	Apr. 10	913	247	23	1390
Atterbury, Thomas B., Pittsburg, Pa. Glass-mold and the manufacture of glass articles.....	276,327	Apr. 24	1882	{ 522 523 }	23	1571
Attock, Frederick, Newton Heath, near Manchester, county of Lancaster, England. Car- coupling.....	287,082	Oct. 23	1649	453	25	318
Atwater, Henry W., Orange, N. J. Wrench.....	284,162	Sept. 4	2	1	24	905
Atwater, John B., Chicago, Ill. Electric motor.....	274,101	Mar. 20	1098	{ 303 304 }	23	1037
Atwater, John B., Chicago, Ill. Rotary electro-magnetic motor.....	278,760	June 5	103	29, 30	23	2141
Atwater, Richard M., Millville, N. J., assignor of one-half to Whittall, Tatum & Co., Phil- adelphia, Pa. Apparatus for cutting the scales on glass measuring-vessels.....	273,795	Mar. 13	721	196	23	966
Atwater, Richard M., Millville, N. J., assignor of one-half to Whittall, Tatum & Co., Phil- adelphia, Pa. Apparatus for determining the scale of glass measuring-vessels.....	278,845	June 5	234	69	23	2163
Atwell, Richard H., Baltimore, Md. Relief-valve for steam fire-engines.....	277,129	May 8	856	228	23	1778
Atwood, Adelbert A., Shenandoah, Iowa. Drag sawing machine.....	287,895	Nov. 6	133	39	25	531
Atwood, Adelbert A., Shenandoah, Iowa. Wire-tightener.....	290,354	Dec. 18	1258	353	25	1124
Atwood, Adelbert A., Shenandoah, Iowa. Seed-planter.....	290,355	Dec. 18	1259	353	25	1125
Atwood, Addison, D. and C. M., East Portland, Oreg. Car-coupling.....	284,787	Sept. 11	791	220	24	1044
Atwood, Charlie M. (See Atwood, Addison D. and C. M.)						
Atwood, George F., Swanton, Vt. Suspender-loop.....	275,975	Apr. 17	1429	394	23	1488
Atwood, George F., Swanton, Vt. Suspenders.....	290,958	Dec. 25	2020	557	25	1262
Atwood, James E., Troy, N. Y., assignor to T. Mace, Plainfield, N. J. Carbon electrode for electric lamps.....	272,017	Feb. 13	541	146	23	546
Atwood, James F., Boston, Mass. Attaching buttons, &c.....	285,781	Oct. 2	4	1	25	3
Atwood, James F., Boston, Mass. Button-setting instrument.....	285,782	Oct. 2	5	2	25	4
Atwood, James F., Boston, Mass. Cuff-holder.....	289,057	Nov. 27	1590	440	25	808
Atwood, James L. (See Hungerford, Arthur E., assignor.)						
Atwood, Leonard, New York, N. Y. Safety hod-elevator.....	271,678	Feb. 6	109	30	23	459
Atwood, Leonard, New York, N. Y. Safety hod-elevator.....	273,066	Feb. 27	1805	505	23	777
Atwood, Leonard, New York, N. Y. Endless hod-elevator.....	275,455	Apr. 10	776	207	23	1367
Atwood, Lewis J., assignor to Plume & Atwood Manufacturing Company, Waterbury, Conn. Lamp-burner.....	270,722	Jan. 16	1112	318	23	232
Atwood, Osmyth H. and H. P. Lester, North Attleborough, Mass. Bracelet.....	279,518	June 19	1141	315	23	2331
Aubin, Auguste H., New York, N. Y. Chewing-gum and manufacturing the same.....	280,115	June 26	1851	-----	23	2462
Auble, William A., assignor to L. H. Thomas, Chicago, Ill. Can for ink.....	286,893	Oct. 16	1403	385	25	268
Auburdale Watch Company. (See Wales, William A., assignor.)						
Auchincloss, William S., Philadelphia, Pa. Averaging-machine.....	281,953	July 24	2034	{ 556 557 }	24	373



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Aner, Albert B., assignor of one-half to S. P. Rounds, Chicago, Ill. Type-form furniture, &c	278,211	May 22	2080	573	23	2004
Anerbach, Altschul & Brannon. (See Brannon, Patrick P., assignor.)						
Angir, Viola J., Spencer, Iowa. Album for photographs, &c	271,765	Feb. 6	216	60	23	478
Angspath, Louis, Little Rock, Ark. Railway-car	283,947	Aug. 28	1792	507	24	849
Auld, Joseph, Burlington, Vt. Tricycle	289,746	Dec. 4	472	133	25	969
Aull, William F., et al. (See Gartside, Joseph H., assignor.)						
Aumock, Charles D., Owasco Lake, N. Y. Force-feed fertilizer-distributor	270,198	Jan. 9	438	129	23	97
Aurand, Balera J., Mansfield, assignor to H. H. Rudd, Cleveland, Ohio. Thill-tug	269,989	Jan. 2	196	57	23	41
Austin, Dinsmore, assignor of one-third to H. C. Laub, Denison, Iowa. Attachment to windmills, &c	272,618	Feb. 20	1307	364	23	683
Austin, Dinsmore, assignor of one-third to J. Knight, Denison, Iowa. Mechanical power for windmills	273,796	Mar. 13	722	196	23	966
Austin, Edward R. (See Jackson and Austin.)						
Austin, Frederick. (See Berlin, Henry, assignor.)						
Austin, George W., et al. (See Carleton, Monroe G., assignor.)						
Austin, Henry R., Norwood, N. Y. Turbine water-wheel	287,403	Oct. 30	2059	559	25	399
Austin, James, Brooklyn, N. Y. Traction-wheel	269,990	Jan. 2	197	57	23	41
Austin, Joseph G., Camden, N. J. Wood-working machine	271,014	Jan. 23	1472	424	23	302
Austin, Josiah, and R. Chamberlain, East Liberty, Ohio. Automatic double gate	272,619	Feb. 20	1308	365	23	683
Austin, Matthew J., Danville, Ill. Ditching-machine	283,948	Aug. 28	1793	507	24	849
Austin, Samuel. (See Stites, Steel, and Austin.)						
Austin, William, Philadelphia, Pa. Sheet-metal pipe	290,659	Dec. 25	1633	449	25	1195
Austin, William F., Greenbush, N. Y. Potato-digger	271,015	Jan. 23	1473	424	23	302
Austrian, Raphael, Reading, Pa. Apparatus for cleaning and polishing boots and shoes	290,386	Dec. 18	1260	353	25	1125
Automatic Centering Chuck Company. (See Peer, John A., assignor.)						
Automatic Current Protector and Electric Manufacturing Company. (See Dyer, Josiah W., assignor.)						
Automatic Fire Alarm Association. (See Prentiss and Tilden, assignors.)						
Automatic Fire Extinguisher Company. (See Brown, Joseph R., assignor.)						
Automatic Gas Machine Company. (See Cottrell, Herbert, assignor.)						
Automatic Parcel Delivery Company. (See Hayden, Harris H., assignor.)						
Automatic Safety Boiler and Engine Company. (See Mather, Thomas W., assignor.)						
Automatic Safety Boiler and Engine Company. (See Nunn and Smith, assignors.)						
Averell, Ellicot D., Brooklyn, N. Y. File for invoices, letters, bonds, &c	273,797	Mar. 13	724	196	23	967
Avery, Asher W., assignor of one-half to E. L. Ingalls, Verndale, Minn. Car-coupling	283,743	Aug. 28	1541	436	24	804
Avery, Cyrus M. (See Avery, Robert H., assignor.)						
Avery, Elroy M., Cleveland, Ohio. Electric cut-out	276,328	Apr. 24	1884	523	23	1572
Avery, George C., Louisville, Ky. Plumb-bob	279,316	June 12	872	243	23	2282
Avery, George C., Louisville, Ky. Double shovel plow	285,723	Sept. 25	1912	542	24	1258
Avery, George C., assignor to B. F. Avery & Sons, Louisville, Ky. Plow	290,959	Dec. 25	2021	558	25	1262
Avery, John A., Boston, Mass. Mast-shield	288,153	Nov. 6	442	124	25	585
Avery, John G., Spencer, Mass. Anti-friction bearing	287,215	Oct. 23	1820	499	25	349
Avery Lactate Company. (See Marsh, George A., assignor.)						
Avery Lactate Company. (See Thompson, Charles O., assignor.)						
Avery Lactate Company. (See Waite, Charles N., assignor.)						
Avery, Orlando M. (See Young, James E., assignor.)						
Avery, Robert H., assignor of one-half to C. M. Avery, Galesburg, Ill. Corn-planter	276,745	May 1	279	71	23	1672
Avery, Samuel, Phenix, N. Y. Box-nailing machine	270,364	Jan. 9	641	189	23	135
Avery & Sons, B. F. (See Avery, George C., assignor.)						
Avery, William G., Cleveland, Ohio. Saw-set and punch	282,600	Aug. 7	151	45	24	527
Avery, William O., Washington, D. C. Fire-escape	284,994	Sept. 18	1032	289	24	1095
Axtell, Spencer T. (See Henley and Axtell.)						
Aydellott, Jacob S., Xenia, Ind. Cog-link for chains	270,723	Jan. 16	1113	318	23	233
Aydellott, Jacob S., Xenia, Ind. Lock	281,822	July 24	1878	513	24	346
Ayer, Frank C., Columbus, Ohio. Rein and whip holder	271,016	Jan. 23	1474	425	23	302
Ayer, Frank C., Columbus, Ohio. Vehicle-dash fastening	274,017	Jan. 23	1475	425	23	302
Ayer, Frank C., Columbus, Ohio. Combined whip and rein holder	287,493	Oct. 30	2170	589	25	421
Ayers, Alexander, San José, Cal. Saddle-girth	289,598	Dec. 4	224	79	25	937
Ayers, George A., Holyoke, Mass. Hygrometer	277,533	May 15	1262	339	23	1855
Ayers, George A., Holyoke, Mass. Hygrometric governor for railway-heads	278,488	May 29	2456	669	23	2078
Ayling, Arthur P. (See Semple and Ayling.)						
Aylsworth, William P., Council Bluffs, Iowa. House-moving truck	290,513	Dec. 18	1446	399	25	1156
Ayo, Joseph O., near Honma, La. Dredging-bucket	277,868	May 22	1660	433	23	1931
Ayres, Abraham, New York, N. Y. Railway-switch	275,115	Apr. 3	300	86	23	1270
Ayres, Franklin C., Deadwood, Dak. Ter. Snap-hook	274,694	Mar. 27	1876	523	23	1181
Ayres, Henry, Philadelphia, Pa. Gripper for printing-presses	274,546	Mar. 27	1699	471	23	1148
Ayres, James, et al. (See Decker, Alexander C., assignor.)						
Ayres, Jared A., assignor to Pneumatic Engine Company, Mystic River, Conn. Boiler-feed apparatus for engines	274,102	Mar. 20	1101	304	23	1037
Ayres, Jared A., assignor to Pneumatic Engine Company, Mystic River, Conn. Boiler-feed water apparatus	274,103	Mar. 20	1103	305	23	1038
Ayres, Jared A., assignor to Pneumatic Engine Company, Mystic River, Conn. Boiler-feeding apparatus	274,104	Mar. 20	1105	305	23	1038
Ayres, Peter, et al. (See Decker, Alexander C., assignor.)						
Ayres, Samuel, assignor to S. Ayres & Son, Worcester, Mass. Animal-trap	282,482	Aug. 7	5	2	24	501
Ayres & Son, S. (See Ayres, Samuel, assignor.)						
Ayres, Tyler F., Yuba, Wis. Churn	274,252	Mar. 20	1298	357	23	1073
Babb, William J., assignor to himself and W. T. Mason, Troy, N. Y. Fire-kindler	277,190	May 8	857		23	1779
Babb, William J., assignor to himself and W. T. Mason, Troy, N. Y. Fire-kindler. (Re-issue)	10,352	July 10	1100		24	201
Babbitt, Joseph W., Hiawatha, Kans. Skimmer for evaporating-pans	278,074	May 22	1898	520	23	1972
Babbitt, Benjamin T., New York, N. Y. Rotary engine	269,991	Jan. 2	199	57	23	41
Babbitt, Benjamin T., New York, N. Y. Balanced rotary valve	269,992	Jan. 2	200	58	23	42
Babbitt, Benjamin T., New York, N. Y. Boiler-feeder	269,993	Jan. 2	201	58	23	42
Babbitt, Benjamin T., New York, N. Y. Steam-generator	271,397	Jan. 30	1947	563	23	392
Babbitt, Benjamin T., New York, N. Y. Blast apparatus for forges	273,433	Mar. 6	250	63	23	876
Babbitt, Benjamin T., New York, N. Y. Extracting glycerine	275,976	Apr. 17	1429	394	23	1488
Babbitt, Benjamin T., New York, N. Y. Bleaching palm-oil, &c	281,823	July 24	1879	513	24	346
Babbitt, Benjamin T., New York, N. Y. Evaporating apparatus	286,369	Oct. 9	745	200	25	145
Babbitt, S. William, Meriden, Conn. Combined sink trap and safety-pocket	280,759	Oct. 16	1232	333	25	228
Babcock, Amos M., Nora Springs, Iowa. Device for converting motion	285,372	Sept. 25	1486	419	24	1161



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Babcock, Barber, Busti, N. Y. Cotton and hay press	277,101	May 8	745	196	23	1759
Babcock, Cyrus M., <i>et al.</i> (See Healy, Michael L., assignor.)						
Babcock, Erskine L., Cuyahoga Falls, Ohio, assignor to Indianapolis Machine and Bolt Works, Indianapolis, Ind. Pulley-wheel	285,869	Oct. 2	111	33	25	22
Babcock, George H., Plainfield, N. J. Luminous sign	284,163	Sept. 4	3	1	24	905
Babcock, Simon, Manistee, Mich. Machine for sawing clapboards or rift siding	273,701	Mar. 13	594	159	23	943
Babcock, Sylvester P., Adrian, Mich. Hand-planter cut-off	276,995	May 8	608	159	23	1736
Babcock, Sylvester P., Adrian, Mich. Spring-metal cut-off for hand-planters	276,996	May 8	608	160	23	1736
Babcock & Wilcox Company. (See Higgins, Campbell P., assignor.)						
Babcock & Wilcox Company. (See Pratt, Nathaniel W., assignor.)						
Babcock, William A., South Coventry, Conn. Air-compressor	280,997	July 10	810	226	24	150
Babcock, William A., South Coventry, Conn., assignor to Bishop & Babcock, Cleveland, Ohio. Fanet	287,357	Oct. 23	1993	543	25	381
Babcock, William A., South Coventry, Conn., assignor to Bishop & Babcock, Cleveland, Ohio. Hydraulic air-compressor	287,358	Oct. 23	1995	544	25	381
Babcock, William H. (See Aldrich, James T., assignor.)						
Babcox, Hiram M. D. L., Modesto, Cal. Sully dirt-scraper	277,826	May 15	1600	437	23	1914
Babcox, Hiram M. D. L., San Francisco, Cal. Pump	284,708	Sept. 11	678	191	24	1025
Bach, Edward, Richfield, Wis. Churn	275,747	Apr. 10	1145	314	23	1429
Bach, John C., Hillsdale, Mich. Shaft-press	290,834	Dec. 25	1864	515	25	1236
Bach, John C., assignor to himself and H. Alles, Hillsdale, Mich. Two-wheeled vehicle	288,757	Nov. 20	1225	335	25	735
Bach, Thomas C. (See Moore, Ira, assignor.)						
Bach, Thomas C. (See Moore, Ira W., assignor.)						
Bachelder, John, Napa, Cal. Agricultural machine	278,675	June 5	1	1	23	2125
Bacher, Gottfried, Kladno, Austria-Hungary. Apparatus for depositing and collecting sediments or precipitates	277,191	May 8	858	228	23	1779
Bachman, Albert, Shelburne, Nova Scotia, Canada, assignor of one-third to J. W. Young, Boston, Mass. Pulley-block	272,186	Feb. 13	745	206	23	581
Bachman, Jacob, Stony Run, Pa. Fan for grain-separators, &c.	270,882	Jan. 23	1305	377	23	275
Bachmann, Emil, New York, N. Y. Elevator	284,352	Sept. 4	235	66	24	944
Bachmann, Emil, New York, N. Y. Coin-detector	285,204	Sept. 18	1286	362	24	1139
Bachmann, Emil, New York, N. Y. Elevator	286,760	Oct. 16	1234	333	25	239
Bachmann, Johann, Nuremberg, Bavaria, Germany, assignor to Link-Belt Machinery Company, Chicago, Ill. Belt-fastener	285,543	Sept. 25	1690	476	24	1218
Backus, Augustus. (See Watrous, James A., assignor.)						
Backus, Quimby S., Winchendon, Mass. Combined bathing apparatus and commode	275,011	Apr. 3	168	45	23	1254
Backus, Quimby S., Winchendon, Mass. Boiler	279,905	June 26	1596	447	23	2417
Backus, Thaddeus J. (See Walker and Backus.)						
Backus, Victor M., Indianapolis, Ind. Vehicle-spring	274,547	Mar. 27	1700	472	23	1148
Backus, Victor M., Indianapolis, Ind. Vehicle-spring	287,404	Oct. 30	2059	559	25	400
Bacon, Charles H., Boston, assignor of one-half to A. Fuller, E. Newhall, Lynn, and J. H. Sturgis, Brookline, Mass. Rotary engine	280,438	July 3	126	34	24	24
Bacon, Charles H., assignor of one-half to A. Fuller, Boston, E. Newhall, Lynn, and J. H. Sturgis, Brookline, Mass. Apparatus for measuring fluids	289,058	Nov. 27	1591	440	25	808
Bacon, Edward H., La Prairie, Ill. Ribbon box and reel	283,949	Aug. 28	1794	508	24	849
Bacon, George C., Lynn, Mass. Clamp	282,945	Aug. 14	561	159	24	607
Bacon, Henry S. (See Bate, Wallace H., assignor.)						
Bacon, Henry S. (See Cushman, Henry S., assignor.)						
Bacon, Henry S., Milford, Mass., assignor to Union Fastening Company, Jersey City, N. J. Tube-forming and cord-covering machine	273,217	Feb. 27	2068	581	23	824
Bacon, J. Francis, <i>et al.</i> (See Pfautz, Daniel M., assignor.)						
Bacon, John L. (See Preston and Bacon.)						
Bacon, Joseph H., Charlotte, Mich. Signal	273,218	Feb. 27	2069	581	23	824
Bacon, Joseph H., and W. H. Paige, Detroit, Mich. Straight-way valve	281,228	July 17	1109	306	24	209
Bacon, Nathaniel T. (See Cowles, William, assignor.)						
Bacon, Orin F., assignor to Reed & Barton, Taunton, Mass. Table-caster frame	285,544	Sept. 25	1691	477	24	1218
Bacon, Renben S., assignor of one-half to E. J. Pelton, Springfield, Ohio. Roller for endless belts	280,282	June 26	2045	575	23	2497
Bacon, William. (See Walker and Bacon.)						
Bacon, William L., Philadelphia, Pa. Strap-binge	289,599	Dec. 4	285	80	25	937
Badger, Henry. (See Richards, James F., assignor.)						
Badger, Thomas E., assignor to M. J. Wine, Washington, D. C. Package-holder	290,514	Dec. 18	1447	400	25	1157
Badger, George A., Quincy, Mass. Cash-carrier	279,688	June 19	1340	372	23	2366
Badger, Jonathan, New York, N. Y. Spoon and sugar-tongs combined	274,695	Mar. 27	1877	523	23	1181
Badger, Jonathan, New York, N. Y. Window-ventilator	287,791	Nov. 6	4	2	25	507
Badger, Walter A., <i>et al.</i> (See Reynolds, David R., assignor.)						
Badger, William E., Quincy, Mass. Ball-governor for steam-engines	278,387	May 29	2334	638	23	2056
Badger, William E., Quincy, Mass. Governor-valve	289,954	Dec. 11	720	203	25	1020
Badger, William F., Muscotah, Kans. Windmill	285,948	Oct. 2	218	61	25	42
Badgley, Charles C., Neelysville, Mo. Steam logging-crab	270,873	Jan. 16	1287	371	23	266
Badgley, Josephus H., Clayton, Mich. Baling-press	286,168	Oct. 9	474	131	25	99
Badzlov, Oliver B., <i>et al.</i> (See Miller, David W., assignor.)						
Badische Anilin and Soda Fabrik. (See Bernthsen, August, assignor.)						
Badische Anilin and Soda Fabrik. (See Brunck, Heinrich, assignor.)						
Badische Anilin and Soda Fabrik. (See Caro and Kern, assignors.)						
Badische Anilin and Soda Fabrik. (See Kern, Alfred, assignor.)						
Baechler, Charles, Portland, Oreg. Casting stereotype-plates	278,652	May 29	2655	726	23	2112
Baer, Henry C., Massillon, Ohio. Pneumatic shavings and dust feeder	277,192	May 8	859	228	23	1779
Baer, Leopold, T. F. Miner, and T. Taylor, La Grande, Oreg. Non-explosive lamp	284,353	Sept. 4	238	66	24	944
Baese, C. Otto. (See Gärtner, Adolph, assignor.)						
Baggett, James E., assignor of one-half to C. R. Combs, Memphis, Mo. Cream and milk transporter	285,724	Sept. 25	1914	543	24	1258
Bagges, Andrew H., deceased, Labelle Glass Company, legatee, Bridgeport, Ohio. Glass-lamp mold	277,402	May 8	1096	294	23	1821
Bagley, Perkins H. (See Slater, Richard L., assignor.)						
Bagot, Joseph, Brooklyn, N. Y. Combined perch and parasite-trap	273,434	Mar. 6	251	68	23	877
Bahret, Jacob F., Fort Wayne, Ind. Toy trundle or hoop	276,746	May 1	281	71	23	1673
Baier, Franz, Chicago, Ill. Oil-stove stand	272,620	Feb. 20	1309	365	23	684
Baier, Franz A., New York, N. Y. Bottle-packing box	278,761	June 5	105	30	23	2141
Bailo, Charles P., New Windsor, Md. Green corn silker	287,083	Oct. 23	1650	433	25	318
Bailey, Benjamin F., Manchester, N. H., and G. H. Griffen, Wareham, Mass. Portable soda-water apparatus	283,060	Aug. 14	700	196	24	631
Bailey, Charles A., trustee. (See Cayce, John M., assignor.)						
Bailey, Charles A., Middletown, Conn. Mechanical toy	281,427	July 17	1358	375	24	252

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Bailey, Charles A., Middletown, Conn. Trundle toy.	281,428	July 17	1359	375	24	252
Bailey, Charles E., and W. R. Talbot, Providence, R. I. Manufacture of shoe-buttons	273,932	Mar. 13	1893	244	23	995
Bailey, Daniel, Buckeye City, Ohio. Bee-hive	283,554	Aug. 21	1307	366	24	748
Bailey, Ezra H., assignor to Canvas Slide Fire Escape Company, Washington, D. C. Incline-plane fire-escape	288,394	Nov. 13	771	{ 208 209 }	25	649
Bailey, Fortune L., Freeport, Ind. Plane	286,894	Oct. 16	1404	385	25	268
Bailey, Frank W. (See Webb, Mottell A., assignor.)						
Bailey, Henry, New York, N. Y. Pulverizer	275,566	Apr. 10	915	248	23	1390
Bailey, Henry C. (See Bennett, John M., assignor.)						
Bailey, Henry D. W., Canton, Ohio. Grain-binder	283,456	Aug. 21	1196	336	24	728
Bailey, Henry D. W., Canton, Ohio. Grain-binder	283,457	Aug. 21	1198	336	24	728
Bailey, Henry L., Brooklyn, N. Y. Circuit for secondary electric clocks	284,355	Sept. 4	241	67	24	945
Bailey, Henry L., Brooklyn, assignor to Time Telegraph Company, New York, N. Y. Electric circuit and apparatus for synchronizing clock-pendulums	278,846	June 5	235	69	23	2163
Bailey, Henry L., Brooklyn, assignor to Time Telegraph Company, New York, N. Y. Electric-spark arresting circuit and device	284,354	Sept. 4	239	67	24	944
Baldry, Henry P., Boston, Mass., and A. A. Hurd, Northwood, N. H. Sewing-machine	286,988	Oct. 23	1527	421	25	295
Bailey, James G., Patterson, Ontario, assignor of one-half to R. Thorne, Toronto, Ontario, Canada. Tricycle	285,205	Sept. 18	1268	362	24	1139
Bailey, Jefferson, Providence, R. I., assignor to McTammany Organette Company, Worcester, Mass. Music-sheet for mechanical musical instruments	266,108	Oct. 2	405	111	25	75
Bailey, Joseph R., Woonsocket, R. I. Hatchet	270,883	Jan. 23	1308	378	23	275
Bailey, Leonard, Hartford, Conn. Bench-plane	285,546	Sept. 25	1694	478	24	1219
Bailey, Leonard C., Washington, D. C. Combined truss and bandage	285,545	Sept. 25	1692	477	24	1218
Bailey, Michael, Windham, Ohio. Fence	273,435	Mar. 6	252	68	23	877
Bailey, Samuel R., Boston, Mass. Wood-dressing machine	277,827	May 15	1601	438	23	1915
Bailey, Selden A., assignor to Lark Manufacturing Company, New York, N. Y. Vehicle-spring	271,187	Jan. 23	1683	485	23	336
Bailey, Walter M., New York, N. Y. Elevator	269,994	Jan. 2	202	58	23	42
Bailey, Walter M., New York, N. Y. Apparatus for making varnish, &c	277,534	May 15	1263	339	23	1855
Bailey, William F., St. Paul, Minn. Sash-fastener	285,545	July 10	684	193	24	128
Bailey, William H., Minneapolis, Minn. Spike	285,373	Sept. 25	1487	419	24	1181
Baillie, William L. (See Wood and Baillie.)						
Baillie-Hamilton, Charles R., Greenwich, county of Kent, England. Velocipede	270,896	Jan. 23	1322	{ 381 382 }	23	278
Bain, Jesse, Spiceland, Ind. Washing-machine	276,329	Apr. 24	1885	523	23	1572
Bain Electric Company. (See Bain, Forcé, assignor.)						
Bain, Forcé, Minneapolis, Minn., assignor to T. G. Springer, Chicago, Ill. Dynamo-electric machine	280,708	July 3	443	126	24	79
Bain, Forcé, Minneapolis, Minn., assignor to T. G. Springer, Chicago, Ill. Electric-arc lamp	280,709	July 3	444	127	24	79
Bain, Forcé, assignor to Fisher Electric Company, Union City, Ind. Electric lamp	283,186	Aug. 14	852	238	24	658
Bain, Forcé, Minneapolis, Minn., assignor to Bain Electric Company, Chicago, Ill. Carbon for arc-lamps	284,939	Sept. 11	956	268	24	1074
Bain, Forcé, assignor to Bain Electric Company, Chicago, Ill. Dynamo or magneto electric generator	287,608	Oct. 30	2332	630	25	452
Bain, Forcé, assignor to Bain Electric Company, Chicago, Ill. Dynamo-electric machine	287,609	Oct. 30	2334	630	25	453
Bain, Forcé, assignor to Bain Electric Company, Chicago, Ill. Dynamo-electric machine	287,610	Oct. 30	2337	631	25	453
Bain, Forcé, assignor to Bain Electric Company, Chicago, Ill. Dynamo or magneto electric machine	287,611	Oct. 30	2338	631	25	453
Bain, Forcé, assignor to Bain Electric Company, Chicago, Ill. Method of and apparatus for cutting and shaping objects	288,395	Nov. 13	774	209	25	650
Bain, George M., et al. (See Brie, Duncan M., assignor.) (Reissue.)						
Bain, Robert E. W. (See Bain, William B., assignor.)						
Bain, William B., assignor of one-half to R. E. W. Bain, St. Louis, Mo. Carriage-wheel lock	288,154	Nov. 6	443	124	25	585
Bainbridge, David, Philadelphia, Pa. Hull of vessels	272,621	Feb. 20	1309	365	23	684
Bair, G. Milton. (See Raffensperger, Christian M., assignor.)						
Bair & Gazzam. (See Killip, John, assignor.)						
Bair, Ishmael, South Bend, Ind. Spring bed-bottom	289,493	Dec. 4	155	42	25	913
Baird, James, Allegheny, assignor to Reiter & Co., Pittsburg, Pa. Link-bending machine	287,359	Oct. 23	1997	544	25	381
Baird, Robert, assignor to Boulton Brothers & Co., Glasgow, Scotland. Valve attachment for gravity-lubricators	274,894	Apr. 3	5	1	23	1227
Bairstow, William H., assignor to Horner Brothers, Philadelphia, Pa. Loom for weaving carpets	289,955	Dec. 11	721	204	25	1020
Baker, A. L., et al. (See Schermerhorn, Herschel A., assignor.)						
Baker, Alfred. (See Ferguson and Baker.)						
Baker, Augustus H. (See Pinney, Henry L., assignor.)						
Baker, Augustus H., Hartford, assignor of one-half to H. L. Pinney, South Windsor, Conn. Railway-signal	271,296	Jan. 30	1815	{ 526 527 }	23	368
Baker, Bernard N. (See Price, George W., assignor.)						
Baker, Charles A., Boulder, Colo. Combined sofa and bath-tub	277,438	May 15	1151	309	23	1837
Baker, Charles A., New York, N. Y. Filtering compound	286,370	Oct. 9	746	200	25	146
Baker, Charles F. (See Clapp and Baker.)						
Baker, Charles J., Topeka, Kans. Aligner for type-writers	282,253	July 31	2428	668	24	444
Baker, Christian E., Chicago, Ill., assignor of one-half to C. A. Eggert, Muskegon, Mich. Fire-escape	278,847	June 5	239	69	23	2164
Baker, Cyrus M., West Waterville, Me., assignor of one-half to J. H. Mandeville, Washington, D. C. Turbine water-wheel	277,535	May 15	1265	339	23	1856
Baker, Daniel and D. C., Stephens City, Va. Gate	276,330	Apr. 24	1887	{ 523 524 }	23	1572
Baker, Daniel C. (See Baker, Daniel and D. C.)						
Baker, Edgar, assignor to himself and S. W. Curriden, Washington, D. C. Stopping and starting mechanism for intermittent machines	275,116	Apr. 3	310	86	23	1279
Baker, Frank E. (See Hitchcock, Arthur C., assignor.)						
Baker, Frank P., et al. (See Baker, Loring J., assignor.)						
Baker, George A., Boston, Mass. Spring coupling-link	271,592	Feb. 6	9	3	23	442
Baker, George C. (See Likes, Hedge, and Baker.)						
Baker, George C., assignor to H. B. Hedge and T. A. Noble, Des Moines, Iowa. Fence-barb and barbed wire	273,219	Feb. 27	2070	582	23	824
Baker, George M., and W. Abbott, Espy, Pa. Step-ladder	284,356	Sept. 4	242	67	24	945
Baker, George M., and W. Abbott, Espy, Pa. Step-ladder	285,949	Oct. 2	220	62	25	42
Baker, George W., Aberdeen, Md. Canuing green corn	273,436	Mar. 6	252		23	877
Baker, George W., assignor to White Sewing Machine Company, Cleveland, Ohio. Sewing-machine ruffler	271,679	Feb. 6	110	30	23	459



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Baker, George W., assignor to White Sewing Machine Company, Cleveland, Ohio. Embroidering attachment for sewing-machines	274,548	Mar. 27	1701	472	23	1149
Baker, George W., assignor to White Sewing Machine Company, Cleveland, Ohio. Friction-clutch	285,725	Sept. 25	1915	543	24	1259
Baker, Gilbert, Boston, Mass. Dress and skirt protector	282,254	July 31	2429	668	24	444
Baker & Hamilton. (See Armstrong, William T., assignor.)						
Baker & Hamilton. (See Laufenburg, Michael N., assignor.)						
Baker & Hamilton. (See Winn, James H., assignor.)						
Baker, Henry D. (See Sullivan and Baker.)						
Baker, Herbert. (See Colburn, Henry J., assignor.)						
Baker, Hudson A., Bay City, Mich. Cash-carrier	280,003	June 26	1715	480	23	2438
Baker, Hudson A., Bay City, Mich. Box	282,483	Aug. 7	5	2	24	502
Baker, Hudson A., Bay City, Mich. Cash and parcel carrying railway	285,374	Sept. 25	1488	419	24	1181
Baker, Hudson A., Bay City, Mich. Cash-carrier	285,375	Sept. 25	1489	420	24	1182
Baker, Isaac. (See Price, William, assignor.)						
Baker, Jackson R., Jersey City, N. J. Lid for car-axle boxes	283,691	Aug. 21	1470	414	24	780
Baker, Jackson R., Jersey City, N. J., assignor to National Safety Car Bearing Company, of New York. Car-axle box	269,995	Jan. 2	205	58	23	42
Baker, Jackson R., Jersey City, N. J., assignor to National Safety Car Bearing Company, of New York. Car-axle-box lid	270,172	Jan. 2	406	118	23	82
Baker, James, St. Louis, Mo. Velocipede	273,007	Feb. 27	1805	505 506	23	777
Baker, James, St. Louis, Mo. Washing-machine	286,109	Oct. 2	405	111	25	75
Baker, James E., Madison, Wis. Balanced slide-valve	286,573	Oct. 16	996	269	25	197
Baker, James E., Chicago, Ill. Device for promoting combustion in furnaces	282,035	July 31	2135	586	24	396
Baker, James H., Westville, Ohio. Die and die-block for forge-hammers	280,998	July 10	813	226	24	150
Baker, John C., et al. (See Packham, Frank R., assignor.)						
Baker, John G., assignor to Enterprise Manufacturing Company of Pennsylvania, Philadelphia, Pa. Mechanism for cutting up plastic or yielding substances	271,398	Jan. 30	1949	564	23	392
Baker, John G., assignor to Enterprise Manufacturing Company of Pennsylvania, Philadelphia, Pa. Cutting up plastic or yielding substances	271,399	Jan. 30	1952	565	23	392
Baker, John G., assignor to Enterprise Manufacturing Company, Philadelphia, Pa. Lard-press and sausage-stuffer	275,567	Apr. 10	916	248	23	1391
Baker, John G., assignor to Enterprise Manufacturing Company, Philadelphia, Pa. Cherry-stoner	276,331	Apr. 24	1888	524	23	1572
Baker, John J. (See Meltzer and Baker.)						
Baker, John S., et al. (See Burns and Buckman, assignors.) (Reissue.)						
Baker, John W., Baltimore, Md. Gas-burning stove	285,376	Sept. 25	1492	420	24	1182
Baker, Loring J., Boston, Mass. Roller-skate	280,338	July 3	1	1	24	3
Baker, Loring J., assignor of one-half to F. P. Baker and J. W. Clark, Boston, Mass. Boat-plug	277,102	May 8	746	196	23	1759
Baker, M. R. (See Hedge and Noble, assignors.)						
Baker Manufacturing Company, Seth W. (See Mason, Lowell C., assignor.)						
Baker, Pratt & Co. (See Munger, George, assignor.)						
Baker, Ransom R., Buffalo, N. Y. Album and book clasp	278,762	June 5	106	30	23	2141
Baker, Samuel, Buffalo, N. Y. Whip-holder	284,995	Sept. 18	1033	289	24	1005
Baker, Sanford J., Oakland, Mo. Hay-knife	288,198	Nov. 13	508	141	25	605
Baker, Sanford J., West Waterville, Me., assignor of one-third to J. H. Mandeville, Washington, D. C. Hay-knife	276,951	May 1	545	142	23	1719
Baker, Theodore P. (See Park, Aaron, assignor.)						
Baker, Thomas, Aston, near Birmingham, and W. M. Scott, Birmingham, county of Warwick, England; said Baker assignor to said Scott. Cartridge	271,565	Jan. 30	2163	623	23	429
Baker, Walter. (See Thomas and Baker.)						
Baker, William D., Rockland, Mass. Projectile for carrying and discharging oil	272,400	Feb. 20	1026	287	23	635
Baker, William H. (See Knight and Baker.)						
Baker, William H., assignor of six-tenths to A. Lent, D. C. Barber, and T. H. Rice, Oxford, Mich. Draft-equalizer	275,321	Apr. 3	560	153	23	1321
Baker, William H., assignor of six-tenths to A. Lent, D. C. Barber, and T. H. Rice, Oxford, Mich. Draft-equalizer	275,322	Apr. 3	561	153	23	1321
Baker, William H. H., Freeport, Ill. Snow-plow	281,954	July 24	2036	557	24	374
Baker, William R., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Grain-binder	283,744	Aug. 28	1542	436 437	24	804
Baker, William R., and H. E. Fridmore, assignors to McCormick Harvesting Machine Company, Chicago, Ill. Harvester	275,977	Apr. 17	1430	395	23	1488
Baker, William S. G., Baltimore, Md. Car-axle box	276,210	Apr. 24	1721	470	23	1545
Baker, William S. G., Baltimore, Md. Car-axle box	282,140	July 31	2299	631	24	429
Baker, William T., assignor of two-thirds to R. Marvin and J. Shull, Findlay, Ohio. Steam-engine	280,710	July 3	445	127	24	80
Baker, Wilson M. (See Packard, Wales A., assignor.)						
Baker, Wilson M., Urbana, Ohio. Reshipping packing-box	272,513	Feb. 20	1172	327 328	23	659
Bakewell, Thomas, trustee. (See Bissell, Simeon, assignor.)						
Bakewell, William H., Allegheny City, Pa. Camp-chair and cot	280,004	June 26	1717	481	23	2438
Balch, Alfred. (See Tonlinson and Balch.)						
Balch, Lewis. (See Armstrong and Waite, assignors.)						
Balderston, C. Canby, Westtown, and C. Balderston, Philadelphia, Pa. Car coupling and buffer	287,084	Oct. 23	1652	453	25	319
Balderston, Charles. (See Balderston, C. Canby and C.)						
Baldrige, Herman, Los Angeles, Cal. Churn	277,103	May 8	747	196	23	1760
Baldwin, A. C. (See Clemous, Thomas F., assignor.)						
Baldwin, A. C. (See Trier, Frank, assignor.)						
Baldwin, Andrew J. (See Baldwin and Geise.)						
Baldwin, Benjamin W., Pittsburg, Pa. Journal-box	283,950	Aug. 28	1795	508	24	850
Baldwin, Byron, New York, N. Y. Corset-laciug	273,798	Mar. 13	724	196	23	967
Baldwin, Charles E. (See Beard and Baldwin.)						
Baldwin, Charles E., New York, N. Y., assignor of one-half to C. Beard. Copying-roller	274,549	Mar. 27	1702	472	23	1149
Baldwin, Charles E., assignor of one-half to C. Beard, New York, N. Y. Lamp-wick cleaner	278,075	May 22	1899	520	23	1972
Baldwin, Charles E., assignor of one-half to C. Beard, New York, N. Y. Apparatus for taking proof	278,848	June 5	240	69	23	2164
Baldwin, Charles S., assignor to Goodyear's Metallic Rubber Shoe Company, Naugatuck, Conn. Overshoe	286,761	Oct. 16	1236	334	25	239
Baldwin, Charles W., assignor to E. F. Allen, Denver, Colo. Hoisting device	277,403	May 8	1098	295	23	1821
Baldwin, Cyrus W., Chicago, Ill. Elevator	276,332	Apr. 24	1889	524	23	1573
Baldwin, Cyrus W., Chicago, Ill. Lubricator	287,085	Oct. 23	1653	454	25	319

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Baldwin, Cyrus W., Chicago, Ill. Gas-engine	287,897	Nov. 6	135	40	25	531
Baldwin, Cyrus W., assignor to W. E. Hale, Chicago, Ill. Gas-engine	276,747	May 1	282	72	23	1673
Baldwin, Cyrus W., assignor to W. E. Hale, Chicago, Ill. Gas-engine	276,748	May 1	284	72, 73	23	1674
Baldwin, Cyrus W., assignor to W. E. Hale, Chicago, Ill. Gas-engine	276,749	May 1	285	73	23	1674
Baldwin, Cyrus W., assignor to W. E. Hale, Chicago, Ill. Gas-engine	276,750	May 1	288	74	23	1674
Baldwin, Cyrus W., assignor to W. E. Hale, Chicago, Ill. Gas-engine	276,751	May 1	291	74, 75	23	1675
Baldwin, Cyrus W., assignor to W. E. Hale, Chicago, Ill. Gas-engine	288,396	Nov. 13	776	209 210	25	650
Baldwin, Cyrus W., assignor to W. E. Hale, Chicago, Ill. Gas-engine	290,310	Dec. 18	1166	326 327	25	1108
Baldwin, Dewitt C., Onondaga, Mich. Excavator	283,951	Aug. 28	1796	508	24	850
Baldwin, Eben A., North Andover, Mass. Self-acting mule	272,401	Feb. 20	1027	287 288	23	635
Baldwin, Elizabeth P. (See Bate, William A., assignor.)						
Baldwin, Frank S., and P. A. Migasi, St. Louis, Mo. Rein-holder	276,655	May 1	143	36	23	1651
Baldwin, George H., Hollidaysburg, Pa. Gas-furnace. (Reissue)	10,329	May 22	2219	608	23	2027
Baldwin, James M., New York, N. Y. Fabric for furniture and wall coverings	288,294	Nov. 13	623	171	25	624
Baldwin, James S., assignor to H. C. McDougall, Newark, N. J. Toy mortar	283,847	Aug. 28	1667	470	24	826
Baldwin, John B. (See Magreevy, William P., assignor.)						
Baldwin, John M., Sidney, N. J. Sash-holder	275,456	Apr. 10	777	208	23	1367
Baldwin, John W., A. J., and M. H., Jr., and G. A. Geise, Dawson, Ga. Gin-house	283,187	Aug. 14	853	238 239	24	658
Baldwin, Joseph J., Baltimore, Md. Step-ladder	283,555	Aug. 21	1308	366	24	749
Baldwin, Joseph J., Baltimore, Md. Step-ladder	289,059	Nov. 27	1592	440	25	808
Baldwin, Judson A., Shelburne, Vt. Door-latch	276,333	Apr. 24	1891	525	23	1573
Baldwin, Judson A., Shelburne, Vt. Refrigerator	276,752	May 1	293	75	23	1676
Baldwin, Marcellus O., Kansas City, Mo. Reclining-chair	270,724	Jan. 16	1114	318 319	23	233
Baldwin, Marcellus O., Kansas City, Mo. Car-wheel	276,211	Apr. 24	1723	477	23	1546
Baldwin, Marcellus O., assignor of one-half to H. A. Dorr, Kansas City, Mo. Chair-support and footstool	274,877	Mar. 27	2094	581	23	1217
Baldwin, Marcellus O., assignor of one-half to H. A. Dorr, Kansas City, Mo. Car-axle	275,323	Apr. 3	562	153	23	1321
Baldwin, Moses H., Jr. (See Baldwin and Geise.)						
Baldwin, Nathan H., Laconia, assignor of one-half to R. M. Appleton, Lake Village, N. H. Necktie-fastener	270,173	Jan. 2	407	118	23	83
Baldwin, Otis M. (See West, John C., assignor.)						
Baldwin, Ozro J., North Clarendon, Pa. Sleigh-shoe	286,371	Oct. 9	747	200	25	146
Baldwin, Ransom G., Oskaloosa, Iowa. Washing-machine	285,550	Sept. 25	1697	479	24	1219
Baldwin, Ruel S., Sparta, Wis. Machine for forming wire springs	273,933	Mar. 13	894	244	23	995
Baldwin, Sidney M. (See Higgins, Walter B., assignor.)						
Baldwin, William, Marion, Ind. Plashed fence	274,695	Apr. 3	6	2	23	1228
Baldwin, William F., Grayville, Ill. Plow-point	271,593	Feb. 6	10	3	23	442
Bales, Thomas M., and J. A. Jackson; said Bales assignor to W. Hemphill, Des Moines, Iowa. Cockle-machine and grain-separator	282,036	July 31	2136	586	24	306
Ball, Albert. (See Cartmell and Ball.)						
Ball, Albert, Claremont, N. H. Emery-wheel	277,659	May 15	1410	380	23	1880
Ball, Albert, Canton, Ohio. Plow-point	289,797	Dec. 11	530	148	25	985
Ball, Albert, Canton, Ohio. Sulky-plow	289,798	Dec. 11	531	148	25	985
Ball, Alonzo C., and B. H. Tripp, Gallatin, Mo. Churn	271,566	Jan. 30	2164	623	23	429
Ball, Charles A. (See Groesbeck, Sterling, Ball, and Wright.)						
Ball, Charles E., Philadelphia, Pa. Electric gas-generator	272,187	Feb. 13	746	206	23	581
Ball, Charles E., Philadelphia, Pa. Dynamo-electric machine	278,076	May 22	1900	520	23	1973
Ball, Charles E., Philadelphia, Pa. Dynamo-electric machine	284,357	Sept. 4	243	67, 68	24	945
Ball, Charles E., Philadelphia, Pa. Armature for electric motors	283,547	Sept. 25	1693	478	24	1219
Ball, Charles E., Philadelphia, Pa. Dynamo-electric machine	283,548	Sept. 25	1696	478	24	1219
Ball, Charles E., Philadelphia, Pa. Dynamo-electric machine	283,549	Sept. 25	1696	478	24	1219
Ball, Charles H., Toledo, Ohio. Box-fastener	290,739	Dec. 25	1732	478	25	1214
Ball, Charles O., Lowell, Mass. Station-indicator	278,459	May 29	2458	670	23	2074
Ball, Clinton M., Troy, assignor to himself and J. B. Tibbits, Troy, N. Y. Electric lamp	281,229	July 17	1110	306	24	210
Ball, Clinton M., Troy, assignor to himself and J. B. Tibbits, Hoosic, N. Y. Magneto-electric machine	290,199	Dec. 18	1021	288	25	1083
Ball, Cortland, Indianapolis, Ind. Polishing-iron	277,193	May 8	860	228	23	1779
Ball, Flamen, Jr., Cincinnati, Ohio. Electric head-light for locomotives, &c.	277,536	May 15	1266	339	23	1856
Ball, Frank H., Erie, Pa. Steam-engine governor	284,164	Sept. 4	4	2	24	905
Ball, George F. (See Higinbotham and Ball.)						
Ball, Jacob, Waterloo, Ontario, Canada, assignor of two-thirds to J. S. Chase and C. M. Martin, Greenville, Mich. Grain-milling machine	274,550	Mar. 27	1703	473	23	1149
Ball, Jacob, assignor of one-half to J. S. Chase, Greenville, Mich. Feed-water regulator	278,077	May 22	1901	521	23	1973
Ball, James A. (See Moore, Jonathan J., assignor.)						
Ball, John A., Oakland, Cal. Trunk	281,955	July 24	2038	557	24	374
Ball, John A., Oakland, Cal. Disintegrating-hopper for dredgers and excavators	285,340	Sept. 18	1437	406	24	1167
Ball, John W., and H. Clark, Baltimore, Md. Machinery for breasting the heels of boots and shoes	282,255	July 31	2430	668	24	444
Ball, R. Edward, New York, N. Y. Dynamo-electric machine	279,476	June 12	1085	300	23	2315
Ball, R. Edward, New York, N. Y. Dynamo-electric machine	280,439	July 3	128	34	24	24
Ball, Richard, Boston, Mass. Trunk-carrier	286,372	Oct. 9	748	200	25	146
Ball, Thomas H., et al. (See Gardner, Marshall, assignor.)						
Ball, Warren J., Canton, Ohio. Car-axle-box lid	281,173	July 10	1026	287	24	188
Ball, Wilber W., assignor of one-half to J. B. Carter and O. L. Moulder, Kokomo, Ind. Mower	279,074	June 5	565	155	23	2220
Ballagh, Andrew H., assignor of one-third to J. W. Dunnaway, Macon, Mo. Baling-press	277,439	May 15	1151	309	23	1837
Ballard, Dewitt C., Centerville, Mont. Ter. Tongue-support	283,188	Aug. 14	853	239	24	658
Ballard, George W., Hunter's Springs, W. Va. Seeding-machine	281,331	July 17	1242	344	24	232
Ballard, Ira L., and J. W. Craig, Mechum's River, Va. Railway-gate	285,951	Oct. 2	221	62	25	42
Ballard, Martin L., Georgetown, Ky. Bottle-stopper	283,692	Aug. 21	1471	414	24	780
Ballard & Son, J. A. (See Harris, James W. and S., assignors.)						
Ballatschano, Constantin, et al. (See Trenk, Heinrich, assignor.)						
Ballatschano, Jean, et al. (See Trenk, Heinrich, assignor.)						
Ballou, Barton A., Providence, R. I. Pin	287,086	Oct. 23	1654	454	25	319
Ballou, Edward F., Marlborough, Mass. Roller for skates	285,783	Oct. 2	6	2	25	4
Ballou, George F., Waltham, Mass. Electric device for winding clocks	277,104	May 8	748	197	23	1760
Ballou, Hiram P., Needham, Mass., assignor, by mesne assignments, to himself, G. E. Nye, Bristol, Pa., and M. H. A. Evans, Graniteville, Mass. Circular-rib knitting-machine	284,591	Sept. 11	529	150	24	999
Ballou, John, Somerville, Mass. Grate	286,574	Oct. 16	996	270	25	197



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Ballou, Walter, North Attleborough, Mass. Roller-chain.....	277,194	May 8	861	229	23	1779
Baltzell, Charles, Cumberland, Md. Corn-harvester.....	277,660	May 15	1411	{ 380 381 }	23	1880
Baltzell, Frank. (See Burdine, William B., assignor.)						
Baltzell, Frank, Troy, Ala. Cotton cleaner and condenser.....	271,297	Jan. 30	1816	527	23	368
Balzer, John C., Southington, Conn. Method of and die for forging cutting-pliers.....	283,458	Aug. 21	1199	337	24	728
Bambach, Charles H., assignor of one-half to T. Bambach, Baltimore, Md. Neck-yoke.....	274,696	Mar. 27	1877	523	23	1181
Bambach, Thomas. (See Bambach, Charles H., assignor.)						
Bancroft, George D., Springfield, assignor to T. Merrick, Holyoke, Mass. Apparatus for moistening air in buildings.....	287,898	Nov. 6	138	40	25	532
Bancroft, J. Sellers, and W. H. Thorne, assignors to W. Sellers, Philadelphia, Pa. Machine for sharpening drills.....	270,365	Jan. 9	642	190	23	136
Bancroft, J. Sellers, and W. H. Thorne, assignors to W. Sellers, Philadelphia, Pa. Drill.....	270,366	Jan. 9	648	{ 190 191 }	23	136
Bancroft, William, Wilmington, Del. Blotter-tablet.....	272,188	Feb. 13	747	206	23	581
Bandelier, Louis E., New Haven, Ind. Traction-engine.....	280,999	July 10	814	{ 226 227 }	24	151
Bandman, Charles J., assignor of one-half to R. Deeves, New York, N. Y. Fire-proof ceiling.....	270,623	Jan. 16	982	284	23	209
Bane, James R., Gilroy, Cal. Rotary harrow.....	272,112	Feb. 13	665	181	23	566
Bane, James R., Gilroy, Cal. Combined harrow, roller, and seeder.....	284,709	Sept. 11	679	{ 191 192 289 }	24	1025
Bane, James R., Gilroy, Cal. Horse hay-rake.....	284,996	Sept. 18	1034	{ 289 290 }	24	1095
Banes, Howard. (See McGrory, Thomas, assignor.)						
Bang, Ivar A., and C. A. Sanginetti, Marseilles, France. Decolorizing vegetable oils.....	287,216	Oct. 23	1822	.....	25	349
Bang, Ivar A. F., and J. De Castro, Paris, France. Treating acid or partly acid fatty bodies.....	290,835	Dec. 25	1865	.....	25	1237
Bangert, John D., Baltimore, Md. Machine for mixing and aerating flour.....	274,697	Mar. 27	1878	{ 523 524 }	23	1181
Bangs, David E., Medford, Mass. Valve for vapor-burners.....	277,661	May 15	1413	382	23	1880
Banister, James A. (See Denny, John W., assignor.)						
Banks Button Hole Machine Company. (See Banks, Charles M., assignor.)						
Banks, Charles E., and J. W. Chestnut, New Castle, Pa. Dinner-pail.....	284,592	Sept. 11	530	150	24	1000
Banks, Charles M., assignor to Banks Button Hole Machine Company, (limited,) Philadelphia, Pa. Button-hole attachment for sewing machines.....	286,989	Oct. 23	1530	{ 421 422 }	25	295
Banks, Charles M., assignor to Banks Button Hole Machine Company, (limited,) Philadelphia, Pa. Button-hole sewing-machine.....	282,217	Oct. 23	1823	{ 499 500 }	25	349
Banks, George, Oakfield, Mich. Hame-fastener.....	280,554	July 3	260	70	24	47
Banks, John, New York, N. Y. Bread-cutter.....	284,798	Sept. 11	791	221	24	1044
Banks, John M., Birmingham, county of Warwick, England. Fastening for bracelets and necklets.....	277,537	May 15	1267	340	23	1856
Banks, Joseph H., New York, N. Y. Steam-trap.....	271,400	Jan. 30	1953	565	23	392
Banks, William H., assignor of one-half to F. W. Schultz, Baltimore, Md. Roach-trap.....	272,372	Feb. 13	973	271	23	621
Bannigan, Augustus. (See Seymour and Bannigan.)						
Banning, Carina B., assignor, by mesne assignments, to herself and R. A. Murray, Boston, Mass. Dust-pan.....	275,012	Apr. 3	170	46	23	1255
Banning, Hubert A., New York, N. Y. Brake-shoe.....	271,207	Jan. 30	1707	495	23	349
Banning, Hubert A., New York, N. Y. Car-brake shoe.....	274,896	Apr. 3	7	2	23	1228
Bannister, Henry D., Chicago, Ill., assignor of one-half to R. H. Smith, Pittsburg, Pa. Draft-regulator.....	288,914	Nov. 20	1410	388	25	770
Bannister, Lemuel, Philadelphia, Pa. Grate.....	272,514	Feb. 20	1173	328	23	660
Bannister, Lemuel, Philadelphia, Pa. Grate.....	272,515	Feb. 20	1174	328	23	660
Bannister, Lemuel, Philadelphia, Pa. Grate.....	272,937	Feb. 27	1727	482	23	763
Bannister, Lemuel, Philadelphia, Pa. Grate.....	273,437	Mar. 6	254	68, 69	23	877
Bannister, Lemuel, Philadelphia, Pa. Conduit for electric conductors.....	282,833	Aug. 7	427	121	24	576
Bannwart, Alex. (See Egli, Rudolf, assignor.)						
Bapple, James W., Sedalia, assignor of one-half to J. Englaender, St. Louis, Mo. Combined self-dropping corn-planter and check-rower.....	283,459	Aug. 21	1200	337	24	729
Barbé, J. Emile, Paris, France. Toy pistol with numerical combination.....	285,099	Sept. 18	1162	325	24	1117
Barbe, Paul, Paris, France, assignor to Dynamite Nobel Société, Anonyme, Isleten, Uri, Switzerland. Water-proof cartridge.....	273,934	Mar. 13	895	245	23	995
Barber, Charles E., Syracuse, N. Y. Pump.....	274,551	Mar. 27	1704	473	23	1149
Barber, D. Fletcher, Newton, assignor of one-half to A. M. Gardner, Boston, Mass. Hand-drill.....	284,799	Sept. 11	793	221	24	1044
Barber, Daniel C., et al. (See Baker, William H., assignor.)						
Barber, Edward. (See Barber, Thomas T. and E.)						
Barber, Emmet N., Kent, Ohio. Lumber-measure.....	287,995	Nov. 6	263	75	25	553
Barber, Harvey P., Malden, Ill. Butter-package.....	285,950	Oct. 2	221	62	25	42
Barber, Henry A., Watertown, N. Y. Exhausting the air, gases, and water from suction-boxes for paper-making machines.....	280,555	July 3	260	70	24	47
Barber, J. B., et al. (See Charbonneau, Pascal B., assignor.)						
Barber, James R. (See Abel, William G., assignor.)						
Barber, Quincy. (See Wakefield, Nathan S., assignor.)						
Barber, Robert T., and J. Raker, Mifflinburg, Pa. Composition for preserving leather.....	289,880	Dec. 11	636	.....	25	1004
Barber, Thomas T. and E., Hopkinton, R. I. Wagon-jack.....	270,524	Jan. 23	1357	321	23	284
Barber, Winton C., assignor to himself and J. S. Green, Villisca, Iowa. Car-coupling.....	273,438	Mar. 6	255	69	23	877
Barbour, Charles, Tarentum, Pa. Glass-smoothing machine.....	289,747	Dec. 4	473	134	25	969
Barbour, E. Russell, Portland, Me., assignor to C. S. Knowles, Boston, and F. F. Raymond, 2d, trustee, Newton, Mass. Hose-strap and means of attachment.....	289,600	Dec. 4	286	80	25	938
Barclay, John, Providence, R. I. Band-bracelet.....	289,371	Dec. 4	2	1	25	887
Barclay, William P., Chicago, Ill. Car-wheel boring and truing machine.....	271,680	Feb. 6	112	31	23	459
Barclay, William P., Chicago, Ill. Chilled car-wheel boring and truing machine.....	283,367	Aug. 21	1093	{ 307 308 }	24	709
Barcus, Willard E., Vineland, N. J. Molasses-measure.....	274,698	Mar. 27	1880	524	23	1181
Bardeen, Amy, Blackstone, Mass. Grain-elevator.....	283,189	Aug. 14	855	229	24	659
Bardez, Frank, San Francisco, Cal. Molding-machine for foundry use.....	287,996	Nov. 6	265	75	25	553
Barditzky, Hermann. (See Brandenburger, Tirre, and Barditzky.)						
Barditzky, Hermann, assignor of two-thirds to A. Brandenburger and W. Tirre, St. Louis, Mo. Mining-machine.....	280,781	July 10	560	157	24	130
Bardo, Peter N., and T. Ford, Newport, Ky., assignors to Bourbon Copper and Brass Works, Cincinnati, Ohio. Cooler for mash and other liquids.....	270,367	Jan. 9	652	191	23	137
Bardwell, Carlos. (See Nolan, Patrick W., assignor.)						
Bardwell, Horatio C., New York, N. Y. Folding bedstead.....	276,212	Apr. 24	1724	477	23	1546



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Bardwell, Lucian P., Marion, Iowa. Printer's roller.....	271,567	Jan. 30	2165	624	23	429
Barff, Frederick S., Kilburn, county of Middlesex, G. and A. S. Bower, St. Neots, county of Huntingdon, England, said Barff assignor to said G. and A. S. Bower. Furnace for effecting the protection of iron and steel surfaces.....	273,799	Mar. 13	725	197	23	967
Barff, Frederick S., Kilburn, county of Middlesex, and A. P. Wire, Leytonstone, county of Essex, England. Preparation of extracts of meat.....	273,800	Mar. 13	727		23	967
Barker, David N., Broadalbin, N. Y. Draft-bar for sleighs.....	285,377	Sept. 25	1494	420	24	1182
Barker, Erastus B., assignor to E. & H. T. Anthony & Co., New York, N. Y. Photographic camera-box.....	272,632	Feb. 20	1310	{ 365 366 }	{ 23 23 }	684
Barker, Erastus B., assignor to E. & H. T. Anthony & Co., New York, N. Y. Photographic shield.....	273,008	Feb. 27	1807	506	23	777
Barker, Erastus B., assignor to E. & H. T. Anthony & Co., New York, N. Y. Photographic camera-box.....	283,952	Aug. 28	1797	508	24	850
Barker, Frank W., Chelsea, Mass. Cradle.....	274,454	Mar. 27	1567	429	23	1127
Barker, George F., assignor to W. J. Philips, Philadelphia, Pa. Electrical conductor.....	274,699	Mar. 27	1851	524	23	1182
Barker, Henry C., Sedalia, Mo. Brick-machine.....	274,700	Mar. 27	1883	{ 524 525 }	{ 23 23 }	1182
Barker, James, Emory, Tex. Combined rotary harrow and stalk-cutter or roller.....	273,009	Feb. 27	1808	506	23	778
Barker, Jared P., Le Roy, N. Y. Stove-pipe elbow.....	287,494	Oct. 30	2170	559	25	421
Barker, John, assignor of one-half to A. C. Brown, Philadelphia, Pa. Ferrule for handles.....	277,404	May 8	1099	295	23	1821
Barker, John L., assignor to S. Freeman & Sons, Racine, Wis. Brake-lever.....	270,174	Jan. 2	407	118	23	83
Barker, Joseph R., Summerfield, Ala. Machine for hulling and cleaning peas.....	273,010	Feb. 27	1809	{ 506 507 }	{ 23 23 }	778
Barker, Richard, London, county of Middlesex, England. Apparatus for extracting gold and silver from their ores.....	273,011	Feb. 27	1810	507	23	778
Barker, Richard, London, county of Middlesex, England. Apparatus for extracting gold and silver from their ores.....	276,997	May 8	609	160	23	1736
Barker, Robert F., Boston, Mass. Carding-machine.....	287,405	Oct. 30	2060	560	25	400
Barker, Tom B. (See Ewins, James A., assignor.)						
Barker, Volney, Portland, Me. Can-washing machine.....	282,434	July 31	2664	{ 730 731 }	{ 24 24 }	485
Barker, William C., Philadelphia, Pa. Packing-case, box, &c.....	279,689	June 19	1341	373	23	2366
Barkow, Herman, Milwaukee, Wis. Truck.....	285,687	Nov. 20	1135	312	25	719
Barley, James H., Sedalia, Mo. Harrow.....	270,536	Jan. 9	871	253	23	180
Barlow, Solomon Q., Petaluma, Cal. Farm-gate.....	289,800	Dec. 11	533	149	25	986
Barlow, Warren S., Paterson, N. J. Door-spring.....	270,368	Jan. 9	633	192	23	137
Barlow, Warren S., Paterson, N. J. Door-brake.....	284,358	Sept. 4	244	68	24	946
Barna, Thomas M., Atlanta, Ga. Cotton-planter.....	270,369	Jan. 9	634	192	23	137
Barnaby, Charles W., assignor of one-half to Buckeye Engine Company, Salem, Ohio. Eccentric.....	287,406	Oct. 30	2061	560	25	400
Barnard, Charles S., assignor of one-half to J. Preston and A. Jones, New York, N. Y. Toy bank.....	272,189	Feb. 13	748	206	23	581
Barnard, Daniel G., Winslow, N. J. Adjustable double telephone-receiver.....	280,116	June 26	1851	522	23	2462
Barnard, Daniel G., Winslow, N. J. Glass-annealing furnace.....	285,551	Sept. 25	1698	479	24	1220
Barnard, Edward, Rome, N. Y. Horse-boot.....	285,552	Sept. 25	1700	479	24	1220
Barnard, George D. (See Welch, Reuel H., assignor.)						
Barnard, Heman A., assignor to Barnard & Leas Manufacturing Company, Moline, Ill. Flour-packer.....	274,878	Mar. 27	2095	582	23	1217
Barnard, Henry H., assignor to M. B. Alling, Rochester, N. Y. Chuck.....	271,208	Jan. 30	1708	495	23	349
Barnard, Henry L., Greenfield, Mass. Fire-escape.....	278,763	June 5	106	30	23	2142
Barnard & Leas Manufacturing Company. (See Barnard, Heman A., assignor.)						
Barnard & Leas Manufacturing Company. (See Cornwall, John B., assignor.)						
Barnard & Leas Manufacturing Company. (See Hanson and Leas, assignors.)						
Barnard, William G., Bellaire, Ohio. Apparatus for loading coal.....	285,952	Oct. 2	222	62	25	43
Barnes, Abram. (See Dale and Barnes.)						
Barnes, Alden, Bloomington, Ill. Anchor for corn-planter check-row lines.....	272,402	Feb. 20	1031	289	23	635
Barnes, Avon. (See Cunningham, Peter B., assignor.)						
Barnes, Benjamin F. (See Barnes, John and B. F.)						
Barnes, Charles, Dayton, Ky. Shaft-coupling.....	275,877	Apr. 17	1323	364	23	1468
Barnes, Charles A., West Liberty, Iowa. Tile-laying machine.....	285,206	Sept. 18	1289	363	24	1139
Barnes, Charles E., Melrose, and A. C. Winn, Somerville, said Barnes assignor to J. H. Winn, Winchester, Mass. Cord-bracing machine.....	290,624	Dec. 18	1585	436	25	1180
Barnes, Charles T., Chicago, Ill. Grate and lining.....	281,658	July 24	1655	451	24	307
Barnes, Elbridge F., New Haven, Conn. Combined pipe-tongs and wrench.....	282,256	July 31	2431	669	24	445
Barnes, Elbridge F., New Haven, Conn. Pipe-cutter.....	282,435	July 31	2669	731	24	466
Barnes, Elbridge F., New Haven, Conn. Pipe-cutter.....	287,899	Nov. 6	139	41	25	532
Barnes, Elmore A., Pittsburg, Pa. Making shovels.....	284,710	Sept. 11	681	192	24	1026
Barnes, George L., North Haven, Conn. Friction-clutch.....	285,870	Oct. 2	111	33	25	22
Barnes, George R., Boaz, Wis. Churn.....	272,516	Feb. 20	1175	328	23	660
Barnes, Harry W., Bristol, Conn. Gong-bell.....	286,169	Oct. 9	476	131	25	99
Barnes, Henry C., Swanton, Vt. Barrel-cover.....	289,206	Nov. 27	1770	491	25	841
Barnes, Howard C. (See Randall, William W., assignor.)						
Barnes, J. L., et al. (See Henry, John C., assignor.)						
Barnes, Jackson. (See Johnson and Barnes.)						
Barnes, John. (See Barnes, William F. and J.)						
Barnes, John and B. F., assignors to W. F. & J. Barnes, Rockford, Ill. Feed mechanism for drills.....	270,537	Jan. 9	872	254	23	180
Barnes, John C., et al. (See Miller, Charles C., assignor.)						
Barnes, John H., assignor to Barnes Manufacturing Company, New Haven, Conn. Cylinder-lock.....	285,207	Sept. 18	1290	363	24	1140
Barnes, John L., Hecla, Ind. Cider-press.....	277,195	May 8	861	229	23	1779
Barnes, Joseph C., Albany, N. Y. Cooking-range.....	280,782	July 10	563	157	24	106
Barnes, Joshua B., Fort Wayne, Ind. Two-wheeled vehicle.....	283,061	Aug. 14	701	197	24	632
Barnes Manufacturing Company. (See Barnes, John H., assignor.)						
Barnes Manufacturing Company. (See Priddy, Thomas B., assignor.)						
Barnes, Mary K., Chicago, Ill. Show-stand.....	289,799	Dec. 11	532	149	25	986
Barnes, Merrick M., Boston, Mass. Micrometer indicating-gage.....	271,401	Jan. 30	1954	565	23	393
Barnes, Merrick M., Boston, Mass. Micrometer-calipers.....	280,339	July 3	2	1	24	3
Barnes, Monroe, Bloomington, Ill. Corn-planter check-rower.....	271,119	June 12	647	177	23	2244
Barnes, Monroe, Bloomington, Ill. Two-wheeled vehicle.....	281,429	July 17	1360	375	24	252
Barnes, Monroe, Bloomington, Ill. Anchor for check-row lines.....	289,372	Dec. 4	3	1	25	887
Barnes, N. A., et al. (See Pearce, William, assignor.)						
Barnes, Thomas C., Logansport, Ind. Diamond millstone-dressing machine.....	286,251	Oct. 9	579	159	25	116

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Barnes, W. F. & John. (See Barnes, John and B. F., assignors.)						
Barnes, William C., Southbridge, Mass. Eyeglasses	282,946	Aug. 14	562	159	24	607
Barnes, William F. and J., Rockford, Ill. Drilling-machine	285,726	Sept. 25	1915	{ 543 544 }	24	1259
Barnes, William H., Independence, Kans. Live-stock loader	286,575	Oct. 16	997	270	25	197
Barnes, William H., Independence, Kans. Fire-escape	288,155	Nov. 6	444	125	25	585
Barnes, Willis A. (See McDougall, Samuel T., assignor.)						
Barnes, Wilson, Maquoketa, Iowa. Windmill	275,457	Apr. 10	778	208	23	1367
Barnett, John, New York, N. Y. Plate-holder for photographic cameras	271,402	Jan. 30	1956	565	23	393
Barnett, Samuel W., Greenfield, Ind. Broom-support	270,624	Jan. 16	982	284	23	209
Barney Dumping Boat Company. (See Barney, Nathan, assignor.)						
Barney, Everett H., et al. (See Hunter, Alpheus S., assignor.) (Reissue.)						
Barney, Everett H., Springfield, Mass. Skate	274,253	Mar. 20	1299	357	23	1073
Barney, Everett H., Springfield, Mass. Skate	274,254	Mar. 20	1300	358	23	1073
Barney, Frank P., Norton, Mass. Machine for making chain-links from coiled wire	283,556	Aug. 21	1309	{ 366 367 }	24	749
Barney, Frank P., Norton, Mass. Process of and apparatus for manufacturing continuous lengths of coiled wire	283,557	Aug. 21	1312	367	24	749
Barney, Nathan, assignor to Barney Dumping Boat Company, Bergen Point, N. J. Dumping-scow	271,298	Jan. 30	1817	527	23	368
Baruhard, Elias, and A. F. Thomas, Troy, Ohio. Grain-divider for harvesters	282,947	Aug. 14	563	159	24	607
Barnhart, Cornelius, Walker Valley, N. Y. Turbine water-wheel	279,519	June 19	1142	316	23	2331
Barnhart, Daniel K., Gaines, Pa. Saw-table gage	271,018	Jan. 23	1476	425	23	302
Barnhart, Harvey P. (See Thatcher and Baruhart.)						
Barnhart, Henry M., and E. Huber, Marion, Ohio. Traveling crane	285,100	Sept. 18	1163	{ 325 326 }	24	1117
Barnhart, John H. (See Furey, Cyrus R., assignor.)						
Barnhurst, Henry R., Erie, Pa. Lumber-edging machine	272,190	Feb. 13	749	207	23	581
Barnhurst, Henry R., Erie, Pa. Saw-mill head-block	281,750	July 24	1777	484	24	327
Barnhurst, Henry R., and L. Skinner, Erie, Pa. Steam-engine governor	289,601	Dec. 11	534	149	25	986
Barnstead, Robert P., Boston, Mass. Coupling for faucets	289,601	Dec. 4	286	80	25	938
Barnum, Joseph I., New York, N. Y. Music-leaf turner	272,938	Feb. 27	1728	{ 482 483 }	23	763
Baron, Eugène, Paris, France. Decorative fabric	287,495	Oct. 30	2171		25	421
Barr, Alexander T., Louisville, Ky. Coupling-gear for wagons	284,593	Sept. 11	531	151	24	1000
Barr, Charles H., Pittsburg, Pa. Combination-tool	288,397	Nov. 13	778	210	25	650
Barr, Charles H., assignor to T. B. Kerr, Pittsburg, Pa. Wire fence	289,207	Nov. 27	1771	491	25	841
Barr, Charles H., assignor of one-half to H. P. Pears, Pittsburg, Pa. Shoe-fastening	290,625	Dec. 18	1589	437	25	1180
Barr, George D., Greenville, S. C. Pepper cruet and mill	274,255	Mar. 20	1302	358	23	1073
Barr, Jacob N., Altoona, Pa. Car-wheel chill	279,520	June 19	1143	316	23	2332
Barr, Jacob N., Milwaukee, Wis. Contracting car-wheel chill	288,969	Nov. 27	1479	410	25	789
Barr, James S., Wheeling, W. Va. Compression-cock	285,953	Oct. 2	223	63	25	43
Barr, Nicholas, Cayuta, N. Y. Car-coupling	277,828	May 15	1603	438	23	1915
Barr, Samuel, Providence, R. I. Compound for coating gas-tubing, &c	276,998	May 8	610		23	1737
Barr, William J., and J. L. Nelsen, Chicago, Ill. Faucet	289,373	Dec. 4	4	2	25	887
Barratt, Henry, assignor of one-third to J. O. Miller, York, Pa. Fluid-pressure car-brake	283,368	Aug. 21	1095	308	24	709
Barratt, Henry, assignor of one-half to J. O. Miller, York, Pa. Car-brake	288,398	Nov. 13	778	210	25	650
Barrett, Charles F., New York, N. Y. Valve	285,871	Oct. 2	112	33	25	22
Barrett, Charles F., Valley Mills, Ind. Animal-trap	286,252	Oct. 9	581	159	25	116
Barrett, Cornelius S. (See Kimball and Barrett.)						
Barrett, Henry, London, England. Manufacture of stoppers for bottles, jars, &c	281,332	July 17	1243	344	24	232
Barrett, Henry, London, England. Manufacture of stoppers for bottles, jars, &c	281,333	July 17	1244	345	24	232
Barrett, Henry, London, England. Stopper for bottles, jars, &c	281,334	July 17	1245	345	24	232
Barrett, James, Boston, Mass. Soil and waste pipe	277,196	May 8	863	229	23	1779
Barrett, James, assignor of part to B. Dennie, Beallsville, Ohio. Car-coupling	279,317	June 12	875	243	23	2282
Barrett, James O., Erie, Pa. Vise	284,997	Sept. 18	1035	290	24	1096
Barrett, James O., Erie, Pa. Vise	286,990	Oct. 23	1532	422	25	295
Barrett, John A., assignor to Western Electric Company, Chicago, Ill. Galvanic battery	271,299	Jan. 30	1819	527	23	368
Barrett, John P. (See Wilkie, John E., assignor.)						
Barrett, John P., Chicago, Ill. Telephonic system	284,594	Sept. 11	532	151	24	1000
Barrett, John P., Chicago, Ill. Telephonic and telegraphic system	284,595	Sept. 11	533	151	24	1001
Barrett Machine Company. (See Clayton, George W., assignor.)						
Barrett, Robert, assignor of one-half to P. A. Fusz, St. Louis, Mo. Lift for plate-rolling mills	277,466	Feb. 6	217	60, 61	23	478
Barrett, William H., Chicago, Ill. Wagon-shaft	271,740	May 15	1152	309	23	1837
Barrick, Joshua, et al. (See Hill, Andrew L., assignor.)						
Barrick, Joshua, et al. (See Koehler, Charles A., assignor.)						
Barricklo, Andrew, Jersey City, N. J. Window-shade	276,152	Apr. 24	1653	456	23	1534
Barrie, Robert C., Philadelphia, Pa. Music-stand	274,166	Mar. 20	1188	327	23	1053
Barrington, George F., San Francisco, Cal. Strainer for water-faucets	275,978	Apr. 17	1432	395	23	1489
Barritt, William A. (See Steelman, Sophia, assignor.)						
Barron, Martin V. B., Eau Claire, Wis. Power-jack	287,792	Nov. 6	5	2	25	508
Barrows, Henry F., Attleborough, Mass. Roller-chain	277,976	May 22	1784	487	23	1952
Barrows, Hiram J., Armada, Mich. Cloth-measuring machine	289,602	Dec. 4	287	80, 81	25	938
Barrows, Howard A., Rochester, N. Y., and R. F. Cummings, Landrus, Pa. Oiler for car-wheels	286,762	Oct. 16	1236	334	25	239
Barrows, Martin T., Dundee, Ill. Can	279,521	June 19	1144	317	23	2332
Barry, Charlotte M. A., Boston, Mass. Corset	281,659	July 24	1657	{ 451 452 }	24	307
Barry, James A., Baltimore, Md., assignor of one-fourth to T. B. Harrison, Washington, D. C. Attachment for tobacco-smoking devices	281,430	July 17	1361	375	24	252
Barry, Joseph E., assignor of one-half to C. C. Marrin, New York, N. Y. Means or apparatus for obtaining motive power	274,256	Mar. 20	1303	{ 358 359 }	23	1074
Barry, Thomas P., Stillwater, N. Y. Paper-machine	285,954	Oct. 2	224	63	25	43
Barry, Thomas P., Stillwater, N. Y. Steam-valve	285,955	Oct. 2	226	63	25	43
Barse, Mills W. (See Miller and Howarth, assignors.)						
Barstow, George E., et al. (See Ingalls, William A., assignor.)						
Bartelous, Jacques V. M., Brussels, Belgium. Switching apparatus for telephone-lines	290,730	Dec. 25	1733	479	25	1214
Barter, Charles F., Mount Vernon, Ind. Fruit-can	289,374	Dec. 4	5	2	25	888
Barter, Thomas D., Boston, Mass. Circular outer garment	279,211	June 12	746	205	23	2261
Barth, Adam, et al. (See Showalter, Jeremiah, assignor.)						
Barth, Denton, et al. (See Showalter, Jeremiah, assignor.)						
Barth, Henry, Cincinnati, Ohio. Measuring device for paper-making machines	288,295	Nov. 13	624	{ 171 172 }	25	625
Barthel, Albrecht E., New York, N. Y. Lubricator	287,900	Nov. 6	140	41	25	532



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Bartholomay, William. (See White, Van Rensslear G., assignor.)						
Bartholomew, Abram L. (See Sweet, William F., assignor.)						
Bartholomew, Samuel B., Springfield, Mass. Sewing-machine shuttle	269,998	Jan. 2	206	59	23	43
Bartholomew, Sidney W., Castalia, N. C. Cotton elevator and distributor	284,359	Sept. 4	245	68	24	946
Bartholomew, Thomas W., Danville, Pa. Revolving air-toy	272,846	Feb. 27	1614	451	23	745
Bartholomew, Thomas W., Danville, Pa. Revolving air toy	279,630	June 19	1269	{ 352 353 }	23	2354
Bartholomew, William, Doulton's Sanitary Engineering Works, Albert Embankment, county of Surrey, England. Water-waste preventer	288,758	Nov. 20	1226	335	25	735
Bartholomew, William N., Newton, Mass. Pencil-pointer	288,156	Nov. 6	444	125	25	565
Bartine, Joseph H., Etna, Mo. Combined table and cupboard	285,208	Sept. 18	1391	363	24	1140
Bartine, Stephen B., assignor of one-fourth to W. T. Brown, Tottenville, N. Y. Sunshade-hat	276,753	May 1	294	75	23	1676
Bartlett, Charles, Providence, assignor of one-half to F. J. Spencer, Pawtucket, R. I. Circuit-closer	281,603	July 17	1579	{ 431 432 }	24	288
Bartlett, Edward L. (See Laubach, Henry C., assignor.)						
Bartlett, F., et al. (See Held, August S., assignor.)						
Bartlett, Frederic, et al. (See Hazlett, Frederic B., assignor.)						
Bartlett, Frederic W., Buffalo, N. Y. Composite building material and the method of preparing the same	271,209	Jan. 30	1710	495	23	349
Bartlett, Frederick W., Buffalo, N. Y. Stone pavement	283,369	Aug. 21	1096	308	24	709
Bartlett, Frederick W., Buffalo, N. Y. Pavement	288,970	Nov. 27	1481	411	25	790
Bartlett, George P., Woburn, Mass. Globe for incandescent electric lamps	285,784	Oct. 2	6	2	25	4
Bartlett, James F., Cleveland, Ohio. Brush	269,910	Jan. 2	103	31	23	22
Bartlett, John W., Moline, Ill. Machine for shrinking tires on wheels	285,553	Sept. 25	1701	{ 479 480 }	24	1220
Bartlett, La Roy, assignor of one-half to H. H. Wellman, St. Louis, Mo. Nut-tapping machine	283,745	Aug. 28	1545	437	24	805
Bartlett, Samuel H. (See Waite and Bartlett.)						
Bartlett, Samuel H., and H. E. Waite, assignors to C. F. Livermore, New York, N. Y. Receiver for telephones	271,188	Jan. 23	1624	486	23	336
Bartlett, Samuel H., and H. E. Waite, assignors to Molecular Telephone Company, New York, N. Y. Telephone-receiver	287,896	Nov. 6	134	39	25	531
Bartlett, William D., Amesbury, Mass. Chimney cap or ventilator	272,517	Feb. 20	1176	329	23	660
Bartlett, William D., Amesbury, Mass. Vehicle-spring	280,117	June 26	1852	522	23	2463
Bartol, Henry W., Philadelphia, Pa. Manufacture of glucose or grape-sugar	276,334	Apr. 24	1802	23	1573	
Barton, Alexander M., Strickling, and P. Z. Davis, South Gabriel, Tex. Steam-engine, &c.	290,167	Dec. 11	977	276	25	1067
Barton, Charles C., Brooklyn, and J. A. Milliken, New York, N. Y. Piston fluid-meter	274,879	Mar. 27	2097	{ 582 583 }	23	1218
Barton, Charles C., New York, and J. Thomson, Brooklyn, assignors to M. T. Barton, New York, N. Y. Piston fluid-meter	285,209	Sept. 18	1292	{ 363 364 }	24	1140
Barton, Charles S., assignor to Rice, Barton & Fales Machine and Iron Company, Worcester, Mass. Paper-pulp-engine roll	273,801	Mar. 13	728	197	23	967
Barton, Edwin, assignor to C. Lambert, Paterson, N. J. Quilling-machine	271,403	Jan. 30	1957	566	23	393
Barton, Edwin, assignor to C. Lambert, Paterson, N. J. Machine for winding cops, quills, bobbins, &c.	272,623	Feb. 20	1312	366	23	685
Barton, John W., Emporia, Kans. Fence-post	270,370	Jan. 9	655	192	23	137
Barton, Maria T. (See Barton and Thomson, assignors.)						
Barton, Maria T. (See Thomson, John, assignor.)						
Bartou, Robert. (See Searle, Thomas A., assignor.)						
Barton, William C., et al. (See Kennedy, Thomas H., assignor.)						
Barton, William H. H., Brockton, Mass. Self-registering thermometer	289,603	Dec. 4	259	81	25	938
Batram, Charles E., Fredonia, N. Y. Knockdown fruit-barrel	281,230	July 17	1111	306	24	210
Basch, Frank, Columbus, Ohio. Machine for cutting and ripping seams	271,019	Jan. 23	1477	426	23	303
Basch, Frank, Columbus, Ohio. Shears for darning cloth and for other purposes	276,754	May 1	295	75	23	1676
Bascom, H. Clay, assignor to N. S. Vedder Pattern Works, Bascom, Galbraith & Co., Troy, N. Y. Heating-stove	283,953	Aug. 28	1798	509	24	850
Basford, Charles B., Malden, Mass., assignor of two-thirds to J. W. Dunham, Livermore Falls, Me., and C. H. Dunham, Boston, Mass. Commode attachment for wash-stands	290,168	Dec. 11	977	276	25	1067
Basford, Sumner, Bangor, Me. Tire-tightener	274,701	Mar. 27	1884	525	23	1182
Bashear, Milo. (See Nichols, Charles H., assignor.)						
Basinger, James M., assignor of one-fourth to Pratt & Letchworth, Buffalo, N. Y. Trace-coupling	272,624	Feb. 20	1314	366	23	685
Basinger, James M., assignor of one-fourth to Pratt & Letchworth, Buffalo, N. Y. Trace-coupling	283,320	Aug. 14	1016	285	24	689
Bass, S. D., et al. (See Gossett, William J., assignor.)	288,759	Nov. 20	1228	335	25	735
Bass, William E. (See Freese, Francis J., assignor.)						
Bassemir, John, Brooklyn, N. Y. Spittoon	272,518	Feb. 20	1177	329	23	660
Bassemir, John, Brooklyn, and L. R. Walker, New York, N. Y.; said Walker assignor to said Bassemir. Ornamental shaft for the ends of curtain-poles	286,521	Oct. 9	925	249	25	178
Bassett, Charles W. (See Kelly, Frank M., assignor.)						
Bassett, Edgar. (See Mount and Bassett.)						
Bassett, Franklin H. (See Bassett and Hutchins.)						
Bassett, George P., Cincinnati, Ohio. Bath-tub attachment	285,378	Sept. 25	1495	421	24	1182
Bassett, Judson L. and F. W., and A. E. Hutchins, Coldwater, Mich. Picture-exhibitor	280,556	July 3	262	71	24	47
Bassett, Norman C., Philadelphia, Pa. Metallic packing for piston-rods	271,300	Jan. 30	1820	528	23	360
Bassett, Norman C., Chicago, Ill. Hydraulic elevator	290,660	Dec. 25	1635	450	25	1195
Bassett, Royal M. (See Magowan and Bassett.)						
Bassett & Sherman. (See Snow, Azariah, assignor.)						
Basford, Isaac F., Helena, assignor of one-half to P. A. Largey and L. Mantle, Butte City, Mont. Ter. Harvester-cutter	281,956	July 24	2039	558	24	374
Basford, Isaac F., and M. Mahan, Butte City, Mont. Ter. Snap-hook	285,956	Oct. 2	227	64	25	43
Bastler, Joseph, San José, Cal. Riding-saddle	286,674	Oct. 16	1126	303	25	220
Bast, Theodor. (See Treerwiler and Bast.)						
Bastam, Fredric, Freeport, Ill., assignor of two-thirds to J. Maurer and J. Kralowetz. Plow-clevis	274,697	Apr. 3	8	2	23	1228
Bastnagel, Henry, et al. (See Muller, Antone, assignor.)						
Batchelder, Fred B., East Boston, Mass., assignor to Batchelder Machine Company, Portland, Me. Leather blacking, dressing, and finishing apparatus	271,971	Feb. 6	467	128	23	522
Batchelder, George G. (See Prior, Gilbert S., assignor.)						
Batchelder, James H., Chicago, Ill. Egg-carrier	283,954	Aug. 28	1799	509	24	850
Batchelder Machine Company. (See Batchelder, Fred B., assignor.)						
Batcheller, Alfred H. (See Fifield, John W. D., assignor.)						
Batcheller, Lucien B., assignor of one-half to M. A. Gokey, Rutland, Vt. Machine for sawing stone	288,296	Nov. 13	627	172	25	625



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Batchelor, Joseph F., Baltimore, Md. Telephone-receiver	281,000	July 10	815	227	24	151
Bate, Wallace H., assignor to W. E. Pierce, trustee, Boston, Mass. Bottle stopper and fastening	273,935	Mar. 13	896	245	23	995
Bate, Wallace H., Boston, assignor to himself and H. S. Bacon, Milford, Mass. Spring-seat.	288,608	Nov. 13	1031	283	25	696
Bate, William A., assignor, by mesne assignments, of one-third to E. P. Baldwin, Yonkers, N. Y. Machine for hanging hats	284,711	Sept. 11	682	193	24	1026
Bate, William S., Boston, Mass. Barbed fence material	273,245	Mar. 6	3	1	23	835
Bateman, Daniel, Philadelphia, Pa. Card-grinding roll	269,821	Jan. 2	2	1	23	3
Bates, Edward M. (See Williams and Bates.)						
Bates, Edward P., Syracuse, N. Y. Fire-pot for boilers	273,012	Feb. 27	1811	507	23	778
Bates, Francis G., et al. (See Haskin, Uri, assignor.)						
Bates, Franklin P., Ansonia, Conn. Fifth-wheel	285,554	Sept. 25	1702	420	24	1220
Bates, Franklin P., Ansonia, Conn. Die and blank for the manufacture of fifth-wheels	287,407	Oct. 30	2062	560	25	400
Bates, Fred W., Adel, Iowa. Wire-fence nail	280,118	June 26	1853	522	23	2463
Bates, Hiram W., Boston, Mass. Carpet-beating machine	276,656	May 1	144	37	23	1651
Bates, Jasper, Thornbury, Ontario, Canada. Manual power	278,606	May 29	2227	611	23	2037
Bates, Joseph H., Walton, N. Y. Spreading-stick for hammocks	271,767	Feb. 6	218	61	23	478
Bates, John O. (See Cooley, Duane B., assignor.)						
Bates, Samuel D., Lewisburg, Pa. Harvester-rake	278,850	June 5	242	70	23	2164
Bates, Theodore C. (See Williams, Charles H., assignor.)						
Bates, Theodore C., North Brookfield, Mass. Corset-clasp fastening and protector	287,997	Nov. 6	267	75	25	553
Bates, Willard A., Princeton, Me. Necktie-fastener	275,878	Apr. 17	1324	364	23	1468
Bates, William H., et al. (See Lattimer, Francis, assignor.)						
Bates, William S., Chicago, Ill. Lumber-drier	280,440	July 3	130	34, 35	24	24
Batonnier, Eugène A., Vitry-le-François, France. Dyeing wood, cloth, &c., to imitate marble	270,371	Jan. 9	656		23	137
Batson, Alouzo B., New Castle, Ind. Vegetable-slicer	279,212	June 12	747	205	23	2361
Batt, Charles F., Schuylkill, Chester county, Pa. Hoisting-pulley	278,078	May 22	1902	521	23	1973
Battershall, Jesse P., New York, N. Y. Extracting glycerine from the waste soap-liquor of soap-manufacture	276,550	May 1	8		23	1628
Battin, Joseph M., Jr., assignor of one-half to W. A. Huff, Newark, N. J. Lubricator	279,120	June 12	648	177	23	2344
Battle, Daniel. (See Bresnahan, Cornelius, assignor.)						
Battle, James. (See Tucker, Gaylon L., assignor.)						
Battle, Lucius L., Withe, Tenn. Corn-planter	288,399	Nov. 13	780	210	25	651
Battle, Marcus L., Bainbridge, Ga. Plow	282,694	Aug. 7	264	76	24	545
Batston, Arthur L., Morrisburg, Ontario, Canada. Press for sacking bran, sawdust, &c.	290,515	Dec. 18	1448	400	25	1157
Batty, Lindley M., Canton, Ohio. Fodder-cutter	272,403	Nov. 20	1032	289	23	636
Batty, William, assignor of one-half to G. H. Perkins, Philadelphia, Pa. Fire-brick	270,175	Jan. 2	408		23	83
Bauder, George E., and A. M. Pease, Sanborn, Dak. Ter. Harness-pad block	278,079	May 22	1903	521	23	1973
Bauer, Cornelius, assignor of one-half to T. T. Haydock, Cincinnati, Ohio. Vehicle jump-seat	283,370	Aug. 21	1097	308	24	710
Bauer, Elkan, Vienna, Austria-Hungary. Process of and composition for the manufacture of substitutes for leather, horn, tortoise-shell, &c.	277,977	May 22	1784		23	1952
Bauer, Ernst, Brooklyn, N. Y. Life-preserver	281,824	July 24	1880	513	24	346
Bauer, Ernst, assignor, by mesne assignments, to F. Cappel, Brooklyn, N. Y. Clothes-line fastener	282,601	Aug. 7	152	46	24	527
Bauer, Francis, and D. F. Kenney, Baltimore, Md. Privy and its attachments	273,439	Mar. 6	256	69	23	877
Bauer, Frederick E., Danbury, Conn. Fire-escape	284,360	Sept. 4	246	68	24	946
Bauer, Hermann, Schwabach-Gründ, Germany, assignor to W. C. Edge, Newark, N. J. Ornamenting metals	289,956	Dec. 11	723		25	1020
Bauer, Jacob. (See Colvin, Orson, assignor.)						
Bauer, Jacob C., Philadelphia, Pa. Paper-lining machine	276,335	Apr. 24	1892	525	23	1573
Bauer, Jacob C., Philadelphia, Pa. Paper box	278,851	June 5	245	70	23	2165
Bauer, Paul. (See Watson, Hall, and Bauer.)						
Bauer, Zacharias, St. Louis, Mo. Shirt	273,802	Mar. 13	729	197	23	967
Baernermeister, Hermann E. L., Hamburg, Germany. Flour-sifting machine	278,852	June 5	246	71	23	2165
Bangh, Daniel, et al. (See Terne, Bruno, assignor.)						
Bangh, Edwin P., et al. (See Terne, Bruno, assignor.)						
Baughart, Andrew B., and C. H. Treat, Frankford, Del. Making inlaid frames	274,898	Apr. 3	9	2	23	1228
Baughman, David C., Albion, Ind. Lighting and extinguishing gas-lights	287,218	Oct. 23	1825	500	25	350
Baughman, George T., et al. (See Clark, Levi S., assignor.)						
Baujard, Edmund O., Aubervilliers, France, assignor to J. W. Mackay, Virginia City, Nev. Extracting glycerine	278,849	June 5	241		23	2164
Baujard, Edmund O., Aubervilliers, France, assignor to J. W. Mackay, Virginia City, Nev. Extracting glycerine	280,294	July 10	686	193	24	128
Baujard, Edmund, Aubervilliers, France, assignor to J. W. Mackay, Virginia City, Nev. Treating waters containing glycerine obtained by the decomposition of fatty matters	280,893	July 10	685		24	128
Baum, Andrew F., Allentown, Pa. Shirt	283,190	Aug. 14	856	239	24	659
Baum, Chester C., Dover, Del. Spark conductor for locomotives	282,484	Aug. 7	6	2	24	502
Baumann, Frederick, Chicago, Ill. Pipe-coupling	272,191	Feb. 13	750	207	23	582
Baumann, Louis, Offenbourg, Germany. Rag-cutting machine	286,373	Oct. 9	748	201	25	146
Baumeister & Co., L. (See Baumeister, Leopold, assignor.)						
Baumeister, Hermann. (See Lüdeke, Waldemar, assignor.)						
Baumeister, Leopold, Bridgeport, Conn. Fire-escape	274,080	Mar. 13	1069	295	23	1025
Baumeister, Leopold, Bridgeport, Conn. Portable bracket	276,336	Apr. 24	1893	525	23	1574
Baumeister, Leopold, assignor to L. Baumeister & Co., Bridgeport, Conn. Gas-regulator	282,150	July 31	2300	632	24	422
Baumgardner, Emet. (See Laughlin and Baumgardner.)						
Baumgarten, Carl, Berlin, Germany. Steam engine	283,558	Aug. 21	1317	368	24	750
Baumgartner, Frederick, Brooklyn, N. Y. Whip-socket	277,197	May 8	864	230	23	1780
Baumgartner, Rudolph, New Orleans, La. Truck for portable tracks	271,020	Jan. 23	1478	426	23	303
Baumotte, Hermann, Vossnaiken, near Kuperdreh, Prussia, Germany, assignor to himself and R. Nöggerath, St. Johann on-the-Saar. Hydraulic motor	286,374	Oct. 9	749	201	25	146
Baur, John, Chicago, Ill. Feather-renovator	287,496	Oct. 30	2172	569	25	421
Bansch, Edward, Rochester, N. Y. Microscopic illuminator	277,869	May 22	1661	454	23	1931
Bansch, Henry, Rochester, N. Y. Sash-fastener	277,441	May 15	1153	310	23	1837
Banshi, Christian H., Holyoke, Mass. Furnace-grate	277,538	May 15	1268	340	23	1856
Bausmith, William T., assignor of one-half to M. H. Bentley, Ludlow, Ky. Core compound	270,625	Jan. 16	983		23	209
Bavter, John, Newark, N. J. Sash-balance	279,631	June 19	1272	353	23	2354
Bawden, John H., Freehold, N. J. Molding-flask	280,557	July 3	262	71	24	47
Bawsel, Edward E., assignor of one-third to J. A. Beaver, Washington, D. C. Safety device for elevator-shafts	274,257	Mar. 20	1305	359	23	1074
Bawsel, Edward E., assignor to W. Choate, Washington, D. C. Pole-changer for telephone call-circuits	274,552	Mar. 27	1705	473	23	1149

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Baxter, Charles W. (See Baxter, James M., assignor.)						
Baxter, Hartley C., and H. R. Stickney, 2d, Portland, Me. Machine for filling cans	284,998	Sept. 18	1036	291	24	1096
Baxter, James M., Philadelphia, Pa., assignor of one-half to C. W. Baxter, Camden, N. J. Making hair-waves	289,957	Dec. 11	724	204	25	1020
Baxter, Jean. (See Baxter, William, Jr., assignor.)						
Baxter, John L. (See Snell, Luther C., assignor.)						
Baxter, Myron L., Aurora, Ill., assignor, by mesne assignments, to Overland Telephone Company. Transmitting-telephone	277,198	May 8	865	230	23	1780
Baxter, Myron L., Aurora, Ill., assignor, by mesne assignments, to Overland Telephone Company. Receiving-telephone	277,199	May 8	867	230	23	1780
Baxter, Thomas W., et al. (See Pattillo, Robert M., assignor.)						
Baxter, William, Jersey City, N. J., assignor to J. A. Greene, Brooklyn, N. Y. Wrench	281,431	July 17	1362	376	24	252
Baxter, William, Jersey City, N. J., assignor to J. A. Greene, Brooklyn, N. Y. Wrench	281,432	July 17	1363	376	24	253
Baxter, William, Jr., Jersey City, N. J. Voltaic-arc light	288,157	Nov. 6	445	125	25	585
Baxter, William, Jr., assignor to J. Baxter, Jersey City, N. J. Dynamo-electric machine	271,972	Feb. 6	468	128	23	522
Bayles, Thomas S., Toronto, Ontario, Canada. Machine for forming staples	287,087	Oct. 23	1655	454	25	319
Bayles, William H., Montclair, N. J. Sash-fastener	285,210	Sept. 18	1295	364	24	1140
Bayles, William H., Montclair, N. J. Sash-fastener	285,211	Sept. 18	1295	365	24	1141
Bayless, Albert J. (See Lancaster, James H., assignor.)						
Bayley, Alfred, Newark, N. J. Combined coal-scuttle and ash-sifter	283,848	Aug. 28	1668	471	24	826
Bayley, Charles H., Boston, Mass. Trimming mechanism for sewing-machines	272,519	Feb. 20	1178	329	23	660
Bayley, Charles H., Boston, Mass. Trimming attachment for sewing-machines	273,936	Mar. 13	898	245	23	995
Bayley, Charles H., Boston, Mass. Sewing-machine	275,117	Apr. 3	311	87	23	1279
Bayley, James S., York, Pa. Car-coupling	278,764	June 5	107	31	23	2142
Bayley, John C., assignor of one-half to A. Davis, Battle Creek, Mich. Sulky-cultivator	281,957	July 24	2040	558	24	374
Bayley, Samuel K. (See Myer and Bayley.)						
Bayley, Samuel K., Boston, Mass. Refrigerator-car	276,952	May 1	545	{ 142 143 }	{ 23 23 }	{ 1719 1719 }
Bayley, Samuel K., Boston, Mass. Heat insulation of refrigerator cars and buildings	284,361	Sept. 4	247	69	24	946
Bayley, Samuel K., Boston, Mass. Railway-car	284,362	Sept. 4	248	69	24	946
Bayley, William. (See Whiteley and Bayley.)						
Baylis, Frank, Amenia, N. Y. Hay-distributor for barns	283,191	Aug. 14	858	240	24	659
Baynes, John, Brookdale, assignor to J. Matthews, New York, N. Y. Preparing glass, metal, &c., for erosion	282,485	Aug. 7	7	-----	24	502
Bayrer, William J., Southington, Conn. Bit-stock	277,105	May 8	752	197	23	1760
Bazzett, Charles T. (See Shter and Bazzett.)						
Be Vier, Edwin W., Chandleville, Ill. Hog-cholera remedy	282,949	Aug. 14	565	-----	24	608
Be, John H., Jr., assignor to E. R. Cahoon, Newark, N. J. Sewing-machine guide	272,847	Feb. 27	1615	{ 451 452 }	{ 23 23 }	{ 745 745 }
Beach, Alexander H. and R. H., Flint, Mich. Wagon-reach	281,335	July 17	1245	345	24	232
Beach, Alexander H. and R. H., Flint, Mich. Running-gear for wagons	282,486	Aug. 7	8	3	24	502
Beach, Allen J., Flint, Mich. Running-gear for vehicles	279,213	June 12	748	205	23	2261
Beach, Allen J., Flint, Mich. Running-gear	280,895	July 10	687	193	24	128
Beach, Allen J., Flint, Mich. Tongue-support	280,896	July 10	688	193	24	128
Beach, Edgar B., Stony Creek, Conn. Car-lock	277,662	May 15	1414	382	23	1881
Beach, Henry B., et al. (See Rnst, Solon R. and A. E., assignors.)						
Beach, Henry B., Meriden, Conn. Plane	287,612	Oct. 30	2341	632	25	454
Beach, Henry B., assignor to Meriden Malleable Iron Company, Meriden, Conn. Joiner's plane	289,332	Nov. 27	1920	533	25	871
Beach, Henry H., Rome, N. Y. Coffee pot	284,363	Sept. 4	249	69	24	946
Beach, John C., et al. (See Rust, Solon R. and A. E., assignors.)						
Beach, John S., Zanesville, assignor, by mesne ass., cutouts, of one-half to J. B. Cochran, McConellsville, Ohio. Tobacco-cutter	271,768	Feb. 6	219	61	23	478
Beach, Millard E., and A. Burch, Cadillac, Mich. Saw setting and jointing device	272,625	Feb. 20	1315	366	23	685
Beach, Ralph H. (See Beach, Alexander H. and R. H.)						
Beach, William L., Webster City, Iowa. Trace-fastener	289,375	Dec. 4	6	2	25	888
Beach, Willis P., Ovid, Mich. Hitching-post	271,769	Feb. 6	220	62	23	478
Beadle, George, assignor to Wales Manufacturing Company, Syracuse, N. Y. Change-gate for public conveniences	273,337	Mar. 6	125	35	23	855
Beal, David, Doylestown, Ohio. Combined shutter-worker and blind-slat operator	277,663	May 15	1415	382	23	1881
Beal, Ezra F., assignor, by mesne assignments, to himself and S. Snow, Everett, Mass. Lasting-machine	277,664	May 15	1416	{ 382 383 }	{ 23 23 }	{ 1881 1881 }
Beal, William R., New York, N. Y. Apparatus for scrubbing or washing gas	283,192	Aug. 14	859	{ 240 241 }	{ 24 24 }	{ 659 659 }
Beale, F. W. (See Cowles, Harley D., assignor.)						
Beale, John, East Greenwich, county of Kent, England. Bicycle	280,558	July 3	263	71	24	48
Beale, John B., Rush Centre, Kans. Cutting and preparing broom-corn	274,702	Mar. 27	1885	-----	23	1182
Beale, Joseph G., Leeburg, Pa. Gas-burner	286,170	Oct. 9	476	131	25	99
Beale, Oscar J., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Rotary cutter	277,405	May 8	1100	295	23	1822
Beall, John, Decatur, Ill. Grinding-mill	274,703	Mar. 27	1885	525	23	1182
Beals, Ebenezer, assignor to J. M. Guernsey, Norwich, N. Y. Locomotive-brake	271,189	Jan. 23	1685	486	23	336
Beam, Joshua F., Buffalo, N. Y., and S. Brillinger, Sherston, Ontario, Canada. Washing-machine	279,522	June 19	1145	317	23	2332
Beam, Charles F., and W. P. Cragin, assignors to Cragin Bros. & Co., Chicago, Ill. Oil-stove	272,018	Feb. 13	542	146	23	546
Beam, Albert B., New Haven, Conn. Metal-planing machine	272,192	Feb. 13	750	207	23	582
Beam, Edward D., Chelsea, Mass. Policeman's hook	284,165	Sept. 4	6	2	24	906
Bean, John and R., Springfield, Ohio. Hobby-horse	284,940	Sept. 11	957	{ 268 269 }	{ 24 24 }	{ 1074 1074 }
Bean, Joseph H., Cincinnati, Ohio. Vapor-stove	282,037	July 31	2137	587	24	396
Bean, Robert T., Mount Sterling, Ky. Hatchway-protector for elevators	287,219	Oct. 23	1826	500	25	350
Bean, Roscoe. (See Bean, John and R.)						
Bean, Rufus E. (See Poor, John O., assignor.)						
Bean, Samuel L., Washington, D. C. Roller grinding-mill	275,568	Apr. 10	917	248	23	1221
Bean, William Z., Boston, Mass. Nailing-machine	282,602	Aug. 7	152	46, 47	24	527
Bean, William Z., Boston, Mass. Nail	382,603	Aug. 7	154	47	24	528
Beard, Josiah, and H. Whitenberger, Fredonia, Pa. Eaves-trough hanger	290,731	Dec. 25	1737	480	25	1214
Beard, Alfred, Danville, Ill. Pipe-vise	272,193	Feb. 13	753	208	23	582
Beard, Alva P., Horseheads, N. Y. Sliding door	281,433	July 17	1364	376	24	253
Beard, Cornelius. (See Baldwin, Charles E., assignor.)						
Beard, Cornelius. (See Southner, Engelbert, assignor.)						
Beard, Cornelius. (See Turner, William B., assignor.)						
Beard, Cornelius, and C. E. Baldwin, assignors to I. B. Kleinert, New York, N. Y. Ear-protector	280,005	June 26	1718	481	23	2439



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Beard, Cornelius, and C. E. Baldwin, New York, N. Y. Frame for purses.....	284,364	Sept. 4	250	69	24	946
Beard, Edward J., and H. V. Hinckley, Topeka, Kans. Revolving switch-stand for railways.....	276,552	May 1	10	3	23	1628
Beard, Edward J., and H. V. Hinckley, Topeka, Kans. Switch-stand for railways.....	277,539	May 15	1269	340	23	1656
Beard, Frederick C., Aurora, Ill. Driver for lathes.....	280,119	June 26	1854	522	23	2463
Beard, Frederick C., Aurora, Ill. Face-plate for lathes, &c.....	282,038	July 31	2139	567	24	396
Beard, Philo D., Buffalo, N. Y. Overshoe.....	273,803	Mar. 13	730	198	23	968
Beardslee, George W., Brooklyn, N. Y., assignor to W. F. Jobbins, East Orange, N. J. Electric-arc lamp.....	270,725	Jan. 16	1115	{ 319 320 317 }	23	233
Beardslee, William F., Boston, Mass. Hat-sewing machine.....	279,523	June 19	1146	{ 320 318 }	23	2332
Beardsley & Co., L. C. (See Draper, Charles T., assignor.)						
Beardsley, Hiram C., and J. M. Hopson, New Haven, Conn. Grate-cleaner.....	272,194	Feb. 13	754	208	23	582
Bearse, Nelson H., Osterville, Mass. Spirit-level.....	284,712	Sept. 11	684	193	24	1026
Beath, David. (See Kay, Joshua A., assignor.)						
Beath, Schiess & Co. (See Dredge, Edgar, assignor.)						
Beatty, William H., Humansville, Mo. Adding-machine.....	272,626	Feb. 20	1316	367	23	685
Beattie, Frank H., Soho, near Birmingham, county of Warwick, England. Braced frame..	272,627	Feb. 20	1318	{ 367 368 369 370 }	23	686
Beattie, George D. (See Kuhns and Beattie.)						
Beattie, William, Portage, Wis. Foot and leg protector.....	283,193	Aug. 14	861	241	24	660
Beatty, Claudius F., Brooklyn, N. Y. Hat-band.....	274,704	Mar. 27	1886	525	23	1182
Beatty, Daniel F. (See Davis, Charles H., assignor.)						
Beatty, John P., assignor to himself and S. Beatty, Norwalk, Conn. Hat.....	279,690	June 19	1342	373	23	2366
Beatty, John P., assignor to himself and S. Beatty, Norwalk, Conn. Machine for pressing hats.....	286,576	Oct. 16	998	270	25	198
Beatty, Robert P., Norwalk, Conn. Refrigerator.....	290,387	Dec. 18	1261	354	25	1125
Beatty, Samuel. (See Beatty, John P., assignor.)						
Beaty, James E., Summerville, Ga. Quilting-frame for sewing-machines.....	276,337	Apr. 24	1894	525	23	1574
Beaty, Marshal, Cincinnati, Ohio. Thimble.....	279,524	June 19	1152	319	23	2333
Beaty, William W. (See Reeves, Abbott M., assignor.)						
Beauchemin, Joseph E., Sorel, Quebec, Canada. Horse hay-rake.....	284,166	Sept. 4	7	2	24	906
Beaudreau, Joseph, Ludington, Mich. Rowlock.....	271,021	Jan. 23	1479	426	23	303
Beaudreau, Mathias I., Fond du Lac, Wis. Governor for steam-engines.....	274,553	Mar. 27	1706	474	23	1150
Beandry, Alexander, Boston, Mass. Power-hammer.....	281,001	July 10	816	{ 227 228 }	24	151
Beandry, Zotique, Lynn, assignor to Universal Heel Burnishing Machine Company, Boston, Mass. Heel-burnisher for boots and shoes.....	284,167	Sept. 4	8	3	24	906
Beaumont, Henry F., Whitley Beaumont, near Huddersfield, county of York, England. Shooting-seat.....	272,019	Feb. 13	543	117	23	546
Beaumont, Richard, Kankakee, Ill. Stop-valve.....	275,798	Apr. 17	1226	335	23	1451
Beaumont, William W., Camberwell, county of Surrey, and J. Welman, Poole, county of Dorset, England. Apparatus for cutting stone.....	270,925	Jan. 23	1357	391	23	284
Beauregard, Napoleon. (See Wheelock, George J., assignor.)						
Beaver, John A. (See Bawsl, Edward B., assignor.)						
Beazle, Frank N., Pittsburg, Pa. Steel-ingot mold.....	290,626	Dec. 18	1589	437	25	1181
Bebro, Marcus, Canfield House, Priory Road, Kilburn, county of Middlesex, England. Apparatus for punching and registering tickets.....	269,911	Jan. 2	103	31	23	22
Beche, Peter, Wilkes-Barre, Pa. Horse-power.....	278,833	June 5	247	71	23	2165
Bechtel, Albert, E. J. Wunderlich, and D. P. Stetzelberger, Cleveland, Ohio. Lamp-extinguisher and wick-trimmer combined.....	281,232	July 17	1117	308	24	211
Bechtel, George M., Reading, Pa. Carriage-top standard.....	278,676	June 5	2	1	23	2125
Bechter, Joseph M. (See Wright and Bechter.)						
Beck, August, New York, N. Y. Quilting-machine.....	276,657	May 1	145	37	23	1651
Beck, August, New York, N. Y. Quilting-machine.....	279,632	June 19	1272	353	23	2355
Beck, Argust, and G. Creter, New York, N. Y. Mechanical movement.....	289,881	Dec. 11	637	177	25	1004
Beck & Co., A. (See Brenzinger, Adam, assignor.)						
Beck, Daniel, Chicago, Ill. Fire-extinguishing apparatus.....	278,307	May 29	2227	611	23	2037
Beck, Harrison W., et al. (See Beck, Marshall, assignor.)						
Beck, Harry E., et al. (See Beck, Marshall, assignor.)						
Beck, John B., Pittsburg, assignor to himself, A. Haller, and A. Munsch, Allegheny city, Pa. Fertilizer.....	285,555	Sept. 25	1703	.....	24	1220
Beck, Lewis I., et al. (See Beck, Marshall, assignor.)						
Beck, Marshall, assignor of two-thirds to E. Hopkins, Jr., G. W. Le Vin, Chicago, L. I. and H. E. Beck, Clear Creek, Ill., and H. W. Beck, Indianola, Kans. Hay raking and loading machine.....	283,746	Aug. 28	1547	{ 437 438 }	24	805
Becker, Francis L., New York, N. Y. Pivot-joint for piano-actions.....	285,785	Oct. 2	7	3	25	4
Becker, Franck, assignor to R. F. Simmons, E. L. Hixon, and J. L. Sweet, Attleborough Falls, Mass. Ornamental chain.....	276,338	Apr. 24	1805	526	23	1574
Becker, John, Boston, Mass. Embroidering-machine.....	281,231	July 17	1112	307	24	210
Becker, John F., Ward, Minn. Flame and collar fastener.....	290,661	Dec. 25	1638	450	25	1196
Becker, Kiel W. (See Lewis, Francis M., assignor.)						
Beckers, Alexander, Hoboken, N. J. Boat-rowing apparatus.....	287,088	Oct. 23	1655	{ 454 455 }	25	319
Beckert, Andrew, and W. E. Ludlow, Sandusky, Ohio. Dumping-car.....	288,760	Nov. 20	1228	{ 335 336 }	25	735
Beckett, Albert A., assignor of one-half to J. Kelly, Chicago, Ill. Fire-escape.....	290,311	Dec. 18	1168	327	25	1108
Beckley, Silas, Cascade, Mich. Portable fence.....	286,522	Oct. 9	926	230	25	178
Beckhardt, Louis, et al. (See Knoepflin, John B., assignor.)						
Beckley, Philip G., Newark, N. J. Lamp-wick trimmer.....	271,022	Jan. 23	1480	426	23	303
Beckman, C. C. (See Huffer, John H., assignor.)						
Beckwith, Charles T., et al. (See Tripp, James, assignor.)						
Beckwith, Ellen F., et al. (See Tripp, James, assignor.)						
Beckwith, John. (See Clow, Lewis E., assignor.)						
Beckwith, John H. (See Galloway and Beckwith.)						
Beckwith, Leonard F., et al., trustees. (See Marchand, Charles, assignor.)						
Beckwith, Philo D., Dowagiac, Mich. Heating-stove.....	289,802	Dec. 11	536	{ 149 150 }	25	986
Beckwith, Samuel, Mount Pleasant, Iowa. Fence-post.....	282,039	July 31	2140	587	24	397
Beckwith, Samuel H., assignor to F. J. Callanen, Utica, N. Y. Electro-magnetic locomotive.....	280,559	July 3	264	72.73	24	48
Beckwith, Walter C., Norwalk, Ohio. Railway-signal.....	277,230	May 8	863	230	23	1780
Beckwith, Walter C., Allegheny, Pa. Carbon.....	290,836	Dec. 25	1866	515	25	1237
Beckwith, Warren, Geneva Lake, Wis. Wagon end-gate.....	286,675	Oct. 16	1127	303	25	220



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Beckwith, William H., Latrobe, Pa. Coke-oven door .....	288,761	Nov. 20	1230	337	25	735
Becsey, Joseph A., <i>et al.</i> (See Rudolph, Alexander, assignor.)						
Bedbury, George W., assignor of one-half to A. E. Borthwick, Portland, Oreg. Car-coupling.	269,999	Jan. 2	206	59	23	43
Bedbury, George W., assignor of one-third to E. J. Haight and L. M. Cox, Portland, Oreg. Car-axle	275,324	Apr. 3	563	153	23	1322
Bedbury, George W., assignor of one-half to L. M. Cox and J. E. McLaughlin, Portland, Oreg. Car-axle.	284,800	Sept. 11	793	221	24	1044
Beddow, George, assignor of one-half to J. P. Rose, Detroit, Mich. Leather-skiving machine.	275,458	Apr. 10	779	208	23	1367
Bedell, George E.; Herkimer, N. Y. Folding cot .....	274,455	Mar. 27	1567	429	23	1127
Bedell, Lucius M., Chetopa, Kans. Barrel-truck .....	274,258	Mar. 20	1306	360	23	1074
Bedell, Lucius M., Chetopa, Kans. Shot-case .....	285,454	Sept. 25	1528	446	24	1198
Bedell, William, New York, N. Y. Car-ventilation .....	280,723	July 10	563	158	24	106
Bedford, Joseph T., New York, N. Y. Waxing paper .....	273,013	Feb. 27	1812	508	23	779
Bedford, Joseph F., Cincinnati, Ohio. Clasp .....	286,991	Oct. 23	1533	422	25	296
Bedinger, George M., Jr., Erlanger, Ky. Electric signaling apparatus for railway-trains.	275,879	Apr. 17	1325	365	23	1469
Beebe, Charles S., Racine, Wis. Fanning-mill .....	280,897	July 10	688	194	24	128
Beebe, Charles S., Racine, Wis. Fanning-mill .....	280,898	July 10	689	194	24	128
Beebe, Charles S., Racine, Wis. Two-wheeled vehicle .....	281,434	July 17	1365	377	24	253
Beebe, Edgar G., Wiotra, Wis. Vehicle-brake .....	278,765	June 5	108	31	23	2142
Beebe, Gaylord W., Swanton, Vt. Thill-coupling .....	272,628	Feb. 20	1320	370	23	686
Beebe, George F., Hornellsville, N. Y. Pump .....	279,214	June 12	748	206	23	2261
Beebe, Hiram F. (See Hubbard, Frederick H., assignor.)						
Beebe, Lyman C., Villisca, assignor of one-half to R. Truman, Afton, Iowa. Gas-generat- ing lamp .....	290,200	Dec. 18	1025	288	25	1084
Beebe, Lyman C., Villisca, assignor of one-half to R. Truman, Afton, Iowa. Gas-generator.	290,627	Dec. 18	1590	437	25	1181
Beebe, Winsor, Buffalo, N. Y. Grain drier and cooler .....	284,266	Sept. 4	135	38	24	927
Beecher, Ebenezer B., Westville, Conn., and R. T. Elliott, assignors to Diamond Match Company, Wilmington, Del. Machine for making match-boxes .....	281,958	July 24	2040	558 559 560	24	374
Beecher, Henry W. (See Woodruff, Owen, and Beecher.)						
Beecher, Thomas, assignor to W. & E. T. Fitch, New Haven, Conn. Snap-hook .....	282,257	July 31	2433	669	24	445
Beecher, William F. (See Clark and Beecher.)						
Beecher, William F., and R. S. West, Cleveland, Ohio. Portable coffee-roaster .....	271,770	Feb. 6	221	62	23	479
Beecher, William S., Westville, Conn. Match-box .....	284,596	Sept. 11	536	151	24	1001
Beecher, Charles G., assignor to W. T. Mann, J. G. and A. Chapman, and H. Shield, Liver- pool, England. Gas-motor engine .....	280,006	June 26	1719	481 482	23	2439
Beeching, David G., New York, N. Y. Illuminating-tile .....	272,629	Feb. 20	1321	370	23	686
Beckman, C. C. (See Huffer, John H., assignor.)						
Beeler, W. R. (See Park and Hackett, assignors.)						
Beeman, Joseph S., London, England. Magneto-electric machine .....	288,915	Nov. 20	1411	388 389	25	770
Beeman, Joseph S., W. Taylor, and F. King, London, England. Regulator for dynamo- electric machines .....	288,963	Nov. 20	1468	406	25	781
Beeman, Marcus M., Syracuse, N. Y. Nut-lock .....	270,372	Jan. 9	657	193	23	138
Beer, John S., Buffalo, N. Y. Fire-proof material .....	290,837	Dec. 25	1566	515	25	1237
Beer, Peter, Detroit, Mich. Match-machine .....	272,113	Feb. 13	666	181	23	567
Beers, Charles F., Newark, N. J. Spectacles and eyeglasses .....	271,771	Feb. 6	222	62	23	479
Beers, Philo M., Bridgeport, Conn. Machine for polishing the eyes of needles .....	278,854	June 5	248	72	23	2165
Beers, Thomas W., and J. W. Craig, Kirkwood, Ill. Rein-holder .....	279,906	June 26	1597	448	23	2418
Beery, David A., and N. B. Sprague, Springfield, Ohio. Apparatus for making fire-kindlers.	284,597	Sept. 11	536	152	24	1001
Beery, Samuel M., assignor to himself and I. M. Smith, Omaha, Nebr. Platform for rail- way-cars .....	290,516	Dec. 18	1451	401	25	1157
Beesley, Frederick, Queen Street, Edgware Road, assignor to J. Purdey, Oxford Street, county of Middlesex, England. Breach-loading fire-arm. (Reissue) .....	10,281	Feb. 6	528	142	23	531
Beesley, Thomas, Muscatine, Iowa. Caloric-engine .....	270,000	Jan. 2	207	60	23	43
Beggs, Eugene. (See Pennington and Beggs.) (Reissue.)						
Beggs, William. (See McDonald and Beggs.)						
Beha, John, Louisville, Ky. Haruess .....	285,379	Sept. 25	1496	421	24	1182
Behr, Herman. (See Coffin, George W., assignor.)						
Behrens, Hermann L., Holyoke, Mass. Self-oiling calender-box .....	282,151	July 31	2302	632	24	422
Behrens, William H., assignor of one-half to C. M. Theberath, Newark, N. J. Mechanical movement .....	287,408	Oct. 30	2063	561	25	400
Behrens, William H., assignor of one-half to C. M. Theberath, Newark, N. J. Machine for hardening and sizing hat-bodies .....	287,752	Oct. 30	2520	679	25	488
Beidler, Charles, assignor of two-thirds to C. S. Ehrig and J. J. Egge, Allentown, Pa. Wash- ing-machine .....	279,691	June 19	1343	373	23	2366
Beidler, Henry M., Texarkana, Ark. Electro-magnetic car wheel and brake .....	284,365	Sept. 4	251	70	24	947
Beidler, Jacob H., Mount Pulaski, Ill. Brick-kiln .....	275,090	May 22	1904	521	23	1974
Beiermeister, Fredrick, Jr., Troy, N. Y. Collar .....	278,677	June 5	3	1	23	2135
Beiermeister, Fredrick, Jr., Troy, N. Y. Collar .....	289,604	Dec. 4	290	81	25	939
Beisner, George, Chicago, Ill. Folding step-ladder .....	276,339	Apr. 24	1896	526	23	1574
Belcher, Frank S., and J. B. Charlotte, Mich. Fruit-drier .....	285,937	Oct. 2	228	64	25	43
Belcher, John B. (See Belcher, Frank S., and J. B.)						
Belcher, John B. (See Fife, John C., assignor.)						
Belcher, Walter A., assignor of one-half to F. Taylor, Lowell, Mass. Telephonic apparatus.	283,747	Aug. 28	1549	438	24	806
Belden, Henry S., Canton, Ohio. Vapor-burner .....	271,772	Feb. 6	223	62	23	479
Belden, Henry S., Canton, Ohio. Vapor-burner .....	272,195	Feb. 13	755	208	23	582
Belden, Henry S., Canton, Ohio. Street-lamp .....	286,763	Oct. 16	1237	334	25	239
Belden, Preston L. (See Gilmore, Robert J., assignor.)						
Belding, Arthur, Chicago, Ill. Device for hanging seed-corn .....	276,755	May 1	296	76	23	1676
Belding, Edgar F. (See Knowlton, Albion, assignor.)						
Belknap, Charles, Bridgeport, and J. W. Bradley, Stratford, assignors of one-half to Bel- knap Manufacturing Company, Bridgeport, Conn. Valve mechanism .....	286,676	Oct. 16	1128	303 304	25	220
Belknap, Frank D., Wooster, Ohio. Copying and printing press .....	286,677	Oct. 16	1129	304 305	25	220
Belknap Manufacturing Company. (See Belknap and Bradley, assignors.)						
Belknap Manufacturing Company. (See Bradley, John W., assignor.)						
Belknap, Samuel C., and T. H. Fye, Zaniesville, Ohio. Boot or shoe .....	278,308	May 29	2228	611	23	2037
Bell, Albert, Reisterstown, Md. Book-support .....	290,169	Dec. 11	978	276	25	1068
Bell, Benjamin F., Yates Centre, Kans. Wire-tyer .....	279,525	June 19	1153	319	23	2333
Bell, Bushrod W., Dallas, Tex. Wood pavement .....	281,233	July 17	1118	308	24	211
Bell, Franklin N. (See Bell, George S., assignor.)						
Bell, Frederick, Anderson, Ind. Sash-fastener .....	287,409	Oct. 30	2064	561	25	400
Bell, George A., and W. W. Norman, Morley, Mo. Extension step-ladder .....	287,793	Nov. 6	7	2	25	508

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Bell, George S., South Norwalk, Conn., assignor to F. N. Bell, Flushing, N. Y. Center-board for vessels.	277,406	May 8	1101	295	23	1822
Bell, James D., Fremont, Nehr. Portable refrigerator.	286,375	Oct. 9	750	201	25	146
Bell, John A. (See Smith, Oscar L., assignor.)						
Bell, John B., Pittsburg, Pa. Clothes-washer.	270,726	Jan. 16	1116	320	23	233
Bell, John H., Mount Ephraim, N. J. Riddle for grain-separators.	280,007	June 26	1722	482	23	2439
Bell, John W. (See Luse and Bell.)						
Bell, Levi, Orangeburg, N. Y. Sulky-plow.	286,678	Oct. 16	1132	305	25	221
Bell, Patrick F. (See Otto and Bell.)						
Bell, Richard, Liverpool, England, and D. Selkirk, Brooklyn, N. Y. Screw-propeller.	285,212	Sept. 18	1296	365	24	1141
Bell, Robert, Paterson, assignor to A. Martin, Passaic, N. J. Shell for use in dye-vats.	276,340	Apr. 24	1897	526	23	1575
Bell, Samuel H., assignor of one-half to S. L. Griffin, Mexico, Mo. Two-wheeled vehicle.	278,855	June 5	251	72, 73	23	2166
Bell, Thomas, Akron, Ohio. Nut-lock.	284,366	Sept. 4	252	70	24	947
Bell, Walter T., New Rochelle, N. Y. Measure for grain-spouts.	280,120	June 26	1854	523	23	2463
Bell, William. (See Lipsey, Andrew B., assignor.)						
Bell, William G. (See Addie, John, assignor.)						
Bell, William G., Boston, Mass. Meat-cutter.	273,220	Feb. 27	2071	582	23	824
Bell, William G., Boston, Mass. Machine for cutting meat.	287,360	Oct. 23	1998	{ 544 545 }	{ 25 25 }	{ 381 381 }
Bellah, Thomas S. (See Spencer, John N., assignor.)						
Bellairs, William, Mitchellville, Iowa. Snap-hook.	279,477	June 12	1088	300	23	2315
Bellairs, William, Mitchellville, Iowa. Trace-carrier.	288,762	Nov. 20	1232	337	25	736
Bellamy, Charles L., Arlington, N. J. Clamp and vise.	286,376	Oct. 9	751	202	25	147
Belle Patent Button Fastener Company. (See Alton, George H., assignor.)						
Belle Patent Button Fastening Company. (See Alton, George H., assignor.)						
Bellinger, Earl B., Kalamazoo, assignor to himself and H. F. Bellinger, Barry, Mich. Cultivator.	290,960	Dec. 25	2022	558	25	1263
Bellinger, Harvey F. (See Bellinger, Earl B., assignor.)						
Bellingrath, Leonard, Castleberry, Ala. Manufacturing rosin and spirits of turpentine.	284,367	Sept. 4	253		24	947
Bellis, William L., Cleveland, Ohio. Rim-plate for horse-collars.	287,497	Oct. 30	2173	559	25	422
Belt, Jared E., Minneapolis, Minn. Brn packer.	279,854	June 19	1528	427	23	2309
Belt, William L., Washington, D. C. Shutter-worker.	283,194	Aug. 14	862	241	24	660
Belton, John D., New Orleans, La. Grain-screen.	279,215	June 12	749	206	23	2261
Bement, Arthur O., Lansing, Mich. Spring-tooth harrow.	272,939	Feb. 27	1729	453	23	764
Bemis, Charles, assignor of one-half to W. H. Williams and A. E. Cartier, Ludington, Mich. Fire-escape.	286,523	Oct. 9	927	250	25	179
Bemis, Harrison H., Chicago, Ill. Lathe for turning laths.	276,129	Apr. 17	1622	447	23	1520
Bemis, James H., assignor, by mesne assignments, to himself and F. Harrington, Keene, N. H. Button-boot.	278,081	May 22	1905	522	23	1974
Bemis, Judson M., et al. (See Palmer, Charles H., assignor.)						
Bemis, Stephen A., et al. (See Palmer, Charles H., assignor.)						
Bemis, Sumner A., Springfield, Mass. Car-spring.	284,713	Sept. 11	685	193	24	1026
Bemis, Winfield S. (See Dayton, William M., assignor.)						
Bender, George, Hoboken, N. J. Zither.	286,524	Oct. 9	928	250	25	179
Bender, Henry C., Montgomeryville, Pa. Nut-lock.	289,494	Dec. 4	155	42	25	913
Bender, Louis L., assignor of one-half to J. C. Dingens, Buffalo, N. Y. Printer's correcting-table.	285,556	Sept. 25	1703	480	24	1220
Bendix, Josef, assignor to E. Eisenmann, Berlin, Germany. Process of and apparatus for purifying alcohol.	287,089	Oct. 23	1657	455	25	320
Bendler, William H., Baltimore, Md. Accordion.	282,834	Aug. 7	429	121	24	576
Bendure, John U., Middlebourne, Ohio. Cider mill and press.	274,432	Mar. 20	1526	420	23	1112
Benedict, Arthur L., Ocean Grove, N. J. Window and door screen.	290,312	Dec. 18	1169	327	25	1108
Benedict & Burnham Manufacturing Company. (See Blackham, Eli J., assignor.)						
Benedict & Burnham Manufacturing Company. (See Hallas, James G., assignor.)						
Benedict & Burnham Manufacturing Company. (See Thompson, Frank H., assignor.)						
Benedict, Hiram, Detroit, Mich. Folding table.	285,101	Sept. 18	1165	326	24	1117
Benedict, Richard W., assignor to J. Wyckoff and R. T. Tuttle, Perry, N. Y. Harvester.	282,040	July 31	2141	588	24	397
Benedict, William F., New York, N. Y. Basket.	278,856	June 5	252	73	23	2166
Benfield, Thomas, Brooklyn, N. Y. Ornamenting watch-cases and other articles of jewelry.	275,569	Apr. 10	918	248	23	1391
Benham, Elijah B., Mystic, Conn., and H. B. Richardson, Amherst, assignors to Amherst Hydraulic Motor Company, Boston, Mass. Hydraulic motor.	276,520	Apr. 24	2117	{ 588 589 }	{ 23 23 }	{ 1613 1613 }
Benham, Ethan S., Attica, N. Y. Gang-plow frame.	289,376	Dec. 4	6	2	25	888
Benham, William P., Hartford, Conn., assignor to Pope Manufacturing Company, Boston, Mass. Velocipede.	277,870	May 22	1663	454	23	1931
Benjamin, Walter R., Holder, Ill. Device for setting up dead game for decoy purposes.	283,195	Aug. 14	863	241	24	660
Benjamin, William C. (See Wren, William C., assignor.)						
Benner, Lorenzo D., assignor to G. C. Alden and A. C. Clay, Galesburg, Ill. Corn-planter check-rower.	274,259	Mar. 20	1307	360	23	1074
Benner, Lorenzo D., assignor to A. C. Clay and G. C. Alden, Galesburg, Ill. Corn-planter check-rower.	279,692	June 19	1344	374	23	2366
Bennet, Karl W., Manchester, assignor of one-half to F. Nevitt and S. H. Spooner, Sr., Lawrenceburg, Ind. Baling-press.	281,959	July 24	2045	560	24	375
Bennett, Anthony A., West Stratford, Conn. Thill-coupling.	270,571	Jan. 16	920	265	23	197
Bennett, Benjamin, Hyde Park, Pa. Car-brake.	271,773	Feb. 6	225	63	23	479
Bennett, Benjamin F., Lockport, N. Y. Automatic self-setting wrench.	287,998	Nov. 6	268	76	25	554
Bennett, Charles A., assignor of one-half to Morris County Machine and Iron Company, Dover, N. J. Device for operating air-compressor valves.	283,955	Aug. 28	1799	509	24	851
Bennett, Charles H. (See Bennett, John W., assignor.)						
Bennett, Charles H., Cheltenham township, Montgomery county, Pa. Bottle-stopper.	280,784	July 10	565	158	24	106
Bennett, Dwight W., assignor to Craighead & Elwell Manufacturing Company, Bridgeport, Conn. Lamp-fixture.	280,441	July 3	131	35	24	24
Bennett, Edward L. (See Stiles, Frederic, assignor.)						
Bennett, Edwin, Baltimore, Md. Earthenware tea-pot.	273,221	Feb. 27	2072	582	23	825
Bennett, Edwin W. (See Ferre, William T., assignor.)						
Bennett, Eli J., assignor of one-half to D. A. Gilbert, Bainbridge, N. Y. Baling-press.	275,118	Apr. 3	313	87	23	1280
Bennett, George S. (See Dickey, William H., assignor.)						
Bennett, James W. (See Fellows, Charles F., assignor.)						
Bennett, James W. (See Keefe, John C., assignor.)						
Bennett, James W., et al. (See Ladd, Austin S., assignor.)						
Bennett, James W., et al. (See Thompson, Edward W., assignor.)						
Bennett, James W. (See Thompson and Moore, assignors.)						
Bennett, John F., Pittsburg, Pa. Apparatus for separating nitrogen from atmospheric air.	281,002	July 10	818	228	24	151
Bennett, John F., Pittsburg, Pa. Apparatus for compressing liquid steel.	282,041	July 31	2143	588	24	307
Bennett, John F., Pittsburg, Pa. Apparatus for the manufacture of bituminous-coal coke.	282,604	Aug. 7	155	47, 48	24	528



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Bennett, John F., Pittsburg, Pa. Purifying iron with carbonic-acid gas	285,786	Oct. 2	8	.....	25	4
Bennett, John H., assignor of two-thirds to A. T. Matthews and E. Converse, Worcester, Mass. Knob for stove or other doors	274,433	Mar. 20	1527	420	23	1113
Bennett, John M., Green Island, N. Y., assignor to H. C. Bailey, Covington, Ky. Rabbit-plane	284,941	Sept. 11	959	269	24	1075
Bennett, John W., assignor to C. H. Bennett, Halifax, Nova Scotia, Canada. Stencil-holder	277,201	May 8	869	231	23	1781
Bennett, Theodore G., <i>et al.</i> (See Desmond, John, assignor.)						
Bennett, Walter, Providence, R. I. Skin-puncturing device or recussitator	273,702	Mar. 13	595	160	23	944
Bennett, Walter A., <i>et al.</i> (See Desmond, John, assignor.)						
Bennett, Walter G. (See Stonemetz and Bennett.)						
Bonnett, William H. (See Graves, John B., assignor.)						
Bonnette, Jacob B., assignor of one-half to S. F. Seager, Lansing, Mich., and H. S. Wade, Boston, Mass. Barrel	284,267	Sept. 4	136	38	24	928
Bennit, William, assignor of one-half to H. N. Knickerbocker, Troy, N. Y. Corkscrew	277,442	May 15	1154	310	23	1837
Bennor, Joseph, Philadelphia, Pa. Trap	272,020	Feb. 13	543	147	23	547
Bennor, Joseph, Philadelphia, Pa. Water-closet and trap	289,495	Dec. 4	156	43	25	913
Bennor, Joseph, Philadelphia, Pa. Wash-basin	289,496	Dec. 4	158	43	25	914
Bennor, Joseph, assignor of two-thirds to W. H. Staake and W. E. Knowles, Philadelphia, Pa. Block or brick pressing machine	289,882	Dec. 11	638	177 178	25	1005
Benoist, Eugene H., St. Louis, Mo. Window-refrigerator	275,799	Apr. 17	1223	336	23	1451
Benoit, Fredrick, Chicago, Ill., assignor to himself and G. Stone, Beloit, Wis. Stuffing-machine	266,171	Oct. 9	478	132 133	25	99
Benoit, John P., Detroit, Mich. Cut-off-valve gear	288,297	Nov. 13	629	172	25	625
Benson, August, Worcester, Mass. Screw-driver	277,202	May 8	870	231	23	1781
Benson, Benjamin S., Baltimore, Md. Traction-engine and stubble harvester and consumer	281,604	July 17	1579	432	24	238
Benson, Benjamin S., Baltimore, Md. Combined differential gear and friction-clutch	285,213	Sept. 18	1297	365	24	1141
Benson, Charles, <i>et al.</i> (See Swift, Horace E., assignor.)						
Benson, Ezra D. and J. D., Cranberry, W. Va. Animal-shears	287,794	Nov. 6	7	3	25	508
Benson, George T., New York, N. Y., assignor to J. S. Kelso, Jr., Stamford, Conn. Switch for electric lamps	288,971	Nov. 27	1482	411	25	790
Benson, James D. (See Benson, Ezra D. and J. D.)						
Benson, James D., and R. B. Fogle, Cranberry, W. Va. Door	289,785	July 10	566	158	24	107
Benson, Joseph, Boston, Mass. Liquid-filter	277,203	May 8	871	231	23	1781
Benson, Oliver, Brooklyn, N. Y. Snap-hook	286,253	Oct. 9	582	160	25	117
Benson, Richard. (See Coutant and Benson.)						
Benson, Samuel, Evanston, Wyoming Ter. Journal-box	276,756	May 1	297	76	23	1676
Benson, William H., Stamford, Va. Culinary heater	271,774	Feb. 6	226	63	23	479
Bent, William H. (See Haynes, Henry M., assignor.)						
Bentley, Edward M. (See Knight and Bentley.)						
Bentley, Edward M., Washington, D. C. Electric way	276,953	May 1	551	143	23	1720
Bentley, Edward M., Washington, D. C. Electric way	276,954	May 1	552	143	23	1720
Bentley, Edward M., and W. H. Knight, Washington, D. C. Electric way	276,737	May 1	298	76	23	1676
Bentley, Henry. (See Plush, Samuel M., assignor.)						
Bentley, Matthew H. (See Bamsmith, William T., assignor.)						
Benton, James R., Oswego, N. Y. Lawn-rake	281,003	July 10	820	228	24	152
Benton, Linn B., Milwaukee, Wis. Printing-type	290,201	Dec. 18	1026	289	25	1084
Benton, Thomas P., La Crosse, Wis. Machinery for separating the ores of the precious metals	273,703	Mar. 13	595	160	23	944
Bentzen, Charles A., Chicago, Ill. Mechanical movement	271,594	Feb. 6	12	3	23	442
Berchhoff, Otto C., and E. I. Lauffer; said Lauffer assignor, by mesne assignments, to H. J. Lehman, Cleveland, Ohio. Safety attachment for elevators	290,202	Dec. 18	1028	289	25	1084
Berdohl, Peter J., Dell Rapids, Dak. Ter. Wagon-spring	266,377	Oct. 9	753	202	25	147
Berens, William E., assignor of one-half to C. Mayer, Buffalo, N. Y. Cock-grinding machine	286,525	Oct. 9	929	251	25	179
Beres, Jacob, New York, N. Y. Machine for treating tightly-rolled cigars	274,554	Mar. 27	1707	474	23	1150
Berg, August J., Chicago, Ills. Automatic car-brake	288,298	Nov. 13	629	172 173	25	625
Berg, Ole. (See Harsha, Mortimer S., assignor.)						
Bergen, Samuel R., Cantril, Iowa. Spring-brace for vehicles	276,213	Apr. 24	1725	477	23	1546
Bergen, William L., Batavia, Ill. Machine for threading bolts	284,168	Sept. 4	10	3	24	906
Berger, Emil. (See Friebe, Richard, assignor.)						
Berger, Lewis W., E. A. Peters, and O. P. Chaney, Groveport, Ohio. Straw-stacker	271,404	Jan. 30	1959	566	23	394
Bergh, Bror E., assignor to E. E. Garvin & Co., New York, N. Y. Gear-wheel	272,940	Feb. 27	1730	483	23	764
Bergman, Ignaz, Fort Madison, Iowa. Device for holding and guiding the fingers in writing	282,948	Aug. 14	564	160	24	608
Bergmann & Co. (See Bergmann, Sigmund, assignor.)						
Bergmann & Co. (See Vail, Jonathan H., assignor.)						
Bergmann, Julius, Hattingen, Germany. Steam-boiler	273,338	Mar. 6	127	36	23	855
Bergmann, Sigmund. (See Greenfield, Edwin T., assignor.)						
Bergmann, Sigmund, assignor of one-half to E. H. Johnson, New York, N. Y. Flexible electric conductor	275,748	Apr. 10	1146	314	23	1430
Bergmann, Sigmund, assignor of one-half to E. H. Johnson, New York, N. Y. Connection for electric-light fixtures	275,749	Apr. 10	1146	314	23	1430
Bergmann, Sigmund, assignor to Bergmann & Co., New York, N. Y. Galvanic battery	288,916	Nov. 20	1412	389	25	770
Bergmann, Theodor, Gagganau, Baden, Germany. Night-lamp	281,825	July 24	1681	514	24	347
Bergqvist, Nels M., Chicago, Ill. Journal-box lubricator	278,309	May 29	2230	612	23	2037
Bergqvist, John, assignor of one-half to C. Funke, McKeesport, Pa. Puddling-furnace	275,119	Apr. 3	314	87	23	1280
Bergstresser, Edwin L., Hubersburg, Pa. Photographic-plate holder	281,660	July 24	1659	452	24	307
Bergstrom, Gustaf, <i>et al.</i> (See Healy, Michael L., assignor.)						
Bering, James E., assignor to Chambers, Bering & Quinlan, Decatur, Ill. Corn-planter	272,404	Feb. 20	1035	290	23	636
Bering, James E., assignor, by mesne assignments, to Chambers, Bering, Quinlan Company, Decatur, Ill. Corn-planter. (Reissue.)	10,320	May 1	595	156	23	1728
Berkshire, John H., Muscatine, Iowa. Reciprocating saw-mill	272,630	Feb. 20	1322	371	23	686
Berlien, Joachim E., Altona, Prussia, Germany. Drawing corks from bottles	278,388	May 29	2336	638	23	2057
Berlin, Joachim E., Altona, Germany. Attaching corkscrews to bottles	279,216	June 12	750	207	23	2261
Berlier, Jean B., assignor to Compagnie Générale de Salubrité, Paris, France. Water-closet urinal, and cesspool	272,405	Feb. 20	1036	290	23	636
Berlin, Henry, assignor to himself and F. Austin, Pittsburg, Pa. Railway switch and frog	289,377	Dec. 4	7	3	25	888
Berliner, Emil, Boston, Mass. Electric-battery fluid	270,884	Jan. 23	1309	378	23	275
Berliner, Emil, Boston, Mass. Carpet	284,228	Sept. 4	137	39	24	928
Berliner, Emil, Boston, Mass. Telephone-transmitter	285,102	Sept. 18	1166	326	24	1118
Bernhardt, Gottlieb. (See Fink and Branson, assignors.)						
Bernhardt, Louis, Bergen, N. J., assignor to J. H. Foote, New York, N. Y. Accordion	286,679	Oct. 16	1134	305	25	221
Bernhart, Henry S., and I. R. Ritter, Reading, Pa. Dumping-wagon	284,368	Sept. 4	254	70	24	947

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Bernet, Frank. (See Bernet, Ludwig and F.)						
Bernet, Ludwig and F., Bingen, Germany. Vehicle-wheel	275,120	Apr. 3	317	68	23	1280
Bernhamer, Edward R., Indianapolis, Ind. Harrow	273,246	Mar. 6	4	1	23	835
Bernheim, Charles H., Lexington, N. C. Bee-hive	280,560	July 3	268	73	24	48
Berninghans, Edmund O., assignor of one-half to J. C. Schoenthaler, St. Louis, Mo. Bottle wrapper and cushion	285,872	Oct. 2	114	34	25	22
Berninghaus, Eugene, Cincinnati, Ohio. Barber's chair	270,572	Jan. 16	920	265	23	197
Bernstein, Alex, Boston, Mass. Incandescent electric lamp	271,302	Jan. 30	1821	528	23	369
Bernstein, Alex, assignor to Bernstein Electric Light Manufacturing Company, Boston, Mass. Incandescent electric lamp	273,704	Mar. 13	597	161	23	944
Bernstein, Alexander, Boston, Mass. Incandescent electric lamp	280,340	July 3	3	1	24	3
Bernstein, Alexander, Boston, Mass. Safety device for electric wires	284,714	Sept. 11	686	193	24	1026
Bernstein, Alexander, Boston, Mass. Electric switch or circuit controller	284,715	Sept. 11	687	194	24	1026
Bernstein, Alexander, Boston, Mass. Dynamo-electric machine	284,999	Sept. 18	1039	291 292	24	1096
Bernstein, Alexander, Boston, Mass. Apparatus for counterbalancing disturbances in telephones	286,577	Oct. 16	999	270	25	198
Bernstein, Alexander, assignor to Bernstein Electric Light Manufacturing Company, Boston, Mass. Carbon for incandescent electric lamps	280,341	July 3	4	1, 2	24	3
Bernstein, Alexander, assignor to Bernstein Electric Light Manufacturing Company, Boston, Mass. Automatic cut-out for electric lights	283,748	Aug. 28	1551	438	24	806
Bernstein Electric Light Manufacturing Company. (See Bernstein, Alexander, assignor.)						
Bernthsen, August, Heidelberg, Baden, assignor to Badische Anilin and Soda Fabrik, Mannheim, Germany. Manufacture of materials suitable for dye-stuffs	282,835	Aug. 7	430		24	576
Bernthsen, August, Heidelberg, Baden, assignor to Badische Anilin and Soda Fabrik, Mannheim, Germany. Manufacture of coloring-matters	282,836	Aug. 7	430		24	576
Bernthsen, August, Heidelberg, Baden, assignor to Badische Anilin and Soda Fabrik, Mannheim, Germany. Sulphureted derivative of diphenylamine as a basis for the production of coloring-matters	286,526	Oct. 9	931		25	179
Bernthsen, August, Heidelberg, Baden, assignor to Badische Anilin and Soda Fabrik, Mannheim, Germany. Obtaining coloring-matter or dye-stuff from thiodiphenylamine	286,527	Oct. 9	932		25	180
Berolzheimer, Henry. (See Dittenhoefer, Myer, assignor.)						
Berolzheimer, Henry. (See Hoffman, Joseph, assignor.)						
Berret, James G. (See Clason, William P., assignor.)						
Berrigan, John J., Avon, N. Y. Lawn-mower	273,705	Mar. 13	598	161	23	944
Berry, Boswell, Gostorth, Newcastle-on-Tyne, England. Accordion	274,705	Mar. 27	1887	526	23	1153
Berry, David, Gualala, Cal. Sulky	280,561	July 3	269	74	24	48
Berry, Frederic E. (See Putman and Berry.)						
Berry, Henry, assignor to Derby Silver Company, Huntington, Conn. Butter-dish	284,531	Sept. 4	455	129	24	981
Berry, Henry, assignor to Derby Silver Company, Huntington, Conn. Butter-dish	284,532	Sept. 4	455	129	24	981
Berry, James H., Greenville, S. C., assignor to himself and W. M. Berry, Mount Airy, Ga. Railway signal-lantern	270,727	Jan. 16	1117	320	23	233
Berry, John, assignor to National Needle Company, Springfield, Mass. Machine for grooving needles	275,750	Apr. 10	1147	314 315	23	1430
Berry, John, assignor to National Needle Company, Springfield, Mass. Clamp for holding and rotating needles while grinding them	279,075	June 5	565	155 156	23	2220
Berry, John, assignor to National Needle Company, Springfield, Mass. Machine for filing the teeth of rotary cutters	281,960	July 24	2046	560 561	24	375
Berry, John, assignor to National Needle Company, Springfield, Mass. Machine for feeding needle-blanks	281,961	July 24	2050	561 562	24	375
Berry, John B. N., Baltimore, Md. Car-spring	279,907	June 26	1598	448	23	2418
Berry, John L., and S. Gladney, Antelope, Cal. Faucet	269,912	Jan. 2	105	31	23	22
Berry, Lucien H. (See Orton and Berry.)						
Berry, Nathan B. (See Cardwell and Berry.)						
Berry, Samuel T., Cleveland, Ohio. Stencil-plate	286,172	Oct. 9	481	133	25	100
Berry, Walter K., Swede Point, Iowa. Car-coupling	286,578	Oct. 16	1002	271	25	198
Berry, Wilbur F., Chicago, Ill. Carpenter's gage	273,440	Mar. 6	257	69	23	877
Berry, Wilbur F., Chicago, Ill. Door-hanger	279,526	June 19	1154	319	23	2333
Berry, Wilbur F., Chicago, Ill. Door-hanger	280,342	July 3	5	2	24	3
Berry, William M. (See Berry, James H., assignor.)						
Berst, Conrad, Princeton, Mo. Churn-dasher	271,301	Jan. 30	1821	528	23	369
Berteling, Louis A., San Francisco, Cal. Optometer	275,348	Apr. 10	632	169	23	1342
Bertling, Carl, Detroit, Mich. Coffee-roaster	270,373	Jan. 9	658	193	23	138
Berton, Jean, New York, N. Y. Saw filing and setting machine	285,557	Sept. 25	1704	480 481	24	1221
Bertsch, William. (See Schneider, Henry H., assignor.)						
Bertsche, Leopold, and F. Lofink, Pittsburg, Pa.; said Bertsche assignor to said Lofink. Saw-guard	272,114	Feb. 13	667	182	23	567
Berwick, Henry, South Bethlehem, Pa. Sewing-machine needle	278,857	June 5	253	73	23	2166
Besley, John, Columbia Cross Roads, Pa. Apparatus for skimming milk	285,958	Oct. 2	229	64	25	44
Besosa, Mannel, New York, N. Y. Life-boat	289,208	Nov. 27	1771	491	25	841
Besse, Irvin. (See Moody, Henry T., assignor.)						
Bessemer Steel Company (See Reese, Jacob, assignor.)						
Bessey, William B., Elmira, N. Y. Car-coupling	285,787	Oct. 2	9	3	25	4
Best Car Coupler Company. (See Best, Jacob N., assignor.)						
Best, Clearmont V., Canton, Ohio. Vapor-burner	283,956	Aug. 28	1800	510	24	851
Best, Daniel, Albany, Oreg. Grain-separator	270,001	Jan. 2	209	60	23	43
Best, Isaac, Lawrence, Mass. Combing-machine	287,498	Oct. 30	2173	590	25	422
Best, Jacob N., assignor to Best Car Coupler Company, Denver, Colo. Car-coupling	279,121	June 12	650	177 178	23	2244
Best, Louis P., Davenport, Iowa. Manufacture of starch	278,490	May 29	2459	670 671	23	2078
Best, Martin L., et al. (See Mack, Alfred L., assignor.)						
Berancourt, Gaspar A., Havana, Cuba. Rotary plow	272,631	Feb. 20	1323	371	23	687
Bethca, Cade W., Little Rock, S. C. Wire fence	289,803	Dec. 11	537	150	25	987
Bettermann, Reinhold, Cambria, Pa. Portable sash-securer	283,460	Aug. 21	1202	358	24	729
Bettis, Josiah. (See Small, George A., assignor.)						
Bettis, Josiah, New Albany, Ind. Car-brake	270,002	Jan. 2	210	61	23	43
Betts, Charles S., and H. E. Wilson, Salt Lake City, Utah Ter. Gold-washer	279,122	June 12	652	178	23	2345
Betts, Edgar K., Lansingburg, assignor to W. S. and G. Earl, Troy, and W. and R. Wilson, New York, N. Y. Manufacture of collars and cuffs	280,899	July 10	690	194	24	128
Betts, George F., et al. (See Darling, James D., assignor.)						
Betts, Isaac F., assignor of one-half to S. F. Betts, Wilmington, Del. Fruit-stoner	281,234	July 17	1119	308 309	24	211



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Betts, J. Hecker, New York, assignor of one-half to R. W. Lindsly, Brooklyn, N. Y. Mus-tache-protector	276,214	Apr. 24	1725	478	23	1546
Betts, Lewis F., New York, N. Y. Vehicle-spring	277,204	May 8	872	231	23	1781
Betts, Lewis F., New York, N. Y. Sheet-metal pipe. (Reissue)	10,339	June 12	1133	314	23	2323
Betts, Rodney L., Brunswick, N. Y. Grapple	276,658	May 1	147	38	23	1651
Betts, Samuel F. (See Betts, Isaac F., assignor.)						
Bettschen, Joseph. (See Seebach and Bettschen.)						
Betzler, Byron. (See Thomas and Betzler.)						
Bencus, Cephus, assignor of two-thirds to W. and A. Donovan, Waupun, Wis. Spittoon..	279,633	June 19	1274	354	23	2355
Benschoten, Howard H. (See Shepherd and Benschoten.)						
Benthner, Edward W. (See Swenor, George, assignor.)						
Benttel, Charles, and P. P. Braich, assignors of one-third to H. Newburgh, Cincinnati, Ohio. Button-hole sewing-machine.	271,405	Jan. 30	1960	566	23	394
Bevans, Alexander L., Flushing, N. Y. Motor for sewing-machines, &c.	289,658	Dec. 11	725	205	25	1020
Bevard, Joseph, Wooster, Ohio. Gig-saddle	274,260	Mar. 20	1307	360	23	1075
Beverly, George, Providence, R. I. Blind-stop	273,937	Mar. 13	900	246	23	995
Bevin Brothers Manufacturing Company. (See Nichols, William H., assignor.)						
Bevington, James H., Cleveland, Ohio. Railway-torpedo	273,441	Mar. 6	258	70	23	877
Bevis, Issacher L., assignor of one-half to L. J. Creelius, St. Louis, Mo. Weighing-scoop.	271,210	Jan. 30	1711	496	23	350
Bewley, Levi N., and R. L. Mack, Wellsborough, Pa.; said Bewley assignor to said Mack. Wagon-seat iron	276,553	May 1	11	3	23	1628
Bewley, Thomas J. (See Ustick, Stephen, assignor.)						
Beyerhaus, Hermann, <i>et al.</i> (See Brandl, Gotthard, assignor.)						
Beverich, Richard W., <i>et al.</i> (See Eldridge, Stuart, assignor.)						
Bibb, William C., Sr., Atlanta, Ga. Seed-planter	285,558	Sept. 25	1706	481	24	1221
Bibb, Henry E. (See Jones, Hezekiah D., assignor.)						
Bickel, Jacob N., Terre Haute, Ind. Horse-collar	276,521	Apr. 24	2119	589	23	1613
Bickelhaupt, Adam and G., New York, N. Y. Skylight	273,247	Mar. 6	5	2	23	835
Bickelhaupt, Adam and G., New York, N. Y. Skylight	273,248	Mar. 6	7	2, 3	23	836
Bickelhaupt, George. (See Bickelhaupt, Adam and G.)						
Bickford, H. (See Piper, J. Frederic, assignor.)						
Bickford, Homer. (See Cunningham and Bickford.)						
Bickford & Huffman. (See Cunningham and Bickford, assignors.)						
Bickford, William A., Brantford, Ontario, Canada. Force pump	269,913	Jan. 2	106	31	23	92
Bickle, Henry J., and J. E. Bridges, Dungenoon, Ontario, Canada. Harness-saddle	279,123	June 12	653	178	23	2245
Bickley, John H., Dover, N. J. Rolling-mill	289,605	Dec. 4	291	82	25	939
Bickley, Samuel W., Mexico, Mo. Self-opening and closing hatch-door of elevator-shafts	288,612	Nov. 20	1036	285	25	703
Bickmore, Albion P., assignor of one-half to E. B. Pendleton, Hyde Park, Mass. Self-lev-eling berth	276,341	Apr. 24	1898	526	23	1575
Bicknell, J. Edward, Cleveland, Ohio. Apparatus for the manufacture of gas	284,801	Sept. 11	794	222	24	1045
Bicknell, William A. P., Riverdale, N. Y. Air-compressor	273,014	Feb. 27	1813	508	23	779
Bidelman, Robert M. (See Bury and Bidelman.)						
Bidwell, Charles H., Albion, N. Y. Elevator	285,788	Oct. 2	10	3	25	4
Bidwell, John C., Pittsburg, Pa. Method of and furnace for burning green bagasse	285,103	Sept. 18	1167	327	24	1118
Biedinger, Charles G., Cincinnati, Ohio. Bottle-wrapper	275,013	Apr. 3	170	46	23	1275
Biele, Charles F., New York, N. Y. Molding	289,606	Dec. 4	293	82	25	939
Bienhoff, Henry, St. Paul, Minn. Corner-plate for wagon-boxes	281,435	July 17	1366	377	24	253
Bier, Danthus P., and H. E. Rolph, assignors of one-third to H. M. Burchard, Marshall, Minn. Snow-excavator	286,895	Oct. 16	1405	386	25	268
Bierbach, Albert G. (See Bierbach, Charles F., assignor.)						
Bierbach, Albert G., Milwaukee, Wis. Feather-renovator	289,378	Dec. 4	8	3	25	888
Bierbach, Charles F., assignor to A. G. Bierbach, Milwaukee, Wis. Fire-escape	278,310	May 29	2231	612	23	2038
Bierbach, Charles F., assignor to A. G. Bierbach, Milwaukee, Wis. Fire-escape	287,410	Oct. 30	2065	561	25	400
Bierce, Frank, Chicago, Ill. Grain-conveyer	286,764	Oct. 16	1239	334 } 335 }	25	240
Bierds, John T., Brooklyn, N. Y. Machine for boring and grooving sash-stiles	289,497	Dec. 4	160	43	25	914
Biester, Charles H. R., <i>et al.</i> (See Freeman, Thomas R., assignor.)						
Bigelow, Charles D., Brooklyn, N. Y. Apparatus for sizing and amalgamating precious metals	275,325	Apr. 3	563	154	23	1322
Bigelow, George C., Worcester, Mass. Barbed-wire fence	273,389	May 29	2337	630	23	2057
Bigelow, Leander L., Cornville, Me. Pump-piston	279,318	June 12	876	243	23	2282
Bigelow, Pontney. (See De Silva, Herbert A., assignor.)						
Bigelow, William H., Worthington, Minn. Dam for irrigating-ditches	289,959	Dec. 11	726	205	25	1021
Bigford, Sylvester C., Toronto, Ontario, Canada. Manufacture of articles of wood.	285,455	Sept. 25	1589	446	24	1198
Bigger, Neil H. (See Smith and Bigger.)						
Biggs, William, Chicago, Ill. Cutting-die	272,115	Feb. 13	668	182	23	567
Bignell, Edward, Lincoln, Nebr. Locomotive ash-pan	286,570	Oct. 16	1003	271	25	199
Bigney, Robert, Copleston, Ontario, Canada. Car-coupling	275,880	Apr. 17	1326	365	23	1469
Bigney, Robert, Copleston, Ontario, Canada. Car-coupling	286,992	Oct. 23	1534	423	25	296
Bilan, Louis. (See Kronlik and Bilan.)						
Bilan, Louis, assignor of one-fourth to F. J. Horak, Iowa City, Iowa. Corn-planter	270,728	Jan. 16	1130	321	23	234
Bilgram, Hugo, Philadelphia, Pa. Metal-planer	289,607	Dec. 4	293	82	25	939
Bill, Charles H., assignor to Z. Parmenter, Waltham, Mass. Device for making crayon-molds	273,442	Mar. 6	259	70	23	877
Bill, Edward L. (See Ewing and Bill.)						
Billings, Albert, Berge Point, N. J. Hose-reel	289,960	Dec. 11	727	205	25	1021
Billings, Charles H. (See Jones and Billings.)						
Billings, Clark E., Middlesex, Vt. Reversible latch	286,580	Oct. 16	1004	271	25	199
Billings, Eugene F., <i>et al.</i> (See Chine, John B., assignor.)						
Billings, George H., <i>et al.</i> (See McCreary and Smith, assignors.)						
Billings, George H., <i>et al.</i> (See Smith and McCreary, assignors.)						
Billings, George W., Cleveland, Ohio. Apparatus for manufacturing gas	272,848	Feb. 27	1617	452	23	746
Billings, George W., assignor to D. A. Dangler, Cleveland, Ohio. Vapor-burning soldering-furnace	277,901	Nov. 6	141	41	25	532
Billings, Henry S., Hornellsville, N. Y. Berth-guard for sleeping-cars	272,520	Feb. 20	1179	329	23	661
Billings, Jesse. (See Walters, Joseph, assignor.)						
Billings, John D., assignor of one-half to C. White, New York, N. Y. Horseshoe	283,849	Aug. 28	1669	471	24	826
Billings, John D., assignor of one-half to C. White, New York, N. Y. Horseshoe	283,850	Aug. 28	1669	471	24	826
Billings, Joseph D., Salem, Mass. Hand-car	270,375	Jan. 9	659	193 } 194 }	23	138
Billings, Leander S., South Paris, Me. Former	275,349	Apr. 10	633	169	23	1343
Billingsley, Samuel W., Woodberry, Md. Door-latch	276,342	Apr. 24	1899	527	23	1575
Billington, R. C., <i>et al.</i> (See Dunn, William J., assignor.)						
Billington, Thomas E., Des Moines, Iowa. Railway-rail joint and lock	284,169	Sept. 4	13	4	24	906

*Alphabetical list of patentees—Continued.*

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Billoud, Antoine M. (See Lamberet and Billoud.)						
Bills, Seth H., Mount Morris, N. Y. Fire-escape	278,858	June 5	254	73, 74	23	2166
Billups, James, Milton, W. Va. Car-coupling	270,374	Jan. 9	658	193	23	138
Bilz, John A., Pleasanton, Cal. Two-wheeled vehicle	273,804	Mar. 13	730	198	23	968
Bingaman, Mollie E., New York, N. Y. Producing transferable embroidery patterns	277,665	May 15	1418		23	1881
Bingaman, Samuel H., Laurelton, assignor of three-fourths to A. H. Dill, Lewisburg, Pa. Fire-escape	281,235	July 17	1121	309	24	211
Bingham, Albert D., Nashua, N. H. Watch-movement box	280,121	June 26	1855	523	23	2463
Bingham, Judson D. (See Rodman and Bingham.)						
Bingham, Robert O., Sidney, Ohio. Horse hay-rake	287,613	Oct. 30	2342	632	25	454
Binkley, Leonidas H., and T. H. Wright, Ironton, Ohio. Blotter	289,608	Dec. 4	294	82, 83	25	939
Binney, Lydia R. (See Jenks, Lemuel P., assignor.)						
Binnie, Alexander, Maori Hill, near Dunedin, assignor to E. W. and J. W. U'ren, Dunedin, New Zealand. Apparatus for the manufacture of gas	282,695	Aug. 7	264	76	24	545
Binns, Robert, South Windman, Conn. Bufling-wheel	274,456	Mar. 27	1568	429	23	1127
Binsse, Henry, New York, N. Y. Screw-jack	283,851	Aug. 28	1670	471	24	826
Bioren, Frederick F. and J. C., Newark, N. J. Street-sweeper	280,008	June 26	1723	463	23	2439
Bioren, James C. (See Bioren, Frederick F. and J. C.)						
Bippus, Ferdinand G., assignor to G. Delker and Delker Phaeton Company, Henderson, Ky. Side-bar vehicle	281,962	July 24	2051	562	24	376
Birch, John. (See Ritty and Birch.)						
Birch, John, assignor of one-half to J. R. Johnston & Son, Dayton, Ohio. Coupling for shafts, &c.	281,436	July 17	1367	377	24	253
Birch, John E., Winnipeg, Manitoba, Canada. Traction-engine	288,763	Nov. 20	1232	337	25	736
Birch, John P. (See Green and Birch.)						
Birch, John P., Philadelphia, Pa. Mechanical movement	273,015	Feb. 27	1815	508	23	770
Birch, John S., New York, N. Y. Spectacle-cleaner	270,885	Jan. 23	1309	378	23	275
Birch, John S., New York, N. Y. Pencil or crayon holder	276,679	May 1	148	38	23	1651
Birch, John S., New York, N. Y. Extension gun-wiper	276,660	May 1	149	38	23	1651
Birch, John S., New York, N. Y. Construction of vessels	277,443	May 15	1155	310	23	1837
Birch, John S., New York, assignor of one-third to C. C. Cummings, Brooklyn, N. Y. Watch-key and holding-tool	282,605	Aug. 7	158	48	24	528
Birch, John S., New York, assignor of one-third to C. C. Cummings, Brooklyn, N. Y. Watch-key	282,606	Aug. 7	159	48	24	528
Birch, William A., San Francisco, Cal. Flower-pot holder and shield	286,993	Oct. 23	1535	423	25	296
Birchard, Pliny T. (See Lawrence, Mortimer D., assignor.)						
Bircher, Joseph, et al. (See Wood, Edwin A., assignor.)						
Bird, Bernard, Buffalo, N. Y. Car-coupling	273,339	Mar. 6	128	36	23	855
Bird, Francis L., Elizabeth, N. J. Composition for dry-stamping, &c.	288,199	Nov. 13	509		25	605
Bird, George M., Boston, Mass. Blacksmith's tongs	281,437	July 17	1368	377	24	253
Bird, George M., Boston, Mass. Fire-escape	290,313	Dec. 18	1170	327	25	1109
Bird, Michael J., East Saginaw, Mich. Blind	285,104	Sept. 18	1168	327	24	1118
Bird, Samuel. (See Pember and Bird.)						
Bird, Samuel, and S. Pember, Walpole, Mass. Carpet-lining	286,765	Oct. 16	1241	336	25	240
Birdleough, Lucian, Taylor, N. Y. Folding manger	288,917	Nov. 20	1412	389	25	770
Birdsell, J. Benjamin, South Bend, Ind. Grain-separator	278,082	May 22	1906	522	23	1974
Birdsell, J. Benjamin, South Bend, Ind. Carriage-iron	279,527	June 19	1155	320	23	2334
Birdseye & Co., I. W. (See Doolittle and Sherwood, assignors.)						
Birdseye, I. W. (See Bray, Morris P., assignor.)						
Birdsong, John J., Medina, Tenn. Combined seed-planter and cultivator	272,632	Feb. 20	1324	371	23	687
Birge, George K., Buffalo, N. Y. Manufacture of wall-paper	278,212	May 21	2081	573	23	2004
Birkenhead, John, Mansfield, Mass. Latho	272,849	Feb. 27	1616	452	23	746
Birkenhead, John, Mansfield, assignor to Sawyer Spindle Company, Boston, Mass. Spindle-bearing for spinning-machines. (Reissue)	10,268	Feb. 20	1605	449	23	736
Birksey, Cornelius, and H. S. Lord, assignors to Hartford Sanitary Plumbing Company, Hartford, Conn. Water-closet valve	272,196	Feb. 13	757	203	23	583
Birkett, James W., Brooklyn, N. Y. Automatic fire-extinguisher	280,009	June 26	1725	463	23	2440
Birmingham, David W., Clifton, N. Y. Roasting and disintegrating gold and silver ores. (Reissue)	283,461	Aug. 21	1203		24	729
Birmingham, David W., Clifton, N. Y. Roasting and disintegrating gold and silver ores. (Reissue)	10,400	Nov. 6	496		25	594
Birmingham, Frank, Hornellsville, N. Y. Door-hanger	289,961	Dec. 11	728	205	25	1021
Birnbaum, George J. (See Birnbaum and Richmond, assignors.)						
Birnbaum, John, and J. T. Richmond, assignors of one-third to G. J. Birnbaum, Cincinnati, Ohio. Track-cleaner	287,411	Oct. 30	2066	561	25	401
Birney, A. A. (See Peyton, Cunningham R., assignor.)						
Bisbee, Wisner B., and G. D. Dudley; said Dudley assignor to F. Taylor, Lowell, Mass. Twine-holder	282,696	Aug. 7	266	77	24	545
Bishop & Babcock. (See Babcock, William A., assignor.)						
Bishop, Charles C., Nashville, Tenn. Vehicle-spring	274,880	Mar. 27	2099	583	23	1218
Bishop, George P., Newburyport, Mass. Hame-fastener	272,021	Feb. 13	545	147	23	547
Bishop, Henry, Baltimore, Md. Sunshade for bird-cages	290,838	Dec. 25	1867	516	25	1237
Bishop, Ira, Benicia, Cal. Elevating and carrying apparatus	285,873	Oct. 2	115	34	25	22
Bishop, James M., assignor of one-fifth to Thomson, Langdon & Co., Bridgeport, Conn. Corset-press	284,533	Sept. 4	456	129	24	981
Bishop, John W., New Haven, Conn. Automatic fire-extinguisher	276,343	Apr. 24	1900	527	23	1575
Bishop, John W., New Haven, Conn. Fire-extinguisher	283,196	Aug. 14	864	242	24	661
Bishop, Richard T., assignor of one-half to T. Hunt, St. Louis, Mo. Fender for railway-cars	276,999	May 8	611	160	23	1737
Bishop, Walter S., New Haven, Conn. Polishing-wheel	285,559	Sept. 25	1707	481	24	1221
Bishop, William, Brooklyn, N. Y. Water-closet	289,210	Nov. 27	1773	492	25	842
Bishop, William J., Philadelphia, Pa. Folding tripod support or stand	284,269	Sept. 4	138	39	24	928
Bishop, William K., and R. W. Eames, Columbus, Colo. Elevated endless single-track railway	288,400	Nov. 13	780	211	25	651
Bishop, William W., et al. (See Ollis, John W., assignor.)						
Bishop, William W., Virginia, Ill. Harness-loop	283,559	Aug. 21	1318	368	24	750
Bishoprick, Nicholas J., Brooklyn, N. Y. Automatic measure for furs and other materials	273,340	Mar. 6	129	36, 37	23	855
Bissell, Albert A., assignor of one-half to E. R. Knowlton, Joliet, Ill. Signal-light for railway-cars	278,213	May 22	2083	574	23	2004
Bissell, Albert A., Joliet, Ill., assignor of one-half to E. R. Knowlton. Revolving car-signal	285,380	Sept. 25	1497	421	24	1183
Bissell Carpet Sweeper Company. (See Bissell, Melville R., assignor.)						
Bissell, Hiram, Hartford, Conn. Plastering	288,200	Nov. 13	510	141	25	605
Bissell, Melville R., Grand Rapids, Mich. Carpet-sweeper	272,022	Feb. 13	546	148	23	547
Bissell, Melville R., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Carpet-sweeper	285,000	Sept. 18	1043	292	24	1096



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Bissell, Simeon, <i>et al.</i> (See Taylor, William, assignor.)						
Bissell, Simeon, Pittsburg, Pa., assignor to T. Bakewell, trustee. Metallurgical furnace	286,110	Oct. 2	406	111	25	75
Bisset, John G. (See Edward and Bisset.)						
Bissett, Thomas M., <i>et al.</i> (See Palmer, George H., assignor.)						
Bissicks, Joseph J. (See Coates and Bissicks.)						
Bisson, Ernest, Paris, France. Mariner's compass	289,209	Nov. 27	1772	491	25	841
Bitner, Abraham, Lancaster, Pa. Dust-proof watch	273,938	Mar. 13	901	246	23	995
Bittenbender, Eli, and M. L. Snyder, assignors of one-fourth to F. T. and G. H. Bittenbender, Plymouth, Pa. Coal-drilling machine	273,443	Mar. 6	260	70	23	878
Bittenbender, Frederick T., <i>et al.</i> (See Bittenbender and Snyder, assignors.)						
Bittenbender, George H., <i>et al.</i> (See Bittenbender and Snyder, assignors.)						
Bittenbender, John K., Bloomsburg, Pa. Inking apparatus	270,886	Jan. 23	1310	378	23	276
Bitting, Mahlon B. (See Weirbach and Bitting.)						
Bitzer, Samuel B., <i>et al.</i> (See Shallus, William W., assignor.)						
Bixby, Arthur, assignor to International Fire Escape Company, Baltimore, Md. Fire-escape	290,961	Dec. 25	2023	558	25	1263
Bixby, H. H. (See McCollum, James C., assignor.)						
Bixby, Samuel M., New York, N. Y. Bottle	273,444	Mar. 6	262	71	23	878
Bixby, Samuel M., New York, N. Y. Handled paper vessel	280,010	June 26	1726	484	23	2440
Bixler, Henry, Kinnikinnik, Ohio. Sausage-stuffer	283,852	Aug. 28	1671	472	24	836
Bize, Daniel R., Columbus, Ga. Trace-carrier	289,211	Nov. 27	1776	492	25	842
Black, Alexander G. (See Murray, Maurice M., assignor.)						
Black, Aretus E., and R. English, Marlette, Mich. Safety-plate for railway-switches	276,554	May 1	11	3	23	1628
Black & Clawson Company. (See Kaffenberger, Gustav, assignor.)						
Black, David F., Brooklyn, N. Y., assignor to himself and T. Foldberg, Princeton, N. J. Fire-escape	275,121	Apr. 3	318	88, 89	23	1280
Black, Frank X., <i>et al.</i> (See See, James W., assignor.)						
Black, G. S., <i>et al.</i> (See Atkinson, Henry C., assignor.)						
Black, Horace S. (See Glidden, Greenleaf, assignor.)						
Black, Jodie, <i>et al.</i> (See Atkinson, Henry C., assignor.)						
Black, Richard W. (See Lancaster, Bradford F., assignor.)						
Black, Stephen S., Fredericton, New Brunswick, Canada. Railway-car seat	287,999	Nov. 6	269	76	25	554
Black, William, South Shields, and T. Larkin, East Jarrow, county of Durham, England. Ore-roasting furnace	278,859	June 5	256	74	23	2166
Black, William L., St. Louis, Mo. Cotton-harvesting machine	276,061	May 1	150	38, 39	23	1651
Black, William L., St. Louis, Mo. Fire-proof building	278,491	May 29	2402	671	23	2079
Black, William P., <i>et al.</i> (See Gowan, James H., assignor.)						
Blackall, Burton F., and J. C. Decker, Rochester, N. Y. Pole for galvanic batteries	274,899	Apr. 3	10	3	23	1228
Blackall, Robert C., Albany, N. Y. Relief-valve for locomotive engines	283,749	Aug. 28	1553	438	24	807
Blackburn, Frederick, Palmira, assignor to F. H. Hovey, Beverly, N. J. Straw-braid-sewing machine	279,855	June 19	1531	428	23	2399
Blackburn, George, assignor to Standard Boiler and Smoke Consuming Furnace Company, Columbus, Ohio. Smoke-consuming furnace	277,978	May 22	1786	487	23	1952
Blackhall, Edward W., Toronto, Ontario, Canada. Ruling-machine	273,016	Feb. 27	1816	509	23	779
Blackhall, William B., Toronto, Ontario, Canada. Removable book-cover	283,853	Aug. 28	1672	472	24	827
Blackham, Eli J., Bridgeport, assignor to Benedict & Burnham Manufacturing Company, Waterbury, Conn. Drawer-pull	275,326	Apr. 3	566	154	23	1322
Blackman, Alanson A., E., and H., Snohomish, Wash. Ter. Locomotive	272,633	Feb. 20	1326	372	23	687
Blackman, Elhanan. (See Blackman, Alanson A., E., and H.)						
Blackman, Henry. (See Parker and Blackman.)						
Blackman, Hyrcanus. (See Blackman, Alanson A., E., and H.)						
Blackman, James M., Chicago, Ill. Ventilator	273,805	Mar. 13	731	198	23	968
Blackman, Jared C., assignor of one-half to E. L. Strong, Danbury, Conn. Medical compound	276,153	Apr. 24	1654		23	1534
Blackman, William I., Columbus, Miss. Book-binding	286,254	Oct. 9	583	160	25	117
Blackmer, Walter M., assignor of one-half to O. F. Comstock, Detroit, Mich. Filter	281,336	July 17	1246	345	24	233
Blackstock, Thomas M., Sheboygan, Wis. Fastening device for chairs	272,406	Feb. 20	1038	291	23	636
Blackwell, Richard C. (See Hughes and Blackwell.)						
Blackwell, Richard C., assignor of one-third to W. H. Lewis, Henderson, Ky. Running-gear for wagons	290,170	Dec. 11	979	276	25	1068
Blackwell, Richard C., assignor of one-fourth to W. H. Lewis, Henderson, Ky. Wagon running-gear	290,171	Dec. 11	980	277	25	1068
Blackwood, John. (See Ganss, Jacob, assignor.)						
Blackwood, William, Jr., Detroit, Mich. Wash-stand	275,122	Apr. 3	321	89	23	1282
Blade, John M., Alpha, Ill. Cultivator	288,764	Nov. 20	1233	338	25	736
Blain, David, Toronto, Ontario, Canada. Dredge and mining machine	276,215	Apr. 24	1726	478	23	1546
Blair, George W. (See Fougères and Blair.)						
Blair, George W., Wabash, Ind. Shaft-support	279,076	June 5	568	156	23	2221
Blair, George W., and J. Willetts, Pittsburg, Pa. Glass-melting furnace	283,462	Aug. 21	1264	338	24	729
Blair, James C., assignor of two-thirds to O. A. Nicklaus, Columbus, and A. D. Houston, Logan, Ohio. Frictional hinge for mirrors, &c	290,839	Dec. 25	1868	516	25	1237
Blair, John J., Tocoma, Wash. Ter. Rotary engine	281,004	July 10	820	228	24	152
Blair, John M., Cincinnati, Ohio. Metallic paller for brick	279,528	June 19	1156	320	23	2334
Blair, William S., Philadelphia, Pa. Vulcanizer safety-guard and governor	286,766	Oct. 16	1242	336	25	240
Blake, Andrew M., Canton, Ohio. Snap-book	280,283	June 26	2046	575	23	2497
Blake, C. E. (See Blake, Harry, assignor.)						
Blake, Charles R., Frankfurt, Ind. Watch-regulator	285,959	Oct. 2	230	65	25	44
Blake, Clarence J., trustee. (See Richardson, William S., assignor.)						
Blake, David E. (See Smith and Blake.)						
Blake, Francis, Weston, Mass. Switch-board for electric circuits	276,216	Apr. 24	1728	478	23	1546
Blake, Francis, Jr., Weston, Mass. Speaking-telephone	283,062	Aug. 14	704	197	24	632
Blake, George F., Belmont, Mass. Check-valve	270,573	Jan. 16	921	265	23	197
Blake, George F., Belmont, Mass. Steam pumping-engine	270,574	Jan. 16	922	266	23	197
Blake, George F., Belmont, Mass. Duplex pumping-engine	270,575	Jan. 16	923	267	23	198
Blake, George F., Belmont, Mass. Pump	271,775	Feb. 6	227	63	23	450
Blake, George W., Port Townsend, Wash. Ter. Buckle	272,197	Feb. 13	758	209	23	593
Blake, Harry, assignor to himself and C. E. Blake, Chicago, Ill. Motive power	283,063	Aug. 14	704	197	24	632
Blake, Henry, Peppercell, Mass., assignor of one-half to J. A. Greene, Brooklyn, N. Y. Belt-fastener	282,258	July 31	2433	669	24	445
Blake, John E., and C. A. Hall, New York, N. Y. Electrical low-water alarm	286,581	Oct. 16	1005	271	25	199
Blake, John F., New York, N. Y. Apparatus for exhibiting illusions	273,445	Mar. 6	264	71	23	878
Blake, John H., Batavia, N. Y. Rotary engine	273,446	Mar. 6	265	71	23	878
Blake, Joseph E. (See Thompson, George H., assignor.)						
Blake, Mead, Compton, Quebec, Canada. Roofing-paint	286,255	Oct. 9	584		25	117

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Blake, Robert. (See Davis and Blake.)						
Blake, S. P., <i>et al.</i> (See Carter, Alba B., assignor.)						
Blake, Theodore A., New Haven, Conn. Feed mechanism for ore-crushers	277,666	May 15	1419	363	23	1881
Blakely, Caleb J., <i>et al.</i> (See Angell, Russell R., assignor.)						
Blakely, Caleb J., assignor of two-thirds to L. N. Williamson and W. S. Webber, Janesville, Wis. Boot and shoe burnishing machine	270,729	Jan. 16	1121	321	23	235
Blakeman, John D., Smith's Grove, Ky. Trace-detacher	286,767	Oct. 16	1243	336	25	240
Blaker, John D., Newtown, Pa. Ax-handle	271,303	Jan. 30	1823	529	23	369
Blakeslee, Albert J., Duquoin, Ill. Valve-gear for steam pumping-engines	270,576	Jan. 16	924	267	23	198
Blakeslee, Burton E., assignor to R. H. Blakeslee, J. H. Shepherd, and S. T. Richardson, Cambridge, Md. Headway and leeway indicator for vessels	290,840	Dec. 25	1868	516	25	1237
Blakeslee, Charles, <i>et al.</i> (See Frost, Howard B., assignor.)						
Blakeslee, Cornelius, <i>et al.</i> (See Ives, Edward R., assignor.)						
Blakeslee, Harvey D., <i>et al.</i> (See Latta, Emmitt G., assignor.)						
Blakeslee, Rebecca H., <i>et al.</i> (See Blakeslee, Burton E., assignor.)						
Blakesley, Gilbert H. (See Lewis and Blakesley.)						
Blakesley, Lucius W., <i>et al.</i> (See Chandler and Williams, assignors.)						
Blalock, David. (See Greening, Winfield S., assignor.)						
Blanchard, Charles H., Batavia, Ohio. Automatic fan	271,211	Jan. 30	1712	496	23	350
Blanchard, Frank A., Cottle, La. Sulky sod-cutter	274,706	Mar. 27	1828	526	23	1183
Blanchard, George A., Malden, Mass. Skirt-protector	275,014	Apr. 3	171	46	23	1255
Blanchard, George R., <i>et al.</i> (See Frishmuth, William, assignor.)						
Blanchard, Helen A., Philadelphia, Pa. Spool-case	276,344	Apr. 24	1901	527	23	1575
Blanchard, Henry S., Cairo, Ill. Quadricycle for land and water	277,667	May 15	1420	383	23	1882
Blanchard, Kirk S., Clarendon, N. Y. Car-coupling	285,789	Oct. 2	11	3	25	4
Blanchard, Thomas. (See Cunningham, John M., assignor.)						
Blanchard, Thomas, Stoughton, Mass. Speed-indicator	282,487	Aug. 7	9	3	24	502
Blanchard, Virgil W., New York, N. Y. Portable building	271,776	Feb. 6	228	64. 65	23	480
Blanchard, Virgil W., New York, N. Y. Steam-boiler	289,962	Dec. 11	729	206	25	1021
Blanchard, Virgil W., New York, N. Y. Furnace	289,963	Dec. 11	732	207	25	1022
Blanchard, Virgil W., New York, N. Y. Superheater for steam-boilers	289,964	Dec. 11	735	208	25	1023
Blanchard, Virgil W., New York, N. Y. Air-heater for furnaces	290,172	Dec. 11	981	277	25	1068
Blanchard, William H., Gainesville, Ga. Machine for filing cotton-gin and linter saws	280,900	July 10	691	{ 194 195 }	24	128
Bland, James. (See Champlin and Bland.)						
Blandin, Charles, La Pointe-à-Pitre, Guadeloupe, West Indies. Apparatus for coagulating the albuminous matter contained in sugar-cane	287,902	Nov. 6	141	41	25	533
Blandy, Fred. J. L. (See Haehulen, William, assignor.)						
Blank, Hugo, Berlin, Germany. Fly-wheel	284,369	Sept. 4	255	70	24	947
Blankman, John S., Denver, Colo. File-holder or temporary binder	284,534	Sept. 4	459	130	24	982
Blanshan, John, Le Fever Falls, N. Y. Clock-escapement	283,957	Aug. 28	1801	510	24	851
Blascow, David H., and S. Fichtner, Milwaukee, Wis. Hammock	277,829	May 15	1605	438	23	1915
Blasier, David J., Westonville, N. Y. Feathering paddle-wheel	276,662	May 1	152	39	23	1652
Blass, Talmadge, assignor to W. Angevine and G. S. Frink, Millerton, N. Y. Injection-regulator for steam-condensers	289,609	Dec. 4	296	83	25	940
Blass, Talmadge, assignor to W. Angevine and G. S. Frink, Millerton, N. Y. Suction-condenser for steam-pumps	289,748	Dec. 4	474	134	25	969
Blatch, Thomas G. (See Clark and Blatch.)						
Blatchley, Albert B. (See Blatchley, Albert P., assignor.)						
Blatchley, Albert C., administrator. (See Blatchley, Albert P.)						
Blatchley, Albert P., deceased; A. C. Blatchley administrator and assignor to A. B. Blatchley, Deposit, N. Y. Steam-boiler	289,610	Dec. 4	297	83	25	940
Blatchly, Ambrose, San Francisco, Cal. Sewer-gas trap	276,217	Apr. 24	1729	{ 478 479 }	23	1547
Blaylock, John, Winona, Miss. Plow	280,122	June 26	1837	523	23	2464
Blackley, William I. (See Morris, George M., assignor.)						
Bledsoe, Robert B., Alvarado, Tex. Quilting-frame	281,605	July 17	1581	433	24	289
Bledsoe, Robert B., Alvarado, Tex. Quilting-frame	281,826	July 24	1882	514	24	347
Blessing, James H., Albany, N. Y. Pump-valve	272,198	Feb. 13	760	209	23	583
Blessing, James H., Albany, N. Y. Valve	272,634	Feb. 20	1327	372	23	687
Blessing, James H., Albany, N. Y. Combined check-valve, stop-cock, and blow-off valve	272,635	Feb. 20	1329	373	23	688
Blessing, James H., Albany, N. Y. Drain and returning steam trap	278,390	May 29	2337	639	23	2057
Blessing, James H., Albany, N. Y. Straight-way check-valve	281,438	July 17	1369	378	24	254
Blessing, James H., Albany, N. Y. Check-valve	281,439	July 17	1370	378	24	254
Blessing, James H., Albany, N. Y. Pump-regulator	282,042	July 31	2145	{ 588 589 }	24	397
Blessing, James H., Albany, N. Y. Steam-pump	283,064	Aug. 14	705	198	24	633
Blessing, James H., Albany, N. Y. Check-valve	290,314	Dec. 18	1171	328	25	1109
Blessing, James H., Albany, N. Y. Friction-clutch	290,517	Dec. 18	1452	401	25	1157
Blessing, James H., Albany, N. Y. Steam-heating apparatus	290,662	Dec. 25	1639	451	25	1196
Blevney, John C., Newark, N. J. Machine for manufacturing type	290,628	Dec. 18	1592	{ 437 438 }	25	1181
Blighton, D. Franklin. (See Blighton, William V. R. and D. F.)						
Blighton, D. Franklin, Buffalo, N. Y. Track-bolt lock	278,678	June 5	4	1	23	2125
Blighton, D. Franklin, Tonawanda, N. Y. Locking device for bolts	287,795	Nov. 6	9	3	25	508
Blighton, D. Franklin, Buffalo, N. Y. Track-bolt lock	289,379	Dec. 4	10	4	25	688
Blighton, William V. R., Tonawanda, N. Y. Nut-lock	287,796	Nov. 6	10	3	25	509
Blighton, William V. R. and D. F., Tonawanda, N. Y. Nut and lock for the same	275,570	Apr. 10	920	249	23	1391
Blinn, Joseph S., New Haven, Conn. Needle for fancy work	279,693	June 19	1345	374	23	2366
Bliss, Abel H. (See Trippe, Sylvanus L., assignor.)						
Bliss, Abel H., assignor of one-half to S. L. Tripp, Chicago, Ill. Amalgamator	279,319	June 12	876	244	23	2282
Bliss, Eliphalet W. (See Jordan, Edmund, assignor.)						
Bliss, Ellis B., Washington, D. C. Dental spittoon	274,105	Mar. 20	1107	{ 305 306 }	23	1039
Bliss, Francis D., New Haven, Conn. Axle-box	288,299	Nov. 13	631	173	25	626
Bliss, James F. (See Ross and Bliss.)						
Bliss, William H., Norwich, Conn. Safety-lock for fire-arms	283,854	Aug. 28	1673	472	24	827
Bliven, Alonzo P., Brooklyn, N. Y., assignor to American Quick Transit Steamship Company, Boston, Mass. Screw-propeller	271,212	Jan. 30	1713	496	23	350
Bliven, Alonzo P., Brooklyn, N. Y., assignor to American Quick Transit Steamship Company, Boston, Mass. Construction of ships	271,213	Jan. 30	1714	496	23	350
Bliven, Charles F., Worcester, Mass. Dental plugger	279,908	June 26	1599	448	23	2418
Blitz, Rudolf, Paris, France. Manufacture of paper, &c.	289,212	Nov. 27	1776		25	842
Bloch, Baruch, assignor to P. Garcet & Nisius, Paris, France. Device for aiding swimmers	281,005	July 10	822	229	24	152



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Bloch, Herman, New York, N. Y. Combined cigarette and match box	283,065	Aug. 14	706	198	24	633
Blochman, Emanuel, and G. R. Evans, San Francisco, Cal. Atmospheric bed	272,116	Feb. 13	669	182	23	567
Blochman, Emanuel, and G. R. Evans, San Francisco, Cal. Bed or pillow	277,979	May 22	1787	487	23	1952
Block, David. (See Rundback, Joseph, assignor.)						
Block, David, New York, N. Y. Knife-box	283,066	Aug. 14	706	198	24	633
Block, David, New York, N. Y. Ear for tin pails	285,105	Sept. 18	1169	327	24	1118
Block, Joe, <i>et al.</i> (See Rice, Joel F., assignor.)						
Block, Louis, Jersey City, N. J. Apparatus for superheating steam	275,571	Apr. 10	920	249	23	1391
Blodgett, Aaron D., Boston, R. M. Read, Cambridge, and J. P. Tirrell, Boston, Mass. } Electric signal for railway-stations	284,114	Aug. 28	2016	{ 560 561 }	24	887
Blodgett, Gardner S., assignor of one-half to E. P. Manor, Burlington, Vt. Oven for cooking, baking, or drying	288,201	Nov. 13	510	142	25	605
Blodgett, George W., Boston, and G. R. Hardy, Newton, Mass. Railway-signal	284,716	Sept. 11	691	194	24	1027
Blodgett, Henry L., Chicago, Ill. Sash-fastener	277,980	May 22	1787	487	23	1952
Blodgett, John W., Chicago, Ill. Button-hole attachment for sewing-machines	279,320	June 12	877	{ 244 245 }	23	2282
Bloodon, Louis, Bay City, Mich. Bed-bottom fire-escape	284,802	Sept. 11	795	222	24	1045
Blohm, Ludwig, Chicago, Ill. Mold for forming ornamental moldings	283,560	Aug. 21	1319	368	24	750
Blomquist, Carl A., and T. Buskirk, assignors of one-third to A. W. Machen, Toledo, Ohio. Wrench	284,598	Sept. 11	537	152	24	1001
Blood, Edwin J., Chicago, Ill. Hame tug and trace adjuster	276,555	May 1	12	4	23	1629
Blood, Edwin J., Chicago, Ill. Elastic cushion for cutter-bars	280,901	July 10	693	195	24	129
Blood, Edwin J., Chicago, Ill. Elastic cushion for cutter-bars	280,902	July 10	694	195	24	129
Blood, Edwin J., assignor of one-third to W. H. Stubbings, Chicago, Ill. Reaping and mowing machine	273,341	Mar. 6	132	37	23	856
Blood, Frederick W., Liverpool, county of Lancaster, England. Box-nailing machine	272,199	Feb. 13	761	{ 209 210 211 }	23	583
Blood, Hiram, assignor to himself and L. H. Dale, East Cambridge, Mass. Link-box for steam-engines	278,766	June 5	110	31	23	2142
Blood, Maurice E. (See Marsh and Blood.)						
Blood, Maurice E., assignor to himself, C. W. and W. W. Marsh, Sycamore, Ill. Grain-binding harvester	275,751	Apr. 10	1150	{ 315 316 522 }	23	1430
Blood, Maurice E., assignor to himself, C. W. and W. W. Marsh, Sycamore, Ill. Cord-tying device for grain-binders	278,083	May 22	1907	{ 523 524 525 }	23	1974
Blood, Maurice E., assignor to himself, C. W. and W. W. Marsh, Sycamore, Ill. Grain-adjusting device for harvesters	278,492	May 29	2462	672	23	2079
Bloom, David, Sandwich, Ill., assignor to M. J. S. Marshall, Boston, and S. G. Lane, Cambridge, Mass. Mail-bag	282,152	July 31	2303	632	24	422
Bloom, Jacob E. (See Woerber, Amos, assignor.)						
Bloom, John P. (See Porter, Bloom, and Aspin.)						
Bloomfield, Ellis S., Jr., Jersey City, N. J., assignor of one-sixth to Starr Brothers Bell Company, East Hampton, Conn. Door-bell	289,804	Dec. 11	538	150	25	987
Bloomfield, Joseph H., Rio, and M. W. Boone, Galesburg, Ill.; said Boone assignor to said Bloomfield. Railway-rail joint	282,259	July 31	2434	{ 669 670 }	24	445
Bloss, Robert. (See Holmgren, Julius H., assignor.)						
Blossom, Cyrus H., Algona, Iowa. Cream-can	283,958	Aug. 28	1802	510	24	851
Blount, Eugene I. (See Blount, William C. and E. I.)						
Blount, Eugene I., Cambridge, Mass. Pneumatic door-check	289,380	Dec. 4	10	4	25	889
Blount, William C., Boston, and E. I. Blount, Cambridgeport, Mass. Lock	273,939	Mar. 13	901	246	23	996
Blow, Walter W., Oakland, Cal. Watch-holder	283,855	Aug. 28	1675	472	24	827
Blowers, Azor, Cambridge, Mich. Bolt-cutter	275,015	Apr. 3	172	46	23	1255
Blowers, George O., Canajoharie, N. Y. Paper bag	286,896	Oct. 16	1406	382	25	268
Blowers, George O., Canajoharie, N. Y. Making paper bags	287,753	Oct. 30	2522	680	25	488
Bine, Dennis S., Fremont, Ohio. Whiffletree-hook	271,777	Feb. 6	232	65	23	481
Bine, Dennis S., assignor of one-half to F. Fabing, Fremont, Ohio. Hese-coupling	290,603	Dec. 25	1639	451	25	1196
Blum, Robert. (See Mantz and Blum.)						
Blume, Herman, New York, N. Y. Velocipede	275,979	Apr. 17	1433	395	23	1489
Blumenberg, Israel R., Washington, D. C. Indestructible compound for lining and coating tubes, cylinders, and other vessels, electric wires, also for joint-packing, taking impressions, making castings, molds, and ornaments, and ornamental work	275,123	Apr. 3	322	.....	23	1282
Blumenberg, Israel R., Washington, D. C., and H. W. Whiting, assignors to Hydrocarbon Burner and Fuel Company, Philadelphia, Pa. Hydrocarbon-vapor generator and burner	275,124	Apr. 3	323	90	23	1282
Blumenberg, Israel R., and H. W. Whiting, Philadelphia, Pa., assignors to Hydrocarbon Burner and Fuel Company, of New Jersey. Hydrocarbon-vapor generator and carbon burner	278,860	June 5	257	74, 75	23	2167
Blumenberg, Israel R., deceased; W. Blumenberg administratrix and assignor to F. H. Smith, Washington, D. C. Vapor generator and motor	290,962	Dec. 25	2024	559	25	1263
Blumenberg, Israel R., deceased; W. Blumenberg administratrix and assignor to F. H. Smith, Washington, D. C. Vapor generator and motor	290,963	Dec. 25	2029	{ 559 560 }	25	1264
Blumenberg, Israel R., deceased; W. Blumenberg administratrix and assignor to F. H. Smith, Washington, D. C. Vapor generator and motor	290,964	Dec. 25	2034	560	25	1264
Blumenberg, Israel R., deceased; W. Blumenberg administratrix and assignor to F. H. Smith, Washington, D. C. Vapor-engine packing and lubricating device	290,965	Dec. 25	2039	561	25	1265
Blumenberg, Wilhelmina, administratrix. (See Blumenberg, Israel R.)						
Blunt, William S., New York, N. Y. Automatic tornado-breaker	290,966	Dec. 25	2040	561	25	1265
Blust, Charles, Mansfield, Ohio. Washing-machine	286,378	Oct. 9	753	203	25	147
Blydenburgh, Charles M., Riverhead, N. Y. Spring-vehicle	275,572	Apr. 10	922	{ 249 250 }	23	1391
Blydenburgh, Charles M., Riverhead, N. Y. Carriage-pole	287,412	Oct. 30	2067	562	25	401
Blydenburgh, Charles M., Riverhead, N. Y. Vehicle	289,883	Dec. 11	641	{ 178 179 }	25	1005
Blythe, James M. (See Wren, William A., assignor.)						
Bocemdes, George W. (See Grille, Thomas M., assignor.)						
Boch, Philipp, New York, N. Y. Magazine-gun	272,636	Feb. 20	1330	373	23	688
Boch, Philipp, New York, N. Y. Magazine fire-arm	287,090	Oct. 23	1658	{ 455 456 457 }	25	320
Boch, Philipp, assignor of one-tenth to J. Oster, New York, N. Y. Magazine-gun	276,522	Apr. 24	2120	{ 589 590 }	23	1613
Bock, George J., Zanesville, Ohio. Pocket-fastening for billiard or pool tables	273,447	Mar. 6	267	72	23	878
Bockins, A. R., <i>et al.</i> (See Hunter, George W., assignor.)						
Bodell, Allen W., Canton, Ohio. Cash-carrier	278,767	June 5	111	31, 32	23	2142

## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Bodell, Allen W., Toledo, assignor of one-half to P. P. Bush, Canton, Ohio. Tile and brick machine	281,606	July 17	1582	433	24	289
Bodenhamer, Levi I., Kernersville, N. C. Plow	277,205	May 8	873	232	23	1761
Bodenhamer, Levi I., Kernersville, N. C. Car-coupling	279,217	June 12	751	207	23	2262
Bodenhamer, Levi I., Kernersville, and W. E. Ashley, Raleigh, N. C.; said Ashley assignor of one-half to said Bodenhamer. Car-coupling	289,611	Dec. 4	298	83	25	940
Bodoy, Howard, Norristown, Pa. Check, draft, note, &c.	281,096	July 10	822	229	24	152
Bodge, Joseph G., Waterville, Me. Machine for forming hollow ware from wood pulp	257,614	Oct. 30	2342	632	25	454
Bodifield, Charles T., and J. Arnett, Cleveland, Ohio. Hose-protector	289,381	Dec. 4	12	4	25	889
Bodine, Jacob, Jersey City, N. J. Sewer-trap	287,413	Oct. 30	2068	562	25	401
Boecher, Adam, New York, N. Y. Mechanical movement	272,200	Feb. 13	763	211	23	584
Boenke, Ernst T. M., New York, N. Y. Necktie-fastener	262,153	July 31	2304	632	24	423
Boesch, Emilio, San Francisco, Cal. Tubular lantern	277,444	May 15	1156	310	23	1838
Boesch, Emile, San Francisco, Cal. Side and center lamp and reflector for street-cars	283,693	Aug. 21	1472	415	24	780
Boettcher, Emil, Leipsic, Germany. Secondary battery	277,445	May 15	1157	311	23	1838
Boettcher, Theodor, Mendota, Ill. Sully	274,167	Mar. 20	1189	327	23	1054
Bogard, John J., assignor of one-half to T. C. Kuhnle, St. Louis, Mo. Packing-box for bottles, &c.	276,218	Apr. 24	1730	479	23	1547
Bogardus, Adam H., Elkhart, Ill. Flying target	288,000	Nov. 6	271	76	25	551
Bogart, A. Livingston, Jamaica, N. Y. Electric-circuit cut-out	279,634	June 19	1275	354	23	2355
Bogart, A. Livingston, Jamaica, N. Y. Electric lighting gas-burner	282,043	July 31	2146	589	24	398
Bogart, A. Livingston, Jamaica, N. Y. Electric-circuit cut-off	290,732	Dec. 25	1738	480	25	1214
Bogert, John L., Flushing, N. Y. Device for reciprocating the cutter-heads of planing and slotting machines	278,084	May 22	1915	525	23	1975
Bogert, Mortimer P., assignor to J. B. Oelkers, Newark, N. J. Combining celluloid, &c., with woven or knitted fabric, &c.	270,538	Jan. 9	873	254	23	181
Boggs, Henry H. (See Carley, Powell, and Boggs.)						
Boggs, John C., Auburn, Cal. Hasp-lock	282,607	Aug. 7	160	48	24	529
Bogia, Matthew C., Philadelphia, Pa. Toy	286,379	Oct. 9	755	203	25	147
Bogle, Walter S., assignor of one-half to W. R. King, Chicago, Ill. Apparatus for unloading coal from vessels	280,284	June 26	2047	575	23	2497
Bohner, George and J. E., Chicago, Ill. Extension-lamp	285,381	Sept. 25	1499	422	24	1183
Bohner, Joseph E. (See Bohner, George and J. E.)						
Böhringer, Alexander, Stuttgart, Wurtemberg, Germany. Producing monacylised hydro-bases	282,488	Aug. 7	10		24	502
Bohsbert, Frederick, New York, N. Y. Surgical chair	290,841	Dec. 25	1870	516	25	1237
Boice, Reed V., Toledo, Ohio. Machine for making wooden rings	273,806	Mar. 13	733	199	23	968
Boice, Reed V., Toledo, Ohio. Cutter-head	275,459	Apr. 10	780	209	23	1368
Boies, Henry M., Scranton, Pa. Car-wheel	290,518	Dec. 18	1454	402	25	1158
Boisen, William, Luzerne, Iowa. Window-frame	276,219	Apr. 24	1731	479	23	1547
Bokenkotter, John S., Cincinnati, Ohio. Shoe	281,007	July 10	823	229	24	152
Bokop, Henry D., assignor to himself and D. B. Turnbull, Defiance, Ohio. Tire-setter	274,168	Mar. 20	1189	327	23	1054
Boland, William A. (See Sweet, Parker H., Jr., assignor.) (Reissue.)						
Boland, William A., Lynn, Mass. Button-setting apparatus	288,401	Nov. 13	782	211	25	651
Boldon, Joseph. (See Godley and Boldon.)						
Boldt, Friedrich W. A., assignor to Boldt & Vogel, Hamburg, Germany. Machine for capsuling bottles	271,304	Jan. 30	1824	529	23	369
Boldt & Vogel. (See Boldt, Friedrich W. A., assignor.)						
Bolender, Harrison W. (See Schoch and Bolender.)						
Bolgiano, Edward H., Camden, N. J. Convertible chair	277,871	May 22	1664	454	23	1932
Bolgiano, Edward H., Camden, N. J. Convertible chair	280,711	July 3	447	128	24	80
Bolgiano, Edward H., Camden, N. J. Convertible chair	282,154	July 31	2305	633	24	423
Boling, William R., Osceola, Iowa. Wagon-gear	287,797	Nov. 6	11	3	25	509
Bollack, Henry, and G. Mayer, Paris, France. Umbrella	281,827	July 24	1883	514	24	347
Bollermaun, Carl L., New York, N. Y. Rotary leader-link for fishing-lines	289,612	Dec. 4	300	84	25	940
Bolles, James H., Dallas, Tex. Miter and framing square	288,613	Nov. 20	1037	286	25	703
Bollinger, Elias, Louisville, Md. Apparatus for amalgamating ores	278,861	June 5	260	75	23	2167
Bollman, John F., Cincinnati, Ohio. Tree feller and block-dresser	285,874	Oct. 2	116	34	25	23
Bollette, Etienne, Soldier, Kans. Automatic corn-planting attachment	285,560	Sept. 25	1708	482	24	1221
Bollow, Henry, et al. (See Dumke, Frank F., assignor.)						
Bolt, Daniel A., Harrisburg, Pa. Seal-lock	286,768	Oct. 16	1243	336 } 337 }	25	241
Bolt, Marlin S., and J. W. Lunn, Elmira, N. Y. Fan attachment for sewing-machines, &c.	270,926	Jan. 23	1360	392	23	284
Bolte, Frank H., assignor to Egelhoff Manufacturing Company, Milwaukee, Wis. Hay-carrier	276,556	May 1	13	4	23	1629
Bolte, Frank H., assignor to Egelhoff Manufacturing Company, Milwaukee, Wis. Horse hay-fork	283,694	Aug. 21	1474	415	24	780
Bolton, Charles E., and M. Rankin, Cleveland, Ohio. Paper-box machinery	284,599	Sept. 11	538	152	24	1002
Bolton, Charles E., F. H. Strieby, and M. Rankin, Cleveland, Ohio. Box and package filler	277,540	May 15	1270	340	23	1856
Bolton, Gideon S., et al. (See Dunn, William, assignor.)						
Bolton, James, and A. D. Pentz, Chicago, Ill. Clamp-guide for button-hole sewing-machines	277,106	May 8	752	198	23	1760
Bolton, Simeon R. (See Keith and Bolton.)						
Boman, Claes W., assignor to J. Reckendorfer, New York, N. Y. Holder for knife-blades	273,222	Feb. 27	2073	583	23	825
Boman, Claes W., assignor to J. Reckendorfer, New York, N. Y. Lead or crayon holder	275,125	Apr. 3	326	90	23	1282
Boman, Claes W., assignor to J. Reckendorfer, New York, N. Y. Holder for knife-blades. (Reissue.)	10,335	June 5	634	172	23	2231
Bond, Edmund E., et al. (See Pattysen, William D. C., assignor.)						
Bond, Henry F., West Newton, Mass. Centrifugal creamer	286,769	Oct. 16	1245	337	25	241
Bond, Hiram. (See Bourgeois, Edward, assignor.)						
Bond, Hiram, Haverhill, Mass. Sole or heel burnishing machine	276,345	Apr. 24	1902	528	23	1575
Bond, Isaac L., et al. (See Bush, Arthur W., assignor.)						
Bond, Joseph, Jr., assignor of one-half to C. M. Swain, Philadelphia, Pa. Sewing-machine	288,765	Nov. 20	1234	338	25	736
Bond, Joseph L. (See Stevens and Bond.)						
Bond, Joseph N. B. assignor to J. N. B. Bond, Jr., New York, N. Y. Apparatus for the manufacture of fertilizers from offal, &c.	270,003	Jan. 2	211	61	23	43
Bond, Joseph T., Chelsea, Mass. Sugar-bowl	275,350	Apr. 10	634	169	23	1343
Bond, Nathan O., Fairfax, Va., assignor to J. F. Johnson and F. W. Pratt, Washington, D. C. Wash-stand	285,001	Sept. 18	1044	292	24	1096
Bond, William E., Cleveland, Ohio. Outrigger for boats	276,220	Apr. 24	1732	479	23	1547
Bonds, George W. (See Jackson and Bonds.)						
Bondy, George W., San Francisco, Cal. Key-seat-cutting machine	289,060	Nov. 27	1593	441	25	809
Bonett, Edwin J., T. Gillilan, and A. W. Flinders, Barnet, Vt. Flower-stand	276,663	May 1	153	39	23	1652
Bonn, John H., Weebawken, and A. De Bevoise, West Hoboken, N. J. Combined chair, knee, and truss bracket	282,697	Aug. 7	267	77	24	546



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Bonnefond, Michel, assignor to Ste. Peuvrez & Cie, Paris, France. Device for covering water-closet seats.	279,218	June 12	752	{ 207 208 }	23	2262
Bonnell, James A., assignor to National Interlocking Switch and Signal Company, New York, N. Y. Torpedo-holding attachment for railway danger-signals.	290,391	Dec. 18	1268	356	25	1126
Bonney, Otto M., and N. D. Lamoreux, St. Louis, Mo. Attachment for sewing-machines.	286,994	Oct. 23	1536	423	25	296
Bonninghausen, Hugo, Detroit, Mich. Lawn-sprinkler.	273,940	Mar. 13	903	247	23	996
Bonsilate Company. (See Hyatt and Lockwood, assignors.)						
Bonsilate Company. (See Lockwood, Charles S., assignor.)						
Bonta, James W., assignor to Giant Air Injector Manufacturing Company, (limited,) Philadelphia, Pa. Air-injector for furnaces.	287,754	Oct. 30	2523	680	25	488
Bonte, Philipp, Chicago, Ill. Thermo steam-pressure gage.	277,446	May 15	1158	311	23	1838
Bonwill, William G. A., Philadelphia, Pa. Dental or surgical engine.	282,044	July 31	2147	589	24	398
Bonzano, Adolphus, Phoenixville, Pa. Traction-rope railway.	281,440	July 17	1371	378	24	254
Bonzano, Adolphus, Phoenixville, Pa. Conduit for traction-rope railways.	287,220	Oct. 23	1827	500	25	350
Bookstaver, James N. (See Leggett, William, assignor.)						
Bools, Zadock H. (See Wilson and Boole.)						
Boomer, George B., Tarrytown, N. Y. Screw-press.	283,463	Aug. 21	1205	{ 338 339 }	24	729
Boomer, George B., Tarrytown, N. Y. Steam-radiator.	289,965	Dec. 11	736	208	25	1023
Boomer, Oscar F., Brooklyn, N. Y. Evaporating apparatus.	271,023	Jan. 23	1480	427	23	303
Boone, Alonzo T., Chicago, Ill., assignor of one-half to R. H. Sanborn. Door-knob alarm.	270,199	Jan. 9	439	129	23	97
Boone, Charles A. (See Bound and Boone.)						
Boone, Clara E. (See Boone, Thomas R., assignor.)						
Boone, John L., San Francisco, Cal. System for transmitting power from a central station.	279,694	June 19	1346	374	23	2366
Boone, Martin W. (See Bloomfield and Boone.)						
Boone, Robert B. (See Whitaker, David W., assignor.)						
Boone Steel Barb Wire Company. (See Cline, John B., assignor.)						
Boone, Thomas R., assignor, by mesne assignments, to C. E. Boone, Rochester, N. Y. Game apparatus.	282,608	Aug. 7	161	49	24	529
Boone, William C., and W. A. Whitfield, Brooklyn, N. Y. Beer-tap.	277,872	May 22	1665	454	23	1932
Boone, William C., and W. A. Whitfield, Brooklyn, N. Y. Cut-off for Argand gas-burners.	282,260	July 31	2436	670	24	445
Boost, Philip J. (See Gordon and Boost.)						
Booth, Alfred R., San Luis Obispo, Cal. Poison for squirrels, gophers, &c.	271,024	Jan. 23	1481	.....	23	303
Booth, Constant W., Brooklyn, N. Y. Lubricator.	283,695	Aug. 21	1475	415	24	781
Booth, John, assignor to S. A. Jenks, Lincoln, R. I. Bearing for spindles.	272,942	Feb. 27	1733	484	23	764
Booth, John, Lincoln, assignor to Fales & Jenks Machine Company, Pawtucket, and S. A. Jenks, Lincoln, R. I. Spinning-ring.	272,941	Feb. 27	1731	484	23	764
Booth, John H., Altoa, Ill. Sleeve or collar button.	286,770	Oct. 16	1246	337	25	241
Booth, Jonathan L., Rochester, N. Y. Railway-signal.	290,842	Dec. 25	1871	517	25	1238
Booth, Joseph N., Prairie du Chien, Wis. Feed-water purifier.	275,980	Apr. 17	1434	396	23	1489
Boots, William R. (See Darrow, Charles, assignor.)						
Boppel, Jacob, Newark, N. J. Sewing-machine.	281,008	July 10	824	{ 229 230 }	24	153
Borchard, Albert J., Chicago, Ill. Press.	286,582	Oct. 16	1007	272	25	199
Borchardt, Albert, Weehawken, N. J., assignor to V. H. Rothschild, New York, N. Y. Shirt.	280,712	July 3	448	128	24	80
Borchardt, Hugo. (See Parsons and Borchardt.)						
Borchardt, Hugo, Peekskill, assignor to J. W. Frazier, New York, N. Y. Detachable magazine for magazine-guns.	273,448	Mar. 6	268	72	23	879
Borchert, Charles, et al. (See Dumke, Frank F., assignor.)						
Borden, Edwin, assignor of one-half to J. H. Pitman, Fall River, Mass. Milk-wagon.	270,539	Jan. 9	875	254	23	181
Borden, Norman E., Fall River, Mass. Machine for finishing tucked fabrics.	287,615	Oct. 30	2344	{ 632 633 680 481 }	25	454
Bordwell, Joseph, assignor to D. S. Morgan, Brockport, N. Y. Harvester.	290,733	Dec. 25	1740	481	25	1215
Boren, John S., Booneville, Miss. Molasses-evaporator.	277,206	May 8	874	232	23	1781
Borg, Ole P., Richfield, Utah Ter. Buckle.	287,798	Nov. 6	12	4	25	509
Borgesen, Bendix G., Chicago, Ill. Lady's work-table.	272,201	Feb. 13	764	211	23	584
Borfeldt, Nicholas H., New York, N. Y. Screw-propeller.	285,002	Sept. 18	1045	293	24	1097
Boring, Frank M., Jamestown, Ohio. Harness attachment.	288,614	Nov. 20	1038	286	25	704
Bornholdt, Detlef. (See Arff and Bornholdt.)						
Borodoulin, Nicholas, Kharkov, Russia. Apparatus for measuring the density of liquids.	288,402	Nov. 13	783	211	25	651
Borowsky, Bernhard, Stargard, Prussia, Germany. Apparatus for manufacturing varnish.	286,528	Oct. 9	932	251	25	180
Borowsky, Bernhard, Stargard, Prussia, Germany. Uniting small pieces of amber into a large block.	288,300	Nov. 13	632	173	25	626
Borror, Absalom, Jr., Shadeville, Ohio. Scale-pan for weighing cattle.	283,371	Aug. 21	1098	309	24	710
Borsch, John L., assignor of one-half to E. Hazlehurst, Philadelphia, Pa. Spectacles.	272,321	Feb. 20	1180	330	23	661
Borst, George, assignor of one-half to F. Will, Rochester, N. Y. Awning-frame.	275,573	Apr. 10	923	250	23	1392
Borst, George, and F. Will, Rochester, N. Y. Fire-escape.	283,061	Nov. 27	1595	442	25	809
Borthwick, A. E. (See Bedbury, George W., assignor.)						
Borton, Stockton, Philadelphia, Pa., assignor to Wilcox & Gibbs Sewing Machine Company, New York, N. Y. Manufacture of welted or hemmed goods of knit fabrics.	271,190	Jan. 23	1686	487	23	336
Borton, Stockton, Philadelphia, Pa., and C. H. Wilcox, assignors to Wilcox & Gibbs Sewing Machine Company, New York, N. Y. Sewing and trimming machine.	275,981	Apr. 17	1435	{ 396 397 }	23	1489
Bosch, Charles G., Davenport, Iowa. Apparatus for malting.	277,107	May 8	753	198	23	1760
Boschert, Rufus E., Syracuse, N. Y. Power-press.	279,695	June 19	1348	375	23	2367
Bossard, Joseph H. (See Lyon and Bossard.)						
Bossidy, Patrick, Lee, Mass. Rein-rack.	277,668	May 15	1422	384	23	1882
Boston Electric Company. (See Crockett, Charles H., assignor.)						
Boston Water Purifier Company. (See Haynes, Edgar K., assignor.)						
Bostrom, Ernst A., Newnan, Ga. Leveling-instrument.	280,713	July 3	449	128	24	80
Boswick, Seymour A., assignor of one-half to F. A. Magee, Chelsea, Mass. Pipe-wrench.	271,595	Feb. 6	12	3	23	442
Bosworth, Charles B. (See Brown and Bosworth.)						
Bosworth, Charles B. (See Swan and Bosworth.)						
Bosworth, Charles B., and F. A. Swan, Boston, Mass. Arc-lamp cut-out.	278,679	June 5	5	2	23	2125
Bosworth, Charles F., Milford, Conn. Machine for winding thread upon spools.	270,376	Jan. 9	660	{ 194 195 }	23	138
Bosworth, Emory, Cleveland, Ohio. Water-tight joint for tiling, vault-covers, areas, &c.	284,170	Sept. 4	14	4	24	907
Boteler, John W., Washington, D. C. Combination game-box.	286,583	Oct. 16	1009	272	25	199
Botkin, Jonathan A. (See Davison, William J., assignor.)						
Botsford, Alban B., Grand Rapids, Mich. Anal speculum.	282,950	Aug. 14	566	160	24	608
Botsford, Isaac P., Cromwell, Conn. Truss.	288,972	Nov. 27	1484	411	25	790
Botsford, William B., Millport, assignor of one-half to W. B. Thomas, Elmira, N. Y. Door-hanger.	288,918	Nov. 20	1413	389	25	770

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Bott, Joseph E., Marcus Hook, assignor to J. M. Broomall, Jr., Media, E. L. Clark and E. H. Burr, Philadelphia, Pa. Crucible and means for heating the same	285,214	Sept. 18	1299	365 366	24	1141
Bott, Joseph E., Marcus Hook, assignor to J. M. Broomall, Jr., Media, E. L. Clark and E. H. Burr, Philadelphia, Pa. Gas-generator for furnaces	285,561	Sept. 25	1708	482 483	24	1221
Bötter, Carl, Ober-Ursel, Prussia, assignor to L. Zeyen, Raguhn, Anhalt, Germany. Paper-machine	280,123	June 26	1857	523 524	23	2464
Bottomley, Thomas H., Capac, Mich. Saw-mill dog	277,981	May 22	1789	488	23	1953
Botts, Barnet N., Paso Robles, Cal. Acoustic telephone	286,680	Oct. 16	1135	306	25	221
Bottum & Trescott, et al. See Landfear, William R., assignor.)						
Boucher, Amos, Monclova, Ohio. Door-securer	278,862	June 5	261	75	23	2168
Boucher, Amos, Monclova, Ohio. Door-securer	278,863	June 5	262	76	23	2168
Boughton, George A., Chicago, Ill., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass. Bale-tie tightener	272,943	Feb. 27	1734	484	23	764
Boughton, William, Caledonia, Ohio. Vehicle-spring	273,449	Mar. 6	269	72	23	879
Bonilly, Amédée, Saumur, France. Mechanism for firing ordnance by electricity	289,966	Dec. 11	738	208	25	1023
Boulanger, Emile, St. Louis, Mo. Drum	274,900	Apr. 3	11	3	23	1228
Boul Brothers & Co. (See Baird, Robert, assignor.)						
Boulton, William H., Cleveland, Ohio. Furnace for baking incandescents	284,171	Sept. 4	15	4	24	907
Bound, David T., and C. A. Boone, Shickshinny, Pa. Time-signal	279,696	June 19	1349	375 376	23	2367
Bourbon Copper and Brass Works. (See Bardo and Ford, assignors.)						
Bourgeois, David, assignor of one-half to Kroeschell Brothers, Chicago, Ill. Feed-water heater and precipitator	271,025	Jan. 23	1482	427	23	303
Bourgeois, Edward, assignor to himself and H. Bond, Haverhill, Mass. Heel-burnishing tool	277,207	May 8	875	232	23	1781
Bousfield, Edward T. (See Howard and Bousfield.)						
Boussier, Michael P., Summerfield, Ill. Non-heat-conducting jug	277,447	May 15	1159	311	23	1838
Boutoll, William H., Antrim, N. H. Apple-parer	266,380	Oct. 9	756	203 204	25	147
Bovee, David W., Richland Centre, Wis. Hay-tedder	289,382	Dec. 4	13	4	25	889
Bovee, Henry. (See Moore and Bovee.)						
Bowalter, Thomas, and L. D. York, Portsmouth, Ohio. Manufacture of hoes	281,441	July 17	1372	378	24	254
Bowden, Hanson M., Wilmington, N. C. Carriage-top	287,499	Oct. 30	2174	590	25	432
Bowe, Arthur E., et al. (See Olson, Peter J., assignor.)						
Bowen, Augustus C., Michigan Bluff, Cal. Amalgamator	371,305	Jan. 30	1824	529	23	369
Bowen, George M., Talbot, Tenn. Attachment for back-straps	277,669	May 15	1423	384	23	1882
Bowen, George W., Fort Wayne, Ind. Horseshoe	285,215	Sept. 18	1300	366	24	1141
Bowen, Hibbard T., assignor of one-half to P. P. Bowles, Philadelphia, Pa. Boring-machine	288,403	Nov. 13	784	212	25	632
Bowen, Horace W., Corning, N. Y. Carpet-stretcher	288,301	Nov. 13	633	173	25	626
Bowen, J. Howard, Philadelphia, Pa., assignor of one-half to A. C. Couch, Boston, Mass. Wrench	273,017	Feb. 27	1819	510	23	780
Bowen, John J., San Francisco, Cal. Saw-plate and inserted saw-tooth	283,197	Aug. 14	868	242	24	661
Bowen, Phillip A., and J. W. Suetterle, Milwaukee, Wis. Broom-support	290,315	Dec. 18	1172	328	25	1109
Bowen, William, Edina, Mo. Grain and seed cleaning mill	272,637	Feb. 20	1333	374	23	688
Bowen, William H., Lincoln, R. I. Lubricator	270,626	Jan. 16	984	284	23	209
Bowen, William H., Oskaloosa, Iowa. Mop-holder	285,003	Sept. 18	1046	293	24	1097
Bowen, William J., Norwalk, assignor to himself, T. T. Keckeler, Cincinnati, Ohio, and Z. C. Thwing, Marshall, Mich. Mechanical telephone	285,004	Sept. 18	1047	293	24	1098
Bowen, William J., Norwalk, assignor to himself, T. T. Keckeler, Cincinnati, Ohio, and Z. C. Thwing, Marshall, Mich. Acoustic and electric insulator	286,681	Oct. 16	1136	306	25	222
Bowen, William J., Norwalk, assignor to himself, T. T. Keckeler, Cincinnati, Ohio, and Z. C. Thwing, Marshall, Mich. Polarized electric bell	288,202	Nov. 13	512	142	25	605
Bower, Anthony S. (See Barff and Bower.)						
Bower, Anthony S. (See Bower, George and A. S.)						
Bower, George. (See Barff and Bower.)						
Bower, George, St. Neots, county of Huntingdon, England. Depositing metals upon the surfaces of iron and steel coated with magnetic oxide	270,004	Jan. 2	212		23	44
Bower, George and A. S., St. Neots, county of Huntingdon, England. Furnace for effecting the protection of iron and steel surfaces	270,005	Jan. 2	212	61, 62	23	44
Bower, Henry, Philadelphia, Pa. Packing bran, &c	282,045	July 31	2151	590	24	398
Bower, Henry, Philadelphia, Pa. Process of and apparatus for packing bran	282,046	July 31	2152	590 591	24	398
Bower, Isaac G., assignor to L. B. Myers, Fremont, Ohio. Thill-coupling	271,191	Jan. 23	1687	487	23	337
Bower, Isaac G., and L. B. Myers, Fremont, Ohio; said Bower assignor of one-third to said Myers. Toy catapult	271,568	Jan. 30	2166	624	23	429
Bower, James, assignor of one-half to H. A. Wright, Forest City, Ill. Thrashing-machine	284,600	Sept. 11	539	152 153	24	1002
Bower, John, Goode's Crossing, Va. Horse hay-rake	284,942	Sept. 11	960	269	24	1075
Bowers, Alfred H., assignor to I. Newman, New Haven, Conn. Corset	290,843	Dec. 25	1874	517	25	1238
Bowers, Cassimer D. C., Ridgway, Pa. Fastening for bed-slats	277,541	May 15	1272	341	23	1857
Bowers, George W., assignor of one-half to C. E. Nickerson, Somerville, Mass. Necktie-fastener	279,697	June 19	1350	376	23	2367
Bowers, Henry C. (See Bowers, Warren N., assignor.)						
Bowers, Henry C. and W. N., New Haven, Ind. Log-turning attachment for saw-mills	280,124	June 26	1859	524	23	2464
Bowers, Riley, Indianapolis, Ind. Veneer-dish machine	269,822	Jan. 2	2	1	23	3
Bowers, Warren N. (See Bowers, Henry C. and W. N.)						
Bowers, Warren N., Jefferson, assignor of one-half to H. C. Bowers, New Haven, Ind. Gate	287,361	Oct. 23	2000	545	25	382
Bowers, William B., Falls City, Nebr. Band-cutter	274,707	Mar. 27	1889	526	23	1183
Bowes, Frederick K. (See Scharnweber, William, assignor.)						
Bowes, John, Halifax, Nova Scotia, Canada. Ice apparatus	278,085	May 22	1916	525	23	1975
Bowes, John G. (See Jamieson, James, assignor.)						
Bowes, Thomas H., Milwaukee, Wis. Device for straightening sheets delivered from the fly of a printing-press	276,221	Apr. 24	1733	480	23	1547
Bowie, Orin R., Portland, assignor of one-half to E. Hershey, Deering, and W. K. Rhoads, Portland, Me. Fire-escape	281,661	July 24	1661	453	24	308
Bowker, James J., La Otto, Ind. Head-rest	270,377	Jan. 9	664	195	23	139
Bowker, James J., La Otto, Ind. Folding chair	271,778	Feb. 6	233	65	23	481
Bowker, James J., La Otto, Ind. Invalid-bed	277,208	May 8	876	232	23	1782
Bowker, William. (See Williams, Robert, assignor.)						
Bowker, William. (See Williams and Bowker.)						
Bowker, William, Somerville, assignor, by mesne assignments, to himself and R. Williams, Boston, Mass. Cleansing saws	279,698	June 19	1351	376	23	2367



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Bowker, William, Somerville, assignor, by mesne assignments, to himself and R. Williams, Boston, Mass. Machine for sawing hoops from poles.....	286,173	Oct. 9	482	{ 133 134 }	25	100
Bowles, Philemon P. (See Bowen, Hibbard T., assignor.)						
Bowles, Thomas H., Atlanta, Ga. Traveling sign for street-cars.....	288,615	Nov. 20	1039	286	25	704
Bowling, Benjamin S., Marcellus, Mich. Cuspidor.....	284,601	Sept. 11	541	153	24	1002
Bowling, John P., assignor of one-half to E. Bryan, Guthrie, Ky. Shingle-machine.....	272,638	Feb. 20	1334	374	23	688
Bowling, John P., assignor of one-half to E. Bryan, Guthrie, Ky. Shingle-machine.....	272,639	Feb. 20	1335	375	23	689
Bowlus, Charles D., Ohio, Ill. Windmill.....	274,261	Mar. 20	1308	360	23	1075
Bowman, Alexander. (See Farrar and Bowman.)						
Bowman, Charles F., New Haven, Conn. Lubricator.....	279,699	June 19	1352	376	23	2368
Bowman, Charles M., Lebanon, Pa. Electric conductor for fire-hose.....	290,844	Dec. 25	1875	{ 517 518 }	25	1238
Bowman, Edmund Q., Philadelphia, Pa. Broom.....	273,941	Mar. 13	904	247	23	996
Bowman, Edward. (See Maranville, Egbert L., assignor.)						
Bowman, Frank, Brooklyn, N. Y. Back for books.....	281,657	July 17	1651	450	24	300
Bowman, Frank, New York, N. Y. Blank or composition book.....	286,111	Oct. 2	409	112	25	75
Bowman, John S., Detroit, Mich. Fire-escape.....	278,768	June 5	113	32	23	2143
Bowman, John W., Huntington, assignor to himself and E. A. Collins, Huntington County, Ind. Ice-tongs.....	289,749	Dec. 4	475	134	25	969
Bowman, William, and E. Hunscher, Cleveland, Ohio. Carpet-cleaning apparatus.....	271,406	Jan. 30	1962	567	23	394
Bowser, John, Lancaster, Ohio. Carriage-body hanger.....	282,436	July 31	2670	732	24	486
Bowsky, Leopold, New York, N. Y. Plumber's charcoal-furnace.....	281,009	July 10	825	230	24	153
Bowyer, William A., and J. E. Elliott, Cleveland, Ohio. Stove-pipe shelf.....	283,959	Aug. 28	1803	510	24	851
Box, Alfred, Philadelphia, Pa. Belt-tightener.....	283,856	Aug. 23	1675	473	24	827
Box, Alfred, Philadelphia, Pa. Radial drilling-machine.....	283,857	Aug. 23	1676	473	24	827
Box, William W., Crayford, county of Kent, assignor to H. Greene, London, England. Caster.....	275,126	Apr. 3	327	91	23	1282
Boyce, Charles M., Stoneham, Mass. Vise.....	286,985	Oct. 23	1537	423	25	296
Boyce, Edmund C., Cincinnati, Ohio. Paving material for street-pavements.....	274,096	Mar. 13	1087	299	23	1028
Boyd, Arthur A. (See Hayden and Boyd.)						
Boyd, George. (See Van Zandt, Robert S., assignor.)						
Boyd, Henry E., McKeesport, Pa. Tube-coupling.....	283,960	Aug. 28	1804	511	24	852
Boyd, Hugh, et al. (See Engel, George, assignor.)						
Boyd, James. (See Hammill, Joshua M., assignor.)						
Boyd, James, St. Paul, Minn. Hoisting-machine.....	271,681	Feb. 6	113	31	23	459
Boyd, John and T. A., Glasgow, county of Lanark, Scotland. Machine for winding yarn or thread.....	276,758	May 1	300	76	23	1677
Boyd, John M., Oakfield, Wis. Wind-wheel.....	285,960	Oct. 2	230	65	25	44
Boyd, Thomas A. (See Boyd, John and T. A.)						
Boyd, William, Galveston, Tex. Wheeled vehicle.....	279,529	June 19	1157	320	23	2334
Boyd, William H., Louisiana, Mo. Netting.....	287,616	Oct. 30	2346	633	25	455
Boyden, George A., assignor of one-half to C. B. Mann, Baltimore, Md. Fluid-pressure brake.....	280,285	June 26	2048	576	23	2497
Boyden, George E. (See Boyden, William H., assignor.)						
Boyden, William H., assignor of one-half to G. E. Boydon, Providence, R. I. Twine-holder.....	285,727	Sept. 25	1918	544	24	1250
Boydston, David S., Volcano, Cal. Camera-shutter.....	272,117	Feb. 13	670	182	23	568
Boysels, Joseph E., et al. (See Morgan, Albert H., assignor.)						
Boyer, Desire, Terre Bonne Parish, La. Baling-press.....	286,771	Oct. 16	1246	337	25	241
Boyer, Jerome L., Columbia, Pa. Cinder-car.....	280,903	July 10	695	{ 195 196 }	24	129
Boyer, Jerome L., Columbia, Pa. Hoisting apparatus for locomotive and portable engines.....	280,904	July 10	696	196	24	129
Boyer, Joseph, assignor of forty-nine one-hundredths to O. Bradford, St. Louis, Mo., and J. F. Golding, Chicago, Ill. Chipping-machine.....	277,448	May 15	1159	311	23	1838
Boyer, Léon, and J. B. Henry, New Orleans, La. Odorless excavating apparatus.....	277,200	May 8	877	233	23	1782
Boyer, Louis W. (See Fraser, Edwin J., assignor.)						
Boyer, Louis W., et al. (See Yates, Henry G., assignor.)						
Boyington, William W., Highland Park, Ill. Window-frame.....	286,584	Oct. 16	1009	{ 272 273 }	25	200
Boyington, William W., Highland Park, Ill. Sash-cord guide.....	290,203	Dec. 18	1028	289	25	1085
Boyle, Daniel, et al. (See Crawford, John, assignor.)						
Boyle, James E., Brooklyn, N. Y. Flushing water-closets.....	285,875	Oct. 2	117	35	25	23
Boyle, James E., Brooklyn, N. Y. Float-valve or ball-cock.....	290,204	Dec. 18	1029	290	25	1085
Boyle, John B., Baltimore, Md. Bell-pull.....	285,961	Oct. 2	232	65	25	44
Boyle, Thomas F., et al. (See Crawford, John, assignor.)						
Boyne, James, Jr. (See Boyne, Thomas A. and J. Jr.)						
Boyne, Thomas A. and J. Jr., Bloomfield, N. J. Paper-machine.....	287,500	Oct. 30	2176	591	25	422
Boynton, Alfred, and H. W. Peace, Brooklyn, N. Y. Saw.....	274,708	Mar. 27	1889	527	23	1183
Boynton, Almanzor W., Bridgeport, assignor to H. I. Hoyt, Norwalk, Conn. Base-ball.....	288,766	Nov. 20	1236	338	25	737
Boynton, Charles B. (See Boynton, Nathaniel A., assignor.)						
Boynton, Charles B., New York, N. Y. Shaking-grate.....	278,864	June 5	263	76	23	2168
Boynton, Charles B., New York, N. Y. Hot-air furnace.....	289,967	Dec. 11	739	208	25	1024
Boynton, Charles M., and T. M. Togns, Concord, N. H. Rack for umbrellas and parasols.....	288,616	Nov. 20	1040	256	25	704
Boynton, Edward S., Bridgeport, Conn. Station-indicator.....	279,478	June 12	1089	301	23	2315
Boynton, Edward S., Bridgeport, Conn., assignor to S. J. Gordon, New York, N. Y. Coloring and hardening articles manufactured of clay.....	287,799	Nov. 6	13	.....	25	509
Boynton, Leander W., Hartford, Conn. Spring fabric.....	284,717	Sept. 11	692	194	24	1027
Boynton, Nathaniel A., assignor to C. B. Boynton, New York, N. Y. Damper for furnace or stove pipes.....	279,530	June 19	1157	{ 320 321 }	23	2334
Boynton, Sumner H., Rockland, Me. Cover or blanket for animals.....	284,803	Sept. 11	796	222	24	1045
Boysen, William F., Buffalo, N. Y. Pulley.....	281,828	July 24	1884	514	24	347
Brabson, Thomas, Newark, N. J. Bridle-bit.....	274,709	Mar. 27	1890	527	23	1183
Brabson, Thomas, Newark, N. J. Hame-tip.....	282,261	July 31	2437	670	24	445
Brach, Isidor, Philadelphia, Pa. Making cigars.....	278,769	June 5	114	.....	23	2143
Brackebusch, Hans, Berlin, Germany. Deodorizing solutions of colophony in heavy hydrocarbons.....	275,565	Apr. 10	914	.....	23	1390
Bracken, Edson L., Dawson, Ill. Knotting mechanism for grain-binders.....	270,378	Jan. 9	665	195	23	139
Bracken, Edson L., Dawson, Ill. Plow-clevis.....	285,962	Oct. 2	233	65	25	44
Brackenridge, Arthur M. (See Strack, Charles F., assignor.)						
Brackett, Cyrus F., Princeton, N. J. Electro-magnetic dynamometer.....	287,800	Nov. 6	13	4	25	509
Bracking, Frank B., Cincinnati, Ohio. Button and glove hook.....	289,213	Nov. 27	1777	492	25	842
Braddock, Warren L., Boston, Mass. Garment-supporter.....	278,493	May 29	2465	672	23	2079
Braden, Joshua E. L., South Berwick, Me. Machine for cutting and punching metal.....	283,198	Aug. 14	868	242	24	661
Bradfield, Thomas. (See Hughes, Bennington R., assignor.)						
Bradford, Addison, Brooklyn, N. Y. Lubricator.....	280,562	July 3	270	74	24	49

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Bradford, Allen, Dalles, Oreg. Combined agricultural machine .....	277,982	May 22	1790	{ 488 489 }	23	1953
Bradford, Charles K., Lynnfield, Mass. Apparatus for cementing the channels of boot or shoe soles .....	278,086	May 22	1917	526	23	1976
Bradford, Charles W., assignor to himself and A. C. Burgess, Belfast, Me. Bag-fastener .....	277,210	May 8	878	233	23	1782
Bradford, Charles W., Belfast, assignor to himself and C. E. Lane, Brooks, Me. Bag-fastener .....	287,755	Oct. 30	2525	680	25	489
Bradford, Cyrus, Erie, Mich. Washing-machine .....	277,670	May 15	1424	324	23	1882
Bradford, James N., Bay City, Mich. Nut-lock .....	271,026	Jan. 23	1483	427	23	304
Bradford, Oliver B., <i>et al.</i> (See Clay, Robert J., assignor.) .....						
Bradford, Oscar, <i>et al.</i> (See Boyer, Joseph, assignor.) .....						
Bradford, Purmort, assignor to Sargent & Co., New Haven, Conn. Table-leaf support .....	270,006	Jan. 2	214	62	23	44
Bradford, Purmort, assignor to Sargent & Co., New Haven, Conn. Grindstone-hanger .....	282,262	July 31	2438	670	24	446
Bradford, William, Brockport, N. Y. Bean-harvester .....	270,381	Jan. 9	668	196	23	140
Bradford, William, Brockport, N. Y. Seed-planter and fertilizer-distributor .....	276,759	May 1	301	77	23	1677
Bradley, Byron C., assignor to Furst & Bradley Manufacturing Company, Chicago, Ill. Seeding-machine .....	270,627	Jan. 16	984	{ 284 285 }	23	209
Bradley, Byron C., assignor to Furst & Bradley Manufacturing Company, Chicago, Ill. Skim plow or colter .....	270,628	Jan. 16	989	286	23	210
Bradley, Byron C., assignor to Furst & Bradley Manufacturing Company, Chicago, Ill. Cultivator .....	270,629	Jan. 16	990	{ 286 287 }	23	210
Bradley, Byron C., assignor to Furst & Bradley Manufacturing Company, Chicago, Ill. Combined plow standard and support .....	270,630	Jan. 16	993	287	23	211
Bradley, Byron C., assignor to Furst & Bradley Manufacturing Company, Chicago, Ill. Tongueless cultivator .....	274,555	Mar. 27	1708	{ 474 475 }	23	1150
Bradley, Byron C., assignor to Furst & Bradley Manufacturing Company, Chicago, Ill. Landside for plows .....	283,067	Aug. 14	707	199	24	633
Bradley, Byron C., assignor to Furst & Bradley Manufacturing Company, Chicago, Ill. Caster-colter .....	285,790	Oct. 2	12	4	25	4
Bradley, Charles E. (See Folmer and Bradley.) .....						
Bradley, Charles S., assignor to Edison Electric Light Company, New York, N. Y. Electrical measuring apparatus .....	280,563	July 3	271	74	24	49
Bradley, Charles S., assignor to Edison Electric Light Company, New York, N. Y. Electrical testing .....	287,501	Oct. 30	2177	591	25	423
Bradley & Co., C. F. (See Hackstadt, George W., assignor.) .....						
Bradley, Daniel R., New York, N. Y. Stand for bottles and flasks .....	288,617	Nov. 20	1041	287	25	704
Bradley, Henry C. (See Seymour, William S., assignor.) .....						
Bradley, Henry C., Camden Point, Mo. Car-coupling .....	279,321	June 12	884	245	23	2283
Bradley & Hubbard Manufacturing Company. (See Evarts, Charles A., assignor.) .....						
Bradley & Hubbard Manufacturing Company. (See Evarts, John A., assignor.) .....						
Bradley & Hubbard Manufacturing Company. (See Hendryx, Andrew B., assignor.) .....						
Bradley, Jeremy, assignor to himself and L. M. Stevens, Sparta, Wis. Check-rower for corn-planters .....	280,714	July 3	449	129	24	80
Bradley, John, North Chelmsford, Mass. Thread-guide mechanism for knitting-machines .....	270,276	Jan. 9	530	155	23	114
Bradley, John B., Vanceburg, Ky. Saw-holding device .....	288,767	Nov. 20	1236	339	25	737
Bradley, John B., Vanceburg, Ky. Saw-guide .....	288,768	Nov. 20	1237	339	25	737
Bradley, John W. (See Belknap and Bradley.) .....						
Bradley, John W., Stratford, assignor of one-half to Belknap Manufacturing Company, Bridgeport, Conn. Valve mechanism .....	280,011	June 26	1727	484	23	2440
Bradley, Milton, Springfield, Mass. Label-cutter .....	272,202	Feb. 13	765	{ 211 212 }	23	584
Bradley, William A., Oshkosh, Wis. Shingle-machine .....	271,407	Jan. 30	1962	567	23	394
Bradley, William E. (See Allen and Bradley.) .....						
Bradshaw, Edwin, assignor of one-half to J. A. Carlaw, Toronto, Ontario, Canada. Sash-balance .....	285,216	Sept. 18	1301	366	24	1141
Bradshaw, John A. (See Ring and Bradshaw.) .....						
Bradshaw, William J., Cleveland, Ohio. Flue-cleaner .....	272,640	Feb. 20	1336	375	23	689
Bradshaw, William J., and W. W. Cowley, Cleveland, Ohio. Device for feeding air to furnaces .....	275,574	Apr. 10	924	250	23	1392
Bradt, William D., Jackson, Mich., assignor to Eagle Lock Company, Terryville, Conn. Router-bit .....	281,442	July 17	1373	379	24	254
Bradwell, Thomas, and S. K. White, Chicago, Ill. Stereotyping outfit .....	283,203	Nov. 13	512	142	25	606
Brady, Charles N., and J. E. Ratcliffe, Wellsburg, W. Va. Caster .....	290,967	Dec. 25	2041	561	25	1265
Brady, Christian H., Chicago, Ill. Metallic bush for bung-holes .....	280,343	July 3	6	2	24	4
Brady, Christian H., Chicago, Ill. Bushing for faucets .....	280,344	July 3	7	3	24	4
Brady, Edwin L., New York, N. Y. Smoke-consuming furnace for locomotives .....	277,027	Jan. 23	1483	427	23	304
Brady, Gilbert A., Chicago, Ill. Clamp for sewing-machine attachments .....	277,108	May 8	756	199	23	1761
Brady, Gilbert A., Chicago, Ill. Tension for sewing-machines .....	277,449	May 15	1161	312	23	1839
Brady, Gilbert A., Chicago, Ill. Sewing-machine shuttle .....	277,873	May 22	1667	455	23	1932
Brady, James, Brooklyn, N. Y. Paper-file .....	284,570	Sept. 4	256	71	24	948
Brady, Patrick, Newark, N. J. Process of and apparatus for preserving and venting beer .....	281,963	July 24	2052	562	24	376
Brady, Thomas. (See Gregg and Briody, assignors.) .....						
Brady, Thomas F., Philadelphia, Pa. Nursery towel-rack .....	274,457	Mar. 27	1570	429	23	1127
Bradlett, Volney M., Indianapolis, Ind. Thill-coupling clip .....	282,951	Aug. 14	567	160	24	608
Bragdon, Melville C., Newton Highlands, Mass. Signal apparatus for railways .....	290,388	Dec. 18	1262	{ 354 355 }	25	1125
Bragdon, Nathaniel, Danvers, Mass. Device for lighting and extinguishing lanterns .....	273,342	Mar. 6	133	37	23	856
Bragg, Everett B., New York, N. Y. Apparatus for treating leather-scap .....	288,001	Nov. 6	272	76	25	554
Bragg, Isaac W., Kidder, Mo. Governor cut-off-valve gear .....	277,983	May 22	1794	4-9	23	1953
Bragg, Leonard G., Kalamazoo, Mich. Tree-digger .....	275,575	Apr. 10	924	251	23	1392
Brah, William, Milwaukee, Wis. Engraver's tool .....	271,306	Jan. 30	1825	530	23	370
Brah, William, Milwaukee, Wis. Preparing blocks of wood for engraving .....	274,556	Mar. 27	1710	233	23	1150
Brahn, James, Jersey City, N. J. Switch-stand .....	273,450	Mar. 6	270	72	23	879
Brahn, Thomas. (See Webley and Brahn.) .....						
Brainard, Adelbert M., Chicago, Ill. Hydrocarbon-gas stove .....	275,127	Apr. 3	327	91	23	1283
Brainard, Amos H., Hyde Park, Mass. Gear-cutting machine .....	273,451	Mar. 6	271	73	23	879
Brainard, Curtis B., Joliet, Ill. Wire-pointing machine .....	279,124	June 12	654	179	23	2245
Brainard, Curtis B., Joliet, Ill. Barbed wire for fences .....	287,091	Oct. 23	1663	456	25	321
Brainard, Curtis B., Cuyahoga Falls, assignor to himself and J. Crowell, Jr., Glenville, Ohio. Device for making fence-harbs .....	283,561	Aug. 21	1319	{ 368 369 }	24	750
Brainard, Joseph W., Kent, Ohio. Machine for making blind-slats .....	283,372	Aug. 21	1098	309	24	710
Brainard, Marvin N., assignor of one-half to R. J. Allyn, Hartford, Conn. Fire-escape .....	278,865	June 5	964	76	23	2168
Brainard, Morris F., Brooklyn, N. Y. Dumping-scow .....	289,498	Dec. 4	162	44	25	914
Brainerd, Charles A., Chicago, Ill. Electrical device for protecting wire fences .....	279,322	June 12	885	246	23	2283



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Brainerd, Frank W., Freeport, Ill. Wire-barbing machine .....	277,451	May 15	1164	313	23	1839
Brainerd, Frank W., Freeport, Ill. Creaming-can .....	284,172	Sept. 4	16	5	24	907
Brainerd, Henry C., Cleveland, Ohio. Preparing rubber plates or sheets for graining .....	287,617	Oct. 30	2347	.....	25	455
Brake, Peter, Toronto, Ontario, assignor of one-half to J. C. Steele, Vaughn township, Canada. Cooking range and stove .....	282,263	July 31	2439	671	24	446
Brakke, Andrew T., <i>et al.</i> (See Jensen, Mathias, assignor.) .....	277,984	May 22	1795	{ 489 490 }	23	1954
Bramer, Frank, Brooklyn, N. Y. Mowing-machine .....	277,984	May 22	1795	{ 489 490 }	23	1954
Bramhall, Esther A. (See Fuller, Hiram E., assignor.) .....						
Bramhall, J. H., <i>et al.</i> (See Van Sickle, George W., assignor.) .....						
Bramhall, Martin L., La Porte, Ind. Weather-strip .....	284,602	Sept. 11	542	{ 153 154 }	24	1002
Bramwell, William, Toledo, Ohio. Cutter-head for boring-machines .....	276,760	May 1	303	77	23	1678
Branch, Thomas L. (See Merrill, George P., assignor.) .....						
Branch, Isaac, Adairsville, Ga. Mowing and reaping machine .....	279,077	June 5	569	156	23	2221
Brand, Frederick J., Milldale, Conn. Machine for forming wire-work .....	274,557	Mar. 27	1711	475	23	1150
Brandis, Leopold. (See Cassin, William, assignor.) .....						
Brandis, Leopold, Brooklyn, N. Y. Faucet .....	288,769	Nov. 20	1238	339	25	737
Brandenburg, Isaac S., Peoria, Ill. Milk-cooler .....	290,519	Dec. 18	1455	402	25	1158
Brandenburg, Mary. (See Stearns, Sarah B., assignor.) .....						
Brandenburger, Andrew, <i>et al.</i> (See Barditzky, Hermann, assignor.) .....						
Brandenburger, Andrew, W. Tirre, and H. Barditzky, St. Louis, Mo. Mining-machine .....	283,858	Aug. 28	1678	474	24	828
Brandl, Gotthard, assignor of two-thirds to H. Sarre and H. Beyerhaus, Berlin, Germany. Horseshoe .....	271,307	Jan. 30	1826	530	23	370
Brandl, Joseph, New York, N. Y. Steam-generator .....	288,688	Nov. 20	1136	313	25	720
Branden, James, New York, N. Y. Metallic packing for pistons .....	283,068	Aug. 14	708	199	24	633
Brandon, John H., Chicago, Ill. Lightning-rod .....	270,379	Jan. 9	666	195	23	140
Brandt, Jacob, San Francisco, Cal. Machine for cutting out cigar-wrappers .....	277,452	May 15	1165	313	23	1839
Brandt, Jacob S. (See Rumbaugh and Brandt.) .....						
Brandt, John J., De Witt Centre, N. Y. Wrench .....	283,696	Aug. 21	1476	416	24	781
Brandt, Thomas J., Dundee, Mich. Heel-stiffener for boots and shoes .....	283,859	Aug. 28	1680	474	24	828
Brandy, James, Lawrence, Mass. Machine for manufacturing felt boots, shoes, or stockings .....	277,450	May 15	1161	312	23	1839
Branham, Alvin J., Houstonia, Mo. Velocipede .....	283,697	Aug. 21	1476	416	24	781
Branneu, James, Philadelphia, Pa. Extension-chandelier .....	285,963	Oct. 2	233	66	25	45
Brannen, James, Philadelphia, Pa. Shade-support .....	285,964	Oct. 2	234	66	25	45
Brannian, James T., Randolph, Iowa. Combined bay rake and loader .....	287,903	Nov. 6	142	42	25	533
Brannon, Patrick P., assignor, by mesne assignments, to Auerbach, Altschul & Brannon, Santa Ana, San Salvador, Central America. Coffee separator .....	271,779	Feb. 6	234	65	23	481
Branson, James L., Philadelphia, Pa. Knitting-machine. (Reissue) .....	10,271	Jan. 16	1296	374	23	267
Branson, Thomas B. (See Fink and Branson.) .....						
Brant, John D., Jr., New York, N. Y., assignor of one-half to A. V. Sargeant, Newark, N. J. Necktie-fastener .....	282,952	Aug. 14	567	160	24	608
Brantley, Henry T., Jamison, Ala. Churn .....	289,968	Dec. 11	740	209	25	1024
Brasher, Thomas M., Brooklyn, N. Y. Manipulating and firing marine torpedoes .....	287,221	Oct. 23	1828	501	25	351
Brastow, Louis C., Ashley, and G. W. Twining, East Mauch Chunk, Pa. Railway-rail curving and straightening machine .....	275,881	Apr. 17	1328	365	23	1469
Bratton, Isaac, Wilmington, Del. Suction-box for paper-making machines .....	280,564	July 3	873	75	24	49
Brauch, Philip P. (See Buntell and Brauch.) .....						
Brauchler, Franklin C., Canton, Ohio. Nut-lock .....	280,125	June 26	1860	524	23	2464
Braner, Justus, Philadelphia, Pa. Rest for ice-pitchers .....	280,520	Dec. 18	1456	402	25	1158
Brauer, Louis, Philadelphia, Pa. Calendar .....	270,730	Jan. 16	1123	322	23	235
Braun, John, Philadelphia, Pa. Pawl-and-ratchet mechanism .....	281,662	July 24	1662	453	24	308
Braun, Otto, and O. Liebreich, Berlin, Germany. Treating wool-oil to produce lanolin .....	271,192	Jan. 23	1687	.....	23	337
Braunfeld, Henry E., Philadelphia, Pa. Fire-escape .....	273,807	Mar. 13	724	199	23	968
Braunfeld, Henry E., Philadelphia, Pa. Fire-escape .....	283,961	Aug. 28	1805	511	24	852
Braunwalder, Jacob, Milwaukee, Wis. Valve-gear for steam-engines .....	286,585	Oct. 16	1011	273	25	200
Bray, John, Washington, D. C., assignor of one-half to C. H. Longley, Hartford, Conn. Paper fabric or matting .....	280,286	June 26	2052	.....	23	2498
Bray, Mellen, Newton, Mass. Manufacture of ring-sockets .....	280,786	July 10	567	158	24	107
Bray, Mellen, Newton, Mass. Manufacture of reed-plates .....	280,787	July 10	568	159	24	107
Bray, Mellen, Newton, Mass. Button .....	280,788	July 10	569	159	24	107
Bray, Mellen, Newton, and G. W. McClintock, Boston, Mass.; said McClintock assignor to said Bray. Reed for musical instruments .....	280,789	July 10	570	159	24	107
Bray, Mellen N., Boston, Mass. Lacing-stud .....	273,706	Mar. 13	600	161	23	944
Bray, Mellen N., Boston, Mass. Lacing-hook .....	273,707	Mar. 13	601	161	23	944
Bray, Morris P., New Haven, Conn. Corset .....	275,982	Apr. 17	1440	397	23	1490
Bray, Morris P., New Haven, Conn. Corset .....	279,323	June 12	886	246	23	2223
Bray, Morris P., New Haven, Conn. Corset .....	280,565	July 3	274	75	24	49
Bray, Morris P., New Haven, Conn. Corset .....	289,969	Dec. 11	741	209	25	1024
Bray, Morris P., New Haven, assignor to I. W. Birdseye, Bridgeport, Conn. Corset-spring .....	270,380	Jan. 9	667	196	23	140
Bray, Morris P., New Haven, assignor of one-half to Wallace & Sons, Ansonia, Conn. Corset-clasp .....	277,671	May 15	1425	384	23	1882
Bray, Morris P., assignor to I. Newman & Co., New Haven, Conn. Corset .....	271,780	Feb. 6	235	66	23	481
Bray, Thomas J., assignor to Oliver Brothers & Phillips, Pittsburg, Pa. Mechanism for making wagon-box straps .....	270,176	Jan. 2	409	119	23	83
Bray, Thomas J., assignor to Oliver Brothers & Phillips, Pittsburg, Pa. Drive-screw .....	289,333	Nov. 27	1921	534	25	871
Bray, Stacy B. and W., Lambertville, N. J. Horse-detacher .....	284,804	Sept. 11	797	222	24	1045
Bray, William C., Newton, Mass. Machine for setting lacing-studs .....	277,985	May 22	1797	{ 490 491 }	23	1954
Bray, William H., assignor of one-half to S. I. Crafts, Boston, Mass. Device for packing glass gage-tubes .....	276,154	Apr. 24	1654	456	23	1534
Bray, Wilson. (See Bray, Stacy B. and W.) .....						
Brayton, A. P. (See Stirk, William E., assignor.) .....						
Brayton, George B., assignor to Brayton Petroleum Engine Company, Boston, Mass. Air-pump valve .....	269,914	Jan. 2	107	32	23	22
Brayton, George B., assignor to Brayton Petroleum Engine Company, Boston, Mass. Regulating the supply of oil to vapor-engines .....	270,927	Jan. 23	1361	392	23	284
Brayton Petroleum Engine Company. (See Brayton, George B., assignor.) .....						
Brazcau, Melchior, Montreal, Quebec, Canada. Picker .....	272,118	Feb. 13	670	183	23	568
Brazelle, Benjamin, St. Louis, Mo. Steam-engine .....	271,781	Feb. 6	236	66	23	481
Brazelle, Benjamin, St. Louis, Mo. Direct-acting engine .....	284,173	Sept. 4	17	5	24	907
Bready, Charles W. (See Dutrow, David E., assignor.) .....						
Brecht, Theodore C. (See Hemje and Brecht.) .....						
Breckenridge, Henry W., assignor to J. A. Miller, trustee, Providence, R. I. Telephone-switch .....	278,494	May 29	2466	672	23	2079

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Breckenridge, Henry W., assignor, by mesne assignments, to Rhode Island Telephone and Electric Company, Providence, R. I. Electric switch-board	290,845	Dec. 25	1877	518	25	1239
Breckheimer, Matthias, Madison, Wis. Ice-harvesting and ice-loading machine	285,791	Oct. 2	13	4	25	5
Brecknell, Richard D. (See Goff, Thimmon G., assignor.)						
Bredelhorst, Friedrich, Bremen, Germany. Incidence-window	276,761	May 1	304	78	23	1678
Bredt, Otto, Barmen, Germany. Manufacture of red coloring-matter	289,613	Dec. 4	300		25	940
Breed, Richard E., Pittsburg, Pa. Machine for making hoes	280,287	June 26	2052	576 577	23	2498
Breen, Peter, assignor of one-half to L. M. Hosea, Cincinnati, Ohio. Lubricator for loose pulleys	271,193	Jan. 23	1688	487	23	337
Breen, Thomas, Knowlton, Pa. Railway-tie	272,850	Feb. 27	1619	452	23	746
Breen, Thomas, Knowlton, Pa. Railway-signal	272,851	Feb. 27	1620	453	23	746
Breen, Thomas, Knowlton, Pa. Combined letter sheet and envelope	272,852	Feb. 27	1621	453	23	746
Breen, Thomas, Knowlton, Pa. Curtain-fixture	275,351	Apr. 10	635	170	23	1343
Breen, Thomas, Knowlton, Pa. Railway-switch	276,762	May 1	304	79	23	1678
Breen, Thomas, Knowlton, Pa. Telegraph-pole	282,489	Aug. 7	11	3	24	503
Breer, Caroline H. (See Breer, Henry, assignor.)						
Breer, Henry, assignor to C. H. Breer, Syracuse, N. Y. Apparatus for treating animal matter for fertilizers	274,901	Apr. 3	12	3	23	1228
Breer, Henry, assignor to C. H. Breer, Syracuse, N. Y. Apparatus for desiccating animal matter for fertilizers	274,902	Apr. 3	13	4	23	1229
Breer, Henry, assignor to C. H. Breer, Syracuse, N. Y. Apparatus for desiccating animal matter	286,897	Oct. 16	1408	386 387	25	269
Breer, Henry, assignor to C. H. Breer, De Witt, N. Y. Apparatus for desiccating fertilizers	288,919	Nov. 20	1414	390	25	771
Breer, Henry, De Witt, assignor to C. H. Breer, Syracuse, N. Y. Apparatus for desiccating animal matter for fertilizers	280,790	July 10	572	159	24	107
Breese, Hiram T. (See Shaw, Ira C., assignor.)						
Brehmer, August, Leipsic, Germany. Paper box	285,456	Sept. 25	1590	446 447	24	1198
Brélivet, Joseph, Enosburg Falls, Vt. Candle-mold	280,566	May 3	274	75	24	49
Brondel, Philipp, St. Louis, Mo. Flexible ladder	277,672	July 15	1426	385	23	1883
Breneman, Edward. (See McSherry and Myers, assignors.)						
Brenn, George W., Philadelphia, Pa. Extension-table	290,734	Dec. 25	1742	481	25	1215
Brennan, Charles E., Charlottesville, Va. Automatic fire-extinguisher	270,731	Jan. 16	1124	322	23	235
Brennan & Co., South Western Agricultural Works. (See Weller, Thomas W., assignor.)						
Brennan, Daniel, Jr., Orange, N. J. Movable jaw for stone and ore crushers	281,829	July 24	1885	515	24	347
Brennan, Daniel J. (See Brennan, Thomas W. and D. J.)						
Brennan, James H. (See Brennan, William F., assignor.)						
Brennan, James R., assignor of one-third to L. R. Lancaster and E. H. Fudge, St. Joseph, Mo. Saw-table gage	271,408	Jan. 30	1964	568	23	395
Brennan, James W. (See Ronseau, Neeter, assignor.)						
Brennan, James W., and N. Rousseau, Chicago, Ill. Mechanism for preventing induced currents in telephone-lines	287,092	Oct. 23	1663	457	25	321
Brennan, Thomas, et al. (See Wolfe, Harvey R., assignor.)						
Brennan, Thomas W. and D. J., Wexford, Iowa. Wheel-cultivator	277,874	May 22	1668	455	23	1932
Brennan, William F., assignor of one-fourth to J. H. Brennan, Providence, R. I. Combined watch-key and cross-bar for watch-chains	274,903	Apr. 3	15	4	23	1229
Brennan, William T., Worcester, Mass. Machine for drawing wire	289,805	Dec. 11	539	150	25	987
Brenner, David H., Grand Rapids, Mich. Weight-motor	277,875	May 22	1669	455	23	1933
Brenner, Jacob, New York, N. Y. Calendar	284,207	Apr. 4	139	39	24	928
Brenner, Max, New York, N. Y. Convertible garment	285,106	Sept. 18	1170	328	24	1118
Brent, Edmund J., Muscatine, Iowa. Window-screen frame	281,964	July 24	2053	562 563	24	376
Brentano, Simon, New York, N. Y. Conduit for telegraph or telephone lines	274,710	Mar. 27	1891	527	23	1183
Brenzinger, Adam, assignor to A. Beck & Co., New York, N. Y. Quilting-machine	289,884	Dec. 11	643	179	25	1005
Bresnahan, Cornelius, assignor of one-half to D. Battle, Detroit, Mich. Vacuum-relief for fire-engine boilers and heaters	277,862	May 15	1646	449	23	1923
Bretney, Edwin W., Louisville, Ky. Harness-saddle	275,576	Apr. 10	925	251	23	1392
Brett, George, assignor to O. R. Peck, Toronto, Ontario, Canada. Pump	273,663	Mar. 6	538	145	23	926
Brett, Thomas, Cleveland, Ohio. Fire-proof safe	286,996	Oct. 23	1538	424	25	206
Brettell, George E., Rochester, N. Y. Iron-planer. (Reissne.)	10,410	Nov. 27	1969	547	25	878
Brevort, Henry L. (See Thomas and Brevort.)						
Brewer, Adolph F., New York, N. Y. Clothes-line coupling	289,334	Nov. 27	1922	534	25	871
Brewer, Frank L., Bedford, Iowa. Attachment for check-rows	277,673	May 15	1427	385	23	1883
Brewer, Roland L., assignor to Colts Patent Fire-Arms Manufacturing Company, Hartford, Conn. Breech-loading fire-arm	279,324	June 12	887	247	23	2283
Brewer, Russell, New York, assignor of one-fifth to G. Engels, Brooklyn, N. Y. Car-axle box	285,217	Sept. 18	1301	366	24	1142
Brewster, Edward E., Holly, Mich. Rein-holder	282,609	Aug. 7	162	49	24	529
Brewster, Elias M., Norwich, Conn. Tea-kettle	279,635	June 19	1276	354	23	2355
Brewster, Henry, et al. (See Mott, George A., assignor.)						
Brewster, Henry, et al. (See Ostmoire, William A., assignor.)						
Brewster, Henry, et al. (See Stahmel, Herman F., assignor.)						
Brewster, Joseph W. (See Kelly, Dennis, assignor.)						
Brewtnall, Arthur W., Westminster, England. Suspending and circuit-controlling mechanism for electroliers	284,805	Sept. 11	798	223	24	1045
Breyer, Charles A., Philadelphia, Pa. Soap	269,823	Jan. 2	3		23	3
Breyer, Joseph, assignor of one-half to J. Kauffman, Cincinnati, Ohio. Lock	285,382	Sept. 25	1500	422	24	1183
Breyfozle, William L. (See Van Dusen, Charles, assignor.)						
Brick, Samuel R., Stapleton, N. Y. Safety gas-tank for vessels	283,962	Aug. 28	1806	511	24	852
Bricker, David. (See Getty and Bricker.)						
Brickett, John, Danforth, Ill. Check-rower	284,603	Sept. 11	543	154	24	1002
Brickhouse, John B., Clarksville, Tenn. Device for lifting wagon-bodies	287,502	Oct. 30	2178	591	25	423
Bricknell, Augustus L. (See Quatremaine, George W., assignor.)						
Bride, Cotto T., Washington, D. C. Pipe-joint packing	274,434	Mar. 20	1528	420	23	1113
Bridewell, Richard F., San Francisco, Cal. Street-car propulsion	279,325	June 12	890	247	23	2284
Bridge, John, Detroit, Mich. Car-coupling link	275,460	Apr. 10	781	209	23	1368
Bridge, Lewis. (See Gornly and Bridge.)						
Bridgeport Automatic Safety Ladder and Hardware Company. (See Stever, Jeremiah, assignor.)						
Bridgeport Brass Company. (See Reed, Thomas S., assignor.)						
Bridgeport Brass Company. (See Somers, George B., assignor.)						
Bridgeport Brass Company. (See Somers and Stoddard, assignors.)						
Bridges, Charles, San Fernando, Cal. Equalizing apparatus for pumping and other machinery	270,007	Jan. 2	215	02	23	44



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Bridges, Charles, San Fernando, Cal. Ladder	270,008	Jan. 2	216	62	23	44
Bridges, David A., assignor of three-fourths to J. Gage, Vineland, N. J. Bench-plane	271,569	Jan. 30	2167	624	23	430
Bridges, Dennis M., Woodstock, Ill. Gate	273,452	Mar. 6	273	74	23	679
Bridges, John E. (See Bickle and Bridges.)						
Bridges, John R., Philadelphia, Pa. Knitting-machine	270,928	Jan. 23	1362	392 393	23	284
Bridges, Mary J., assignor to herself and M. E. Gunn, Wimberly Mill, Tex. Combined clothes-washer and churn	273,453	Mar. 6	274	74	23	880
Bridgman, Almon, Berlin, and J. Challoner, Omro, assignors to Yates Manufacturing Company, Berlin, Wis. Wood-polishing machine	285,728	Sept. 25	1919	544 545	24	1259
Brierly, Fitzroy K., New Brighton, Pa. Coffee-mill	284,271	Sept. 4	140	39	24	928
Biegel, Leo A., Cincinnati, Ohio. Circuit-closer for electric alarms	287,618	Oct. 30	2348	633	25	455
Brigg, William W., Washington, D. C. Auger and gimlet	270,200	Jan. 9	440	129	23	97
Brigg, William W., Washington, D. C. Boring-bit	274,711	Mar. 27	1891	527	23	1183
Brigg, William W., Washington, D. C., assignor of one-half to P. F. Herwig, New Orleans, La. Leather-cutter	273,018	Feb. 27	1820	510	23	780
Brigg, William W., Washington, D. C., assignor of one-half to P. F. Herwig, New Orleans, La. Leather-cutter	273,019	Feb. 27	1821	510	23	780
Briggs, Chester C. (See Briggs, George S., assignor.)						
Briggs & Co., F. H. & D. (See Woodman, Joseph C., assignor.)						
Briggs, George, New Sharon, Iowa. Bee-hive	280,126	June 26	1861	525	23	2464
Briggs, George S., assignor of one-third to C. C. Briggs, Rockford, Ill. Check-rower for planters	288,158	Nov. 6	448	125 126	25	586
Briggs, J. Smith, Kankakee, Ill. Corn-harvester	286,772	Oct. 16	1247	338	25	241
Briggs, John N., Coeymans, N. Y. Snow-plow	285,383	Sept. 25	1501	422	24	1183
Briggs, Joshua, Peterborough, N. H. Folding stool	272,853	Feb. 27	1621	453 454	23	747
Briggs, Lucius. (See Darling, James, assignor.)						
Briggs, M. Willett, et al. (See Byard, Washington I., assignor.)						
Briggs, Marvin A., assignor of one-half to O. P. Clifton, Pataskala, Ohio. Churn	278,391	May 29	2338	639	23	2057
Briggs, Orlando P., assignor to D. H. Donovan, Chicago, Ill. Barbed fence-wire	272,407	Feb. 20	1039	291	23	637
Briggs, Orlando P., assignor to Thorn Wire Hedge Company, Chicago, Ill. Machine for making barbed wire	281,443	July 17	1375	379 380 381	24	255
Briggs, Orlando P., assignor to Thorn Wire Hedge Company, Chicago, Ill. Wire-barbing machine	281,444	July 17	1384	380 381	24	256
Briggs, Orlando P., assignor to Thorn Wire Hedge Company, Chicago, Ill. Machine for stringing barbs on wires	282,698	Aug. 7	268	77, 78	24	546
Briggs, Oscar E., Binghamton, N. Y. Bracket-seat	272,522	Feb. 20	1181	330	23	661
Briggs, Richard F., Salisbury, Mass. Two-wheeled vehicle	279,531	June 19	1159	321	23	2334
Briggs, Richard H., and J. H. Dougherty, Whistler, Ala. Car-door fastening	281,174	July 10	1026	287	24	188
Briggs, Warren R., Bridgeport, Conn. Tuning-pin for stringed instruments	277,211	May 8	878	233	23	1782
Briggs, William H., and W. Robinson, Chicago, Ill., assignors to Adams & Westlake Manufacturing Company, of Michigan. Lamp	272,203	Feb. 13	767	212	23	584
Brigham, Jonathan W., assignor of one-half to T. A. Hodgkins, Rockford, Ill. Seed-planting machine	290,389	Dec. 18	1265	355	25	1126
Brigham, Lyseom, Orangeville Mills, Mich. Soft-ground horseshoe	285,562	Sept. 25	1710	483	24	1222
Brigham, Lyseom, Orangeville Mills, Mich. Soft-ground horseshoe	285,563	Sept. 25	1711	483	24	1222
Brighau, Waldo B., et al. (See Knowlton, Albion, assignor.)						
Brigham, Wilbur F., et al. (See Knowlton, Albion, assignor.)						
Bright, Harvey S., Van Alstyne, Tex. Medicinal compound	275,352	Apr. 10	636	-----	23	1343
Bright, Richard A., Jr., Providence, assignor to himself and M. Fish, Valley Falls, R. I. Cigar-machine	279,125	June 12	655	179	23	2245
Brill, George M., Philadelphia, Pa. Car-brake	286,773	Oct. 16	1251	338	25	242
Brillinger, Edwin, York, Pa. Wood-graining machine	288,302	Nov. 13	634	174	25	626
Brillinger, Samuel. (See Beam and Brillinger.)						
Brimer, Jacob B. and W. M., Richland Centre, Wis. Elevator	277,212	May 8	880	234	23	1782
Brimer, William M. (See Brimer, Jacob B. and W. M.)						
Brimhall, Elmore. (See Day, Thomas, assignor.)						
Brink, Albert, et al. (See Stürmer, August, assignor.)						
Brinkerhoff, Alexander W., Upper Sandusky, Ohio. Tobacco-pouch	271,028	Jan. 23	1485	428	23	304
Brinkerhoff, Alexander W., Upper Sandusky, Ohio. Ink-bottle	275,983	Apr. 17	1441	397	23	1490
Brinkerhoff, Alexander W., Upper Sandusky, Ohio. Ointment-injector	277,213	May 8	881	234	23	1783
Brinkerhoff, Alexander W., Upper Sandusky, Ohio. Operating-table	283,199	Aug. 14	869	242 243	24	661
Brinkerhoff, Alexander W., Upper Sandusky, Ohio. Deflector for railway passenger-cars	286,381	Oct. 9	756	204	25	148
Brinkerhoff, Jacob and W. M., Auburn, N. Y., assignors to Washburn & Moen Manufacturing Company, Worcester, Mass. Erecting wire fences	287,222	Oct. 23	1830	501	25	351
Brinkerhoff, Warren M. (See Brinkerhoff, Jacob and W. M.)						
Brinkerhoff, Warren M., Auburn, N. Y. Lubricating mechanism	282,837	Aug. 7	431	122	24	576
Brinkerhoff, Warren M., Auburn, N. Y. Stay-roller for sliding doors	287,223	Oct. 23	1831	501	25	351
Brinkerhoff, Warren M., Auburn, N. Y. Stay-roller for sliding doors	290,521	Dec. 18	1457	402	25	1158
Brinkhoff, Julius, Pittsburg, Pa. Vegetable slicer and grater	290,390	Dec. 18	1267	356	25	1126
Brintnall, Thomas M., Kansas City, Mo. Blind-stop	274,881	Mar. 27	2100	583	23	1218
Brinton, Caleb, Chicago, Ill. Door-hanger	286,774	Oct. 16	1251	338 339	25	242
Brinton, Caleb, Chicago, Ill. Door-hanger	289,885	Dec. 11	644	179 180	25	1006
Brinton, Caleb, Chicago, Ill. Door-hanger	289,886	Dec. 11	646	180	25	1006
Brintzinghoffer, George, Philadelphia, Pa. Brush	290,522	Dec. 18	1458	403	25	1158
Brody, Barnad, Detroit, Mich. Safety-guard for railways	279,700	June 19	1353	377	23	2368
Brody, Edward. (See Gregg and Brody.)						
Brisben, William M., Philadelphia, Pa. Insulating underground electric wires	278,087	May 22	1917	526	23	1976
Brisben, William W., Cleveland, Ohio. Lubricator	281,010	July 10	826	230	24	153
Brislin, David A., St. Louis, Mo. Pancet	286,256	Oct. 9	584	160	25	117
Brislin, John J., assignor to E. S. Lewis, Albany, N. Y. Device for joining the ends of leather belting	272,523	Feb. 20	1182	330	23	661
Brissard, Henri A., Paris, France. Ruling-machine	286,382	Oct. 9	758	204 205	25	148
Brissett, Henry R., Lowell, and J. Howe, Tyngsborough, Mass.; said Brissett assignor to said Howe. Composition for coating and insulating underground wires	283,200	Aug. 14	870	-----	24	662
Brisson, Xavier, et al. (See Savoie, Joseph, assignor.)						
Brisson, Louis, et al. (See Savoie, Joseph, assignor.)						
Bristol, Edmund R., Madison, Wis. Car-brake	270,732	Jan. 16	1125	322	23	235
Bristol, Edmund R., Madison, Wis. Car-brake	281,445	July 17	1387	381	24	257
Bristow, Albert W., Boston, Mass. Clothes-line clamp	285,005	Sept. 18	1043	293	24	1098

## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Britton, Channing M., <i>et al.</i> (See Mott, George A., assignor.)						
Britton, Channing M., <i>et al.</i> (See Ostnire, William A., assignor.)						
Britton, Channing M., <i>et al.</i> (See Stahmer, Herman F., assignor.)						
Britton, John W., <i>et al.</i> (See Mott, George A., assignor.)						
Britton, John W., <i>et al.</i> (See Ostnire, William A., assignor.)						
Britton, John W., <i>et al.</i> (See Stahmer, Herman F., assignor.)						
Britton, Matthew. (See Wiswall, Alvah, assignor.)						
Broadbeck, Jacob. (See Miller, Jacob D., assignor.)						
Broadbent, Frederick, Providence, R. I. Kink-catcher for spinning-frames	280,567	July 3	275	75	24	50
Brobst, Charles A., Rehersburg, Pa. Bag-fastener	281,663	July 24	1663	454	24	308
Brobst, Daniel, Portland, Mich. Roofing compound	284,371	Sept. 4	257		24	948
Brock, Alvan D., Washington, D. C. Manufacture of coiled metallic pipes	276,763	May 1	306	79	23	1678
Brock, E. F., <i>et al.</i> (See Wood, Edwin A., assignor.)						
Brock, Matthias, Boston, Mass., assignor to McKay and Copeland Lasting Machine Company, Portland, Me. Lasting boots and shoes	264,174	Sept. 4	19	5	24	908
Brock, Matthias, Boston, Mass., assignor to McKay & Copeland Lasting Machine Company, Portland, Me. Lasting-machine	286,898	Oct. 16	1409	387	25	269
Brock, Matthias, Boston, Mass., assignor to McKay & Copeland Lasting Machine Company, Portland, Me. Lasting-machine	288,689	Nov. 20	1137	313	25	720
Brock, William E., Dunellen, N. J., assignor to Arnold & Wendt, New York, N. Y. Window-screen	290,173	Dec. 11	982	277	25	1068
Brock, William H., Corono, assignor of four-tenths to J. W. Alexander, New York, N. Y. Box-nailing machine	285,729	Sept. 25	1921	545	24	1260
Brock, William M., assignor of one-half to W. H. Douty, Shamokin, Pa. Telephone central-office apparatus	282,699	Aug. 7	278	78, 79	24	547
Brockett, Atwater E. (See Wilbur, George W., assignor.)						
Brockner, Washington. (See Randel, Charles D., assignor.)						
Brockner, Washington. (See Randel and Brockner.)						
Brockunier, Charles W., Bridgeport, Ohio, and D. C. Ripley, Pittsburg, Pa. Glass-annealing leet	270,929	Jan. 23	1364	{ 393 394 }	23	285
Brockway, Anna, Ingall's Crossing, N. Y. Fruit-bleacher	287,224	Oct. 23	1833	501	25	351
Broderick, John, <i>et al.</i> (See Conway, Michael L., assignor.)						
Broderick, Thomas M. (See Gilbert, George S., assignor.)						
Broderick, Thomas, Pittsburg, Pa. Hame-tug	272,641	Feb. 20	1337	375	23	689
Broderick, Thomas, Pittsburg, Pa. Thill-tug	290,523	Dec. 18	1459	403	25	1158
Brokaw, Norman H., Marinette, Wis. Block-presser for wood-paper-pulp machines	271,409	Jan. 30	1965	568	23	395
Brokaw, Norman H., Marinette, Wis. Block-presser for wood-paper-pulp machines. (Re-issue)	10,429	Dec. 25	2103	580	25	1275
Broolly, Hugh, Albany, N. Y. Tailor's measure	277,453	May 15	1166	{ 313 314 }	23	1840
Bromley, James M., assignor to W. E. Smith, Plattsburg, N. Y. Two-wheeled vehicle	281,337	July 17	1247	346	24	233
Brong, James E., and E. A. Carter, Canisteo, N. Y. Lumber for walls	285,218	Sept. 18	1302	367	24	1142
Brönnner, Julius, Frankfort-on-the-Main, Germany. Purifying impure anthrachinone and alizarine	275,128	Apr. 3	329	91	23	1283
Bronnum, Lars F., New York, N. Y. Knockdown or portable building	271,398	Jan. 30	1828	5-0	23	370
Bronson, Edgar B., San Antonio, Tex. Gun-case	290,205	Dec. 18	1030	290	25	1085
Bronson, James M., Chicago, Ill. Removable book-cover	290,846	Dec. 25	1878	{ 518 519 }	25	1239
Bronson, John G., Chicago, Ill. Window-ventilator	270,733	Jan. 16	1125	322	23	235
Bronson, Thomas J., and A. Armstrong, Jacksonville, Ill. Railway sleeper and chair	277,000	May 8	612	160	23	1737
Bronson, Thomas J., and A. Armstrong, Jacksonville, Ill. Railway-tie	289,806	Dec. 11	540	151	25	987
Brook, Thomas J. (See Sayles and Brook.)						
Brooke, Aries P., Woodbury, N. J., assignor to W. Brookfield, Brooklyn, N. Y. Press and mold for molding glass	275,984	Apr. 17	1442	397	23	1490
Brooke, Francis M., Philadelphia, Pa. Attachment for printing-presses	288,404	Nov. 13	785	212	25	652
Brooke, Homer, Jersey City, N. J. Molding screw-forms in plastic material	283,321	Aug. 14	1017	285	24	690
Brooke, Isaac, Royer's Ford, Pa. Inkstand	271,410	Jan. 30	1966	568	23	395
Brooke, Isaac, Royer's Ford, Pa. Inkstand	270,532	June 19	1160	321	23	2334
Brooke, Isaac, Royer's Ford, Pa. Inkstand	280,568	July 3	277	76	24	50
Brooke, Thomas G., Newark, Ohio. Corn and fodder binding device	277,214	May 8	882	234	23	1763
Brookes, Elijah, Hawarden, county of Flint, England. Toasting-fork	270,277	Jan. 9	531	156	23	114
Brookfield, William. (See Brooke, Aries P., assignor.)						
Brookmire, James H., St. Louis, Mo. Apparatus for mixing sugar	278,392	May 29	2339	640	23	2057
Brooks, Adolphus E., Jefferson, Ga. Cultivator	275,577	Apr. 10	926	251	23	1392
Brooks, Alfred A., Cambridge, Mass. Boot or shoe sole	280,791	July 10	573	160	24	108
Brooks, Austin A., assignor of one-half to J. A. Whitfield and H. M. Wilcox, Eau Claire, Wis. Car-truck	278,495	May 29	2467	673	23	2079
Brooks, Byron A. (See Knowles, Edward R., assignor.)						
Brooks, Byron A., Flushing, N. Y. Type-writing machine	272,023	Feb. 13	547	148	23	547
Brooks, Byron A., New York, N. Y. Type-writer	273,454	Mar. 6	275	74, 75	23	880
Brooks, Byron A., New York, N. Y. Type-writing machine	274,262	Mar. 20	1309	361	23	1075
Brooks, Charles A., Lenox, Iowa. Trace-carrier	274,712	Mar. 27	1892	528	23	1184
Brooks & Co., E. J. (See Brooks, Edward J., assignor.)						
Brooks & Co., E. J. (See Penfold, Alexander D., assignor.)						
Brooks, David D., Washington, S. C. Millstone-dress	284,535	Sept. 4	460	130	24	982
Brooks, Douglas A., <i>et al.</i> (See Farmer, James C., assignor.)						
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Co., New York, N. Y. Car-door fastening	270,874	Jan. 16	1288	{ 371 372 }	23	266
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Co., New York, N. Y. Metallic tag	278,214	May 22	2084	574	23	2004
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Co., New York, N. Y. Metallic seal	278,866	June 5	265	76	23	2168
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Co., New York, N. Y. Seal-lock for car-doors	285,219	Sept. 18	1303	367	24	1142
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Co., New York, N. Y. Seal-lock	285,384	Sept. 25	1502	423	24	1183
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Co., New York, N. Y. Metallic seal	286,775	Oct. 16	1253	339	25	242
Brooks, Ethan, West Springfield, Mass. Connection-well for steam street-mains	275,129	Apr. 3	333	91	23	1283
Brooks, Howard F., Chicago, Ill. Child's carriage	276,955	May 1	533	144	23	1721
Brooks, James W., trustee. (See Glidden, Charles W., assignor.)						
Brooks, James W., <i>et al.</i> , trustees. (See Goddu, Louis, assignor.)						
Brooks, James W., <i>et al.</i> , trustees. (See Hopkins, William P., assignor.)						
Brooks, John, Plainfield, N. J. Printing-press	274,558	Mar. 27	1712	{ 475 476 }	23	1150



*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Brooks, John, Plainfield, N. J. Inking apparatus for printing-presses.....	280,127	June 26	1863	525	23	2465
Brooks, John, Detroit, Mich. Pill-machine.....	290,524	Dec. 18	1460	{ 403 404 }	25	1158
Brooks, John, and W. Scully, Detroit, Mich. Gear-cutter.....	276,346	Apr. 24	1903	528	23	1576
Brooks, John C., assignor to Textile Manufacturing Company, Westfield, Mass. Casket-knob.....	270,177	Jan. 2	410	120	23	83
Brooks, Joseph A., Denmark, Tenn. Straw-cutter.....	284,175	Sept. 4	21	5	24	908
Brooks, Leonard R., Spring Valley, N. Y. Road-scraper.....	284,604	Sept. 11	544	154	24	1002
Brooks, Merritt S., Chester, Conn. Tap-wrench.....	272,408	Feb. 20	1040	291	23	637
Brooks, Oliver N., Guilford, Conn. Fire-escape.....	285,564	Sept. 25	1711	483	24	1222
Brooks, Reese G., Scranton, Pa. Railway-switch adjusting and locking device.....	274,713	Mar. 27	1893	528	23	1184
Brooks, Theodore L., Port Byron, N. Y. Feeding device for horses.....	289,214	Nov. 27	1778	492	25	842
Brooks, Thomas A., et al. (See Hutson, William L., assignor.)	284,806	Sept. 11	799	223	24	1045
Brooks, Willard P., Topeka, Kans. Fence-post.....	272,373	Feb. 13	973	{ 272 273 }	23	621
Brooks, William H., New York, N. Y. Apparatus for generating vapor from liquid hydro-carbon.....	273,942	Mar. 13	905	247	23	996
Brooks, William H., New York, N. Y. Hydrocarbon-burner.....	278,496	May 29	2467	673	23	2080
Broomall, John M. Jr., et al. (See Bott, Joseph E., assignor.)	290,735	Dec. 25	1743	482	25	1215
Broome, Joseph B., Oswego, N. Y. Hat-holder.....	270,382	Jan. 9	669	196	23	140
Brosemann, Ernst. (See Odiorne and Brosemann.)	290,525	Dec. 18	1463	404	25	1159
Brosius, John M., East Dallas, Tex. Running-gear.....	285,565	Sept. 25	1713	484	24	1222
Brostrom, Charles A., Rock Island, Ill. Harrow.....	284,372	Sept. 4	258	71	24	948
Brotherhood, Fred, Charleston, S. C. Excavating and apparatus therefor.....	278,680	June 5	6	2	23	2126
Brotherhood, Peter, Lambeth, county of Surrey, England. Multiple-cylinder engine.....	272,524	Feb. 20	1183	330	23	661
Brothers, Eli and J., Lynn, Mass. Pinchers.....	284,373	Sept. 4	259	72	24	948
Brothers, Joseph. (See Brothers, Eli and J.)	273,455	Mar. 6	277	75	23	880
Brott, Graham, Waterford, N. Y. Telegraph-wire coupling.....	271,214	Jan. 30	1715	496	23	350
Brottor, George W. (See Graves and Brottor.)	271,215	Jan. 30	1716	497	23	350
Brough, Thomas J., Baltimore, Md. Carburetor.....	290,736	Dec. 25	1744	482	25	1215
Bronghton, Frederick. (See Harmer, Henry, assignor.)	272,024	Feb. 13	549	148	23	547
Brower, Calvin W. (See Angus, Robert B., assignor.)	274,714	Mar. 27	1895	528	23	1184
Brower, George W., Crawfordsville, Ind. Hay elevator and carrier.....	271,214	Jan. 30	1715	496	23	350
Brower, John, Woodland, Cal. Adjustable grate for stoves and ranges.....	271,215	Jan. 30	1716	497	23	350
Brower, Joseph W., Indianapolis, Ind. Coal-oil stove.....	290,736	Dec. 25	1744	482	25	1215
Brower, Warren, Newburg, N. Y. Machine for sanding brick-molds.....	272,024	Feb. 13	549	148	23	547
Brown, Abner S., Cambridge, Nehr. Tongue-support.....	274,714	Mar. 27	1895	528	23	1184
Brown, Abram C. (See Barker, John, assignor.)	275,578	Apr. 10	927	252	23	1393
Brown, Addison P., New York, N. Y. Combined pocket-knife and cigar-cutter.....	285,006	Sept. 18	1048	394	24	1098
Brown, Adolph G., New York, N. Y. Box for stationery.....	288,304	Nov. 13	513	142	25	606
Brown, Ainsworth, Colorado Springs, Colo. Rolling window-screen.....	281,011	July 10	827	{ 230 231 }	24	153
Brown, Albert, Mendocino, Cal. Paper-bag and twine holder combined.....	271,446	July 17	1387	{ 351 352 }	24	257
Brown, Alexander C. (See Brown, William L. and A. C.)	284,435	Mar. 20	1529	421	23	1113
Brown, Alexander E., Cleveland, Ohio. Hoisting and conveying machine.....	282,838	Aug. 7	432	122	24	577
Brown, Alexander E., Cleveland, Ohio. Hoisting and conveying machine.....	272,642	Feb. 20	1338	375	23	689
Brown, Alexander T., assignor to L. C. Smith, Syracuse, N. Y. Gun-lock.....	289,062	Nov. 27	1596	442	25	809
Brown, Anna M. (See Long, Oliver, assignor.)	278,770	June 5	114	32, 33	23	2143
Brown, Arthur L. (See Hoppin and Brown.)	272,409	Feb. 20	1041	{ 291 292 }	23	637
Brown, Augustus. (See Fredricks and Brown.)	289,383	Dec. 4	14	25	889	
Brown, Campbell C., et al. (See Onderdonk, Lansing, assignor.)	273,943	Mar. 13	906	247	23	996
Brown, Charles, Winterthur, Switzerland. Railway running-gear.....	279,909	June 26	1060	448	23	2418
Brown, Charles, Lynn, Mass., assignor to American Staple Sewing Machine Company, Putnam, Conn. Boot and shoe sewing machine.....	289,383	Dec. 4	14	25	889	
Brown, Charles A., E. B. Denison, and C. D. Brown, Portland, Me. Box-board.....	273,943	Mar. 13	906	247	23	996
Brown, Charles B., St. Louis, Mo. Door-knob attachment.....	279,909	June 26	1060	448	23	2418
Brown, Charles B., Chicago, Ill. Thimble-skein.....	275,579	Apr. 10	928	252	23	1393
Brown, Charles D. (See Brown, Denison, and Brown.)	277,863	May 15	1646	449	23	1923
Brown, Charles E. W., Pittsburg, Pa. Device for truing grindstones and emery-wheels.....	275,579	Apr. 10	928	252	23	1393
Brown, Charles H., et al. (See Farmer, James C., assignor.)	277,863	May 15	1646	449	23	1923
Brown, Charles O. (See Cunningham, Fieldon B., assignor.)	275,130	Apr. 3	334	92	23	1283
Brown, Charles T., assignor of one-half to F. L. Brown, Chicago, Ill. Car starter and brake.....	287,414	Oct. 30	2069	562	25	402
Brown & Co. (See Yakel, Levi, assignor.) (Reissue.)	276,764	May 1	307	79, 80	23	1679
Brown & Co., R. H. (See Reid, Charles H., assignor.)	275,130	Apr. 3	334	92	23	1283
Brown, D. Austin, Boston, Mass. Device for handling glassware.....	284,808	Sept. 11	802	224	24	1046
Brown, Daniel C., North Collins, N. Y. Sap-spout.....	273,456	Mar. 6	279	75	23	881
Brown, David H. (See Davis and Brown.)	288,405	Nov. 13	786	{ 212 213 }	25	652
Brown, David J. (See Heston and Brown.)	277,674	May 15	1428	355	23	1883
Brown, David R., St. Louis, Mo. Harvester.....	279,219	June 12	754	208	23	2262
Brown, E. C., et al. (See Cowell, Edward R. E., assignor.)	278,771	June 5	116	33	23	2143
Brown, E. Herman, Baltimore, Md. Fire-escape.....	284,536	Sept. 4	461	130	24	982
Brown, Edward, Philadelphia, Pa. Open-grate stove.....	284,943	Sept. 11	960	269	24	1075
Brown, Edward B., Brimfield, Mass. Stock-car.....	280,569	July 3	278	76	24	50
Brown, Edward R., Spartenburg, S. C. Car-coupling.....	284,807	Sept. 11	800	{ 223 224 }	24	1045
Brown, Edwin, Worcester, Mass. Mechanism for making belts, &c.....	277,674	May 15	1428	355	23	1883
Brown, Edwin H., Brooklyn, N. Y. Mechanical musical instrument.....	279,219	June 12	754	208	23	2262
Brown, Erastus E. (See Cook, James W., assignor.)	278,771	June 5	116	33	23	2143
Brown, F. Barton, assignor of one-half to G. Frost & Co., Boston, Mass. Clasp.....	284,536	Sept. 4	461	130	24	982
Brown, F. Barton, assignor of one-half to G. Frost & Co., Boston, Mass. Clasp.....	284,943	Sept. 11	960	269	24	1075
Brown, Felix, New York, N. Y. Lubricator for journals.....	280,569	July 3	278	76	24	50
Brown, Felix, New York, N. Y. Fog-signal.....	284,807	Sept. 11	800	{ 223 224 }	24	1045
Brown, Fernando. (See Talbot and Brown.)	288,002	Nov. 6	273	77	25	554
Brown, Flora L. (See Brown, Charles T., assignor.)	275,131	Apr. 3	334	92	23	1283
Brown, Francis W., Rochester, N. Y. Insulating, carrying, and laying electric wires.....	275,131	Apr. 3	334	92	23	1283
Brown, Frank. (See Dunbar, Junius H., assignor.)						
Brown, Frank, Chagrin Falls, Ohio. Fence-post.....						

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Brown, Frank C., <i>et al.</i> (See Lutz, Charles H., assignor.)						
Brown, Frank M., Boston, and C. B. Bosworth, Everett, Mass., assignors to Helios Electric Light Company of Maine. Commutator for dynamo-electric machines	280,288	June 26	2057	578	23	2499
Brown, Fred H., Boulder, Colo. Apparatus for detecting mineral ores	274,882	Mar. 27	2101	583	23	1218
Brown, George, <i>et al.</i> (See Stamour, John B., assignor.)						
Brown, George L. (See Bruck, David T., assignor.)						
Brown, George W., Galesburg, Ill. Seed-planter. (Reissue)	10,294	Mar. 13	1091	301	23	1029
Brown, George W., Galesburg, Ill. Corn-planter	278,497	May 29	2469	673 674	23	2080
Brown, George W., Galesburg, Ill. Corn-planter	278,498	May 29	2471	674	23	2080
Brown, George W., Galesburg, Ill. Corn-planter	278,499	May 29	2472	674	23	2081
Brown, George W., Galesburg, Ill. Corn-planter check-rower	278,500	May 29	2474	675	23	2081
Brown, George W., and H. Lambert, Salem, N. J. Can-filling machine	289,807	Dec. 11	541	151	25	987
Brown, George W., and J. C. Tunnichliff, Galesburg, Ill. Corn-planter check-rower	278,653	May 29	2656	727	23	2112
Brown, Gilman W., West Newbury, Mass. Mechanism for indicating the longitudinal expansion of the operative cord of a steam-engine indicator	284,176	Sept. 4	21	6	24	908
Brown, Henry H., Spencerport, N. Y. Fruit-press	281,830	July 24	1887	515	24	348
Brown, Henry S., Hartford, Conn. Shrinkage-gage	271,411	Jan. 30	1966	568	23	395
Brown, Heston & Co. (See Heston, David, assignor.)						
Brown, Heston & Co. (See Heston and Brown, assignors.)						
Brown, Ira, <i>et al.</i> (See Kelly, Robert M., assignor.)						
Brown, Israel F., New London, Conn. Wood-screw	281,831	July 24	1887	515	24	348
Brown, Israel F., New London, Conn. Car-truck	286,776	Oct. 16	1955	339	25	242
Brown, Jackson. (See Smith, James W., assignor.)						
Brown, James, Paine's Hollow, N. Y. Car-coupling	287,415	Oct. 30	2070	563	25	402
Brown, James H., Ottawa, Ill. Oil-can for oiling machinery	290,206	Dec. 18	1031	290	25	1085
Brown, James O., Bangor, Me., assignor to Brown Quadricycle Company, Philadelphia, Pa. Velocipede. (Reissue)	10,307	Apr. 10	1209	331	23	1440
Brown, John, assignor to J. W. Tufts, Medford, Mass. Head for siphon-bottles	289,063	Nov. 27	1596	442	25	809
Brown, John C., Davenport Centre, N. Y. Butter-package	273,020	Feb. 27	1823	510	23	780
Brown, John H., Urbana, Ohio. Cotton-chopper	276,557	May 1	14	4	23	1629
Brown, John H., assignor to Brown Standard Fire Arms Company, New York, N. Y. Breech-loading fire-arm	290,737	Dec. 25	1745	482	25	1216
Brown, John H., assignor to Brown Standard Fire Arms Company, New York, N. Y. Gun-barrel	290,738	Dec. 25	1747	483	25	1216
Brown, John H., assignor to Brown Standard Fire Arms Company, New York, N. Y. Sight for fire-arms	290,739	Dec. 25	1748	483	25	1216
Brown, John H., assignor to Brown Standard Fire Arms Company, New York, N. Y. Fire-arm	290,740	Dec. 25	1750	483	25	1216
Brown, John W., Brooklyn, N. Y. Apparatus for drying malt	277,876	May 22	1670	456	23	1033
Brown, John W., Jr., Baltimore, Md. Machine for cutting green corn from the cob	273,457	Mar. 6	280	76	23	881
Brown, Joseph R., Bridgeport, Conn., assignor to Automatic Fire Extinguisher Company, New York, N. Y. Automatic fire-extinguisher	278,215	May 22	2086	574	23	2004
Brown, Joseph R., Bridgeport, Conn., assignor to Automatic Fire Extinguisher Company, New York, N. Y. Automatic fire-extinguisher	278,216	May 22	2087	574	23	2005
Brown, Joseph R., Bridgeport, Conn., assignor to Automatic Fire Extinguisher Company, New York, N. Y. Automatic fire-extinguisher	278,217	May 22	2088	575	23	2005
Brown, Joseph R., Bridgeport, Conn., assignor to Automatic Fire Extinguisher Company, New York, N. Y. Automatic fire-extinguisher	278,218	May 22	2088	575	23	2005
Brown, Joseph R., Providence, R. I., assignor to Automatic Fire Extinguisher Company, New York, N. Y. Automatic fire-extinguisher	278,219	May 22	2090	575	23	2005
Brown, Joshua, assignor of one-half to F. Hardwick, Quincy, Mass. Key-hole guard	269,824	Jan. 2	4	1	23	3
Brown, Joshua, Jr., New York, N. Y. Sign	276,558	May 1	16	5	23	1629
Brown, Justus N., Owatonna, Minn. Portfolio	284,272	Sept. 4	141	40	24	928
Brown, Leander S., Sharpsburg, Pa. Ash-sifting shovel	281,012	July 10	831	281	24	154
Brown, Lorenzo D. (See Stevens, Nathan P., assignor.)						
Brown, Lucian, <i>et al.</i> (See Stamour, John B., assignor.)						
Brown, M. Harrison, and C. F. Hyde, Ottawa, Kans. Combined wire and picket fence	277,877	May 22	1671	456	23	1933
Brown Manufacturing Company, O. E. (See Rickerson, Sherman B., assignor.)						
Brown, Martin B. (See Van Allen, George W., assignor.)						
Brown, Morgan W., assignor to W. Quinlan, Brooklyn, N. Y. Preparing paper for copying purposes	283,322	Aug. 14	1018		24	690
Brown Quadricycle Company. (See Brown, James O., assignor.) (Reissue.)						
Brown, Reuben H., New Haven, Conn. Calipers	288,770	Nov. 20	1238	340	25	737
Brown, Reuben H., New Haven, Conn. Calipers	288,771	Nov. 20	1239	340	25	737
Brown, Richard, Alliance, Ohio. Foundry-ladle gear	289,499	Dec. 4	163	44	25	915
Brown, Richard H., assignor of one-half to J. Reed, Omaha, Nebr. Furnace for heating tubes	273,944	Mar. 13	906	248	23	996
Brown, Robert, Springfield, Ohio. Harvesting-machine	285,730	Sept. 25	1925	545 546	24	1260
Brown, Robert, Springfield, Ohio. Wheel	287,801	Nov. 6	15	4	25	509
Brown, Robert B., St. Louis, Mo. Manufacture of oil from oleaginous seed	285,220	Sept. 18	1306	367	24	1142
Brown, Rufus H., <i>et al.</i> (See Enos, John A., assignor.)						
Brown, Samuel, San Francisco, Cal. Safety car-truck	280,442	July 3	132	35	24	25
Brown & Sharpe Manufacturing Company. (See Beale, Oscar J., assignor.)						
Brown & Sharpe Manufacturing Company. (See Carleton, Cyrus, assignor.)						
Brown, S. las M., Mount Gilead, Ohio. Cider and wine press	280,570	July 3	278	76	24	50
Brown Standard Fire Arms Company. (See Brown, John H., assignor.)						
Brown, Thomas B., Mount Vernon, Ind. Match-safe	289,500	Dec. 4	164	44	25	915
Brown, Thomas H., Milwaukee, Wis. Two-wheeled vehicle	286,174	Oct. 9	483	134	25	100
Brown, Thomas H., Jr., assignor to S. Clary, Chicago, Ill. Box-fastener	287,093	Oct. 23	1665	457	25	321
Brown, Thomas J., and G. McGowan, Penfield, N. Y. Fruit-drier	270,278	Jan. 9	532	156	23	114
Brown, Tilghman A., Worthington, Ind. Tea or coffee pot	285,731	Sept. 25	1927	546	24	1260
Brown, Timothy S., and G. Williams, Roseville, Cal. Harrow	283,669	Aug. 14	709	199	24	634
Brown, Timothy Y., <i>et al.</i> , trustees. (See Cochen, Noah L., assignor.)						
Brown, Wencel, assignor of one-half to J. B. Erwin, Milwaukee, Wis. Sewing-machine shuttle	278,303	May 22	2212	607	23	2026
Brown, William, Duncannon, Pa. Lightning-conductor	271,029	Jan. 23	1485	428	23	304
Brown, William, Duncannon, Pa. Automatic nail-plate feeder	277,215	May 8	883	234 235	23	1783
Brown, William, Worcester, Mass. Tally-board	283,750	Aug. 28	1556	439	24	807
Brown, William, assignor of one-half to T. Lang, West Point, Ga. Lease-rod for looms	288,303	Nov. 13	635	174	25	627
Brown, William A., and J. F. Smith, Terrell, Tex. Smoke and cinder conductor	276,664	May 1	154	39	23	1652
Brown, William E., and H. J. Durgin, Irving, Kans. Machine for painting wire fences	276,347	Apr. 24	1904	528	23	1576



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Brown, William F., and C. L. Haight, Poughkeepsie, N. Y. Car-platform.....	289,614	Dec. 4	301	84	25	940
Brown, William H., assignor to Haugh, Ketcham & Co., Indianapolis, Ind. Lathing and furring.....	271,309	Jan. 30	1828	531	23	370
Brown, William L. and A. C., Cherry Grove, Pa. Snap-hook.....	283,464	Aug. 21	1206	339	24	730
Brown, William P., Zanesville, Ohio. Hand-truck.....	283,562	Aug. 21	1321	369	24	751
Brown, William P., Zanesville, Ohio. Wagon-gear.....	284,809	Sept. 11	804	224	24	1046
Brown, William P., Zanesville, Ohio. Wheel-cultivator.....	288,003	Nov. 6	274	77, 78	25	534
Brown, William S., Thorntown, Ind. Buckle and trace-carrier.....	278,501	May 29	2475	675	23	2081
Brown, William T. (See Bartine, Stephen B., assignor.)						
Brown, William V., and T. S. Poole, Acadia, Nova Scotia, Canada. Car-coupling.....	287,619	Oct. 30	2348	633	25	455
Brown, William W., and L. A. Gates, San Francisco, Cal. Apparatus for extracting the precious metals by means of the lead bath.....	280,064	Nov. 27	1597	{ 442 443 }	{ 25 25 }	{ 809 809 }
Browne, Alexander P. (See Burnett, Edward, assignor.)						
Browne, Alexander P., Boston, assignor to himself and E. Burnett, Southborough, Mass. Fastener for stoppers of milk-cans, &c.....	281,607	July 17	1585	434	24	289
Browne, Alexander P., Boston, assignor to himself and E. Burnett, Southborough, Mass. Lock-stopper for milk-cans.....	281,608	July 17	1586	434	24	289
Browne, Arthur W. (See Johnston, Browne, Starr, and Gilbert.)						
Browne, Oliver L. F., Syracuse, N. Y. Apparatus for separating solid matter from liquids.....	283,373	Aug. 21	1029	309	24	710
Browne, Samuel A. (See Browne, Symmes E. and S. A.)						
Browne, Symmes E., Columbus, and S. A. Browne, Cincinnati, Ohio; said S. A. Browne assignor to said Symmes E. Browne. Thill-coupling.....	288,541	Nov. 13	948	259	25	680
Browne, Walker G., Atlanta, Ga. Folding dental chair.....	271,596	Feb. 6	13	4	23	443
Browne, William F., New York, N. Y. Process of and apparatus for desulphurizing ores.....	284,177	Sept. 4	23	6	24	908
Browne, William F., New York, N. Y. Method of and apparatus for desulphurizing ores.....	284,178	Sept. 4	26	6	24	909
Browne, William T., Orange, N. J. Manufacture of surgical lint.....	282,364	July 31	2440	671	24	446
Brownell, Anna J. (See Wright, Howell W., assignor.)						
Brownell, Anna J., et al. (See Brownell, Willis L., assignor.)						
Brownell, Elijah H., Dayton, Ohio. Riding roller plow or harrow.....	288,542	Nov. 13	949	260	25	680
Brownell, Frederick B., St. Louis, Mo. Street-car-door mechanism.....	286,257	Oct. 9	585	{ 160 161 491 492 }	{ 25 25 25 25 }	{ 117 117 117 1955 }
Brownell, George L., Worcester, Mass. Machine for making twine or cordage.....	277,986	May 22	1801	492	23	1955
Brownell, George L., Worcester, Mass. Machine for making twine and cordage.....	286,258	Oct. 9	586	161	25	117
Brownell, William H., Brooklyn, N. Y. Artist's box.....	275,882	Apr. 17	1328	365	23	1469
Brownell, Willis L., assignor to A. Smith and A. J. Brownell, Brooklyn, N. Y. Making boilers.....	280,905	July 10	698	196	24	130
Browning, Clinton, Shousetown, assignor of one-half to Lindsay & McCutcheon, Allegheny; said Browning and Lindsay & McCutcheon assignors to J. H. Lindsay, trustee, Allegheny city, Pa. Car-coupling. (Reissue).....	10,291	Feb. 27	2098	588	23	828
Browning, Clinton, Shousetown, assignor, by mesne assignments, to J. H. Lindsay, trustee, Allegheny city, Pa. Car-coupling.....	273,343	Mar. 6	134	38	23	856
Browning, Clinton, Shousetown, assignor to J. H. Lindsay, trustee, Allegheny city, Pa. Car-coupling.....	273,664	Mar. 6	539	145	23	926
Browning, Clinton, Shousetown, assignor to J. H. Lindsay, trustee, Allegheny city, Pa. Car-builder.....	273,665	Mar. 6	543	145	23	927
Browning, John M. and M. S., Ogden, Utah Ter. Magazine-gun.....	282,839	Aug. 7	434	123	24	577
Browning, Matthew S. (See Browning, John M. and M. S.)						
Brubaker, Jacob H., Rockton, Pa. Animal-trap.....	279,126	June 12	656	{ 179 180 }	{ 23 23 }	{ 2245 2245 }
Bruce, James H. (See McCoek, Joshua P., assignor.)						
Bruce, Lucien F., Springfield, Mass. Cartridge-feeder for machine-guns.....	273,249	Mar. 6	8	3	23	836
Bruck, David T., Marionville, Mo., assignor of one-half to G. L. Brown, Mansfield, Ohio. Churn.....	282,047	July 31	2154	591	24	399
Brueggeman, Henry, et al. (See Eger, John, assignor.)						
Bruen, John T., Brooklyn, assignor to W. F. Ware, New York, N. Y. Extension-chandelier.....	276,130	Apr. 17	1623	447	23	1520
Brunble, William, Baltimore, Md. Car-coupling.....	285,221	Sept. 18	1307	360	24	1142
Brunble, William, Baltimore, Md. Car-brake.....	289,970	Oct. 11	742	210	25	1024
Brun, Jean J. L., assignor of one-half to T. Gruaz, Highland, Ill. Self-winding watch.....	271,030	Jan. 23	1486	428	23	304
Brunacci, Richard E., Attleborough, Mass. Sleeve-button.....	278,772	June 5	118	33	23	2144
Bruck, Heinrich, Ludwigshafen, Bavaria, assignor to Badische Anilin and Soda Fabrik, Mannheim, Germany. Manufacture of anthracene-blue.....	274,081	Mar. 13	1070	.....	23	1025
Brunck, Otto, San Francisco, Cal. Spring drag-tug.....	281,236	July 17	1123	300	24	212
Brundage, George E., New York, N. Y. Bottle-lock.....	285,385	Sept. 25	1504	423	24	1183
Brunell, Minchcart, assignor of one-half to P. Brunell, P. J. and V. A. Furnace, and P. Hyde, Allegheny, N. Y. Compound steam-engine.....	289,065	Nov. 27	1600	443	25	810
Brunell, Philopene, et al. (See Brunell, Minchcart, assignor.)						
Brunelle, Onésime, Cincinnati, O. Scouring, scratching, and buffing wheel.....	285,222	Sept. 18	1307	368	24	1143
Brunner, John. (See Hershberger, Daniel, assignor.)						
Brunny, John, Fort Scott, Kans. Well-bucket.....	284,374	Sept. 4	260	72	24	948
Bruno, Theodore, Saginaw, Mich. Stave-jointing machine.....	271,682	Feb. 6	116	32	23	460
Bruns, Friedrich A., New York, assignor to himself and J. L. Truslow, Jr., Brooklyn, N. Y. Preserving hops.....	279,127	June 12	657	.....	23	2246
Brunson, Francis, Decer, Ind. Saw-handle.....	278,088	May 22	1919	526	23	1976
Brunswick Antimony Company. (See Mayall, Thomas J., assignor.)						
Brunswick Antimony Company. (See Parsons, Charles E., assignor.)						
Brunswick Ship's Berth Company. (See Milligan, William T., assignor.)						
Brunswick Ship's Berth Company. (See Wells, Webster, assignor.)						
Bruat, William H. (See Ward and Bruat.)						
Bruat, William H., Baldwin, assignor to Voigt, Ward & Co., Pittsburg, Pa. Glass shade.....	281,009	July 17	1589	435	24	290
Bruat, William H., assignor to Voigt, Ward & Co., Pittsburg, Pa. Mold for glassware.....	281,610	July 17	1590	435	24	290
Bruschke, Charles J., Chicago, Ill. Sofa.....	277,454	May 15	1168	314	23	1840
Brush, Charles C., Crystal, Iowa. Horse-power and capstan.....	277,216	May 8	884	235	23	1783
Brush, Charles F., Cleveland, Ohio. Secondary battery.....	274,062	Mar. 13	1071	295	23	1026
Brush, Charles F., Cleveland, Ohio. Carbon rod or stick and mechanism for making the same.....	274,904	Apr. 3	15	4	23	1229
Brush, Charles F., Cleveland, Ohio. Secondary-battery element.....	274,905	Apr. 3	17	4	23	1229
Brush, Charles F., Cleveland, Ohio. Secondary battery.....	275,985	Apr. 17	1443	398	23	1491
Brush, Charles F., Cleveland, Ohio. Secondary battery.....	275,986	Apr. 17	1444	398	23	1491
Brush, Charles F., Cleveland, Ohio. Secondary battery.....	276,155	Apr. 24	1635	457	23	1534
Brush, Charles F., Cleveland, Ohio. Element for secondary batteries.....	276,348	Apr. 24	1905	529	23	1576
Brush, Charles F., Cleveland, Ohio. Current-manipulator for secondary battery charging.....	281,175	July 10	1027	287	24	188
Brush, Charles F., Cleveland, Ohio. Apparatus for measuring the amount of current energy received by a secondary battery.....	281,176	July 10	1034	{ 287 288 }	{ 24 24 }	{ 190 190 }

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Brush, Charles F., Cleveland, Ohio. Armature for dynamo-electric machines .....	285,457	Sept. 25	1590	447	24	1199
Brush, Charles F., Cleveland, Ohio. Forming electrodes for secondary batteries .....	286,259	Oct. 9	588	161	25	118
Brush, Reuben G., <i>et al.</i> (See Yates, Henry G., assignor.)						
Bruss, Otto. (See Schirer, August, assignor.)						
Brust, Albert G., Uniontown, assignor of one-half to E. W. Anderson and J. C. Smith, Washington, D. C. Screw-cutting die .....	280,128	June 26	1865	526	23	2465
Brust, Albert G., assignor of one-half to E. W. Anderson and J. C. Smith, Washington, D. C. Metal-grooving tool .....	288,159	Nov. 6	451	126	25	586
Bruton, Jackson W., Guthrie, Mo. Churn .....	283,323	Aug. 14	1019	285	24	690
Bryan, Edward. (See Bowling, John P., assignor.)						
Bryan, George W., Norwalk, Conn. Child's carriage .....	281,832	July 24	1888	515	24	348
Bryan, James M., Guthrie, Ky. Fishing-reel .....	278,867	June 5	266	77	23	2168
Bryan, John, Bloomington, Ill. Bottling-machine .....	285,458	Sept. 25	1592	447	24	1199
Bryan, William H., Warm Springs, Va. Dough or butter worker .....	290,392	Dec. 18	1270	357	25	1127
Bryant, Charles B., Woburn, Mass. Machine for smutting leather .....	272,025	Feb. 13	550	149	23	548
Bryant, Edson L. (See Gilbert, William F., assignor.)						
Bryant, Francis. (See Warren, Henry J., assignor.)						
Bryant, George M., Minneapolis, Minn. Metal-melting furnace .....	282,265	July 31	2442	672	24	446
Bryant, Reuben T., and D. Tostevin, Council Bluffs, Iowa. Sewer .....	273,945	Mar. 13	907	248	23	997
Bryant, Reuben T., and D. Tostevin, Council Bluffs, Iowa. Foundation for pavements .....	279,701	June 19	1353	377	23	2368
Bryer, William F., Boston, Mass. Trunk .....	286,383	Oct. 9	760	206	25	148
Buch, George C., Eureka, Mo. Boot or shoe .....	281,664	July 24	1664	454	24	308
Buckalew, George W., and P. Quinn, New York, N. Y. Polishing compound .....	284,718	Sept. 11	693		24	1028
Buchan, William P., Glasgow, county of Lanark, Scotland. Water-closet .....	287,225	Oct. 23	1834	502	25	352
Buchan, William P., Glasgow, county of Lanark, Scotland. Ventilator .....	288,004	Nov. 6	277	78	25	555
Buchanan, Alexander F., Montrose, N. Y. Machine for ornamenting and cutting oil-cloth, &c. ....	271,782	Feb. 6	238	66	23	482
Buchanan, Alexander F., Montrose, N. Y. Manufacture of oil-cloth .....	276,765	May 1	309	80	23	1679
Buchanan, James, Indianapolis, Ind. Grain thrasher and separator .....	271,310	Jan. 30	1829	531	23	371
Buchanan, James, Indianapolis, Ind. Plow .....	277,987	May 22	1802	492	23	1955
Buchanan, John, assignor to Waterbury Buckle Company, Waterbury, Conn. Garment-clasp .....	288,005	Nov. 6	279	79	25	555
Buchanan, William C., assignor to Harrison Machine Works, Belleville, Ill. Separator and cleaner for thrashing-machines .....	278,502	May 29	2476	675	23	2081
Buchanan, William J., Huntington, Ind. Attachment for steam-engine governors .....	287,630	Oct. 30	2349	634	25	455
Buchbinder, Oskar, and L. Vogt, Vienna, Austria-Hungary. Machine for milling key-seats .....	281,833	July 24	1889	516	24	348
Buchholz, August, Appleton, and A. W. Eddy, Zumbrota, Minn. Hay-press for fuel purposes .....	290,741	Dec. 23	1750	483	25	1217
Buck, Daniel, <i>et al.</i> (See Kirkland, William P., assignor.)						
Buck, David S., Middleville, Mich. Cherry-stoner .....	275,353	Apr. 10	636	170	23	1343
Buck, George N., Mattoon, Ill. Tag-fastener .....	286,112	Oct. 2	409	112	25	75
Buck, Henry A., Fredonia, N. Y. Feed-cutter .....	279,533	June 19	1161	321	23	2335
Buck, James A., assignor of one-half to A. C. and S. Newton, Crescent, and A. H. Newton, Cohoes, N. Y. Machine for sanding molds for brick .....	284,115	Aug. 28	2018	561 562	24	887
Buck, James A., assignor of one-half to S. A. H., and A. Newton, Crescent, N. Y. Machine for sanding brick-molds .....	290,847	Dec. 25	1879	519	25	1239
Buck, Thomas E., St. Louis, Mo. Jetty for correcting the channels of rivers, &c. ....	275,132	Apr. 3	335	92	23	1283
Buckell, Albert, Pontiac, Mich. Clevis .....	270,201	Jan. 9	440	130	23	97
Bucker, Robert, Elizabeth, N. J. Electric arc lamp .....	225,107	Sept. 18	1172	328	24	1119
Buckeridge, William, Port Huron, Mich. Axle-gage .....	278,868	June 5	269	77	23	2169
Buckett, John, Southwark, county of Surrey, England. Caloric-engine .....	279,326	June 12	891	248 249	23	2284
Buckeye Brush Company. (See Hawkins, Samuel K., assignor.)						
Buckeye Engine Company. (See Barnaby, Charles W., assignor.)						
Buckeye Engine Company. (See Hunt, Nathan, assignor.)						
Buckeye Iron and Brass Works. (See Dover, Samuel B., assignor.)						
Buckeye Iron and Brass Works. (See Krutzsch, William, assignor.)						
Buckingham, Charles L. (See Vansize and Buckingham.)						
Buckingham & Hecht. (See Buckingham, Thomas H., assignor.)						
Buckingham, Joseph P., New York, N. Y. Folding box .....	284,179	Sept. 4	28	7	24	909
Buckingham, Thomas H., assignor to Buckingham & Hecht, San Francisco, Cal. Boot .....	280,443	July 3	153	36	24	25
Buckins, Albert O., and C. A. Taylor, Chicago, Ill.; said Buckins assignor to said Taylor. Trunk-catch .....	287,226	Oct. 23	1835	502	25	352
Buckins, Albert O., and C. A. Taylor, Chicago, Ill.; said Buckins assignor to said Taylor. Trunk-fixture .....	287,227	Oct. 23	1837	502	25	352
Buckley, Chauncey, Meriden, Conn. Curtain-fixture .....	282,840	Aug. 7	435	123	24	577
Buckley, Chauncey, and L. L. Sawyer, Meriden, Conn. Spring curtain-roller .....	275,987	Apr. 17	1446	398	23	1491
Buckley, Edward, H., Philadelphia, Pa. Manufacture of boots and shoes .....	289,808	Dec. 11	543	151	25	988
Buckley, Edward M., and A. Jackson, San Francisco, Cal. Automatic car-brake .....	273,344	Mar. 6	137	38	23	857
Buckley, Edward M., and A. Jackson, San Francisco, Cal. Car-brake .....	273,345	Mar. 6	139	38	23	857
Buckley, James H., Bangor, Me. Bench-plate socket .....	277,675	May 15	1429	385	23	1783
Buckley, James M., Portland, Oreg. Discharge-pipe for dredging and other machines .....	282,700	Aug. 7	284	80	24	548
Buckley, James M., Portland, Oreg. Grading and leveling machine .....	282,701	Aug. 7	285	80	24	549
Buckley, John M., Sedalia, Mo. Oscillating steam-valve .....	284,719	Sept. 11	694	195	24	1028
Buckley, Robert C., Peoria, Ill. Sulky-plow .....	278,089	May 22	1919	527	23	1976
Buckley, William, Sheffield, county of York, England. Spring .....	274,715	Mar. 27	1895	528 529	23	1184
Buckley, William N., Meriden, Conn. Curtain-fixture .....	275,580	Apr. 10	929	252	23	1393
Bucklin, Charles A., and J. D. Knowlton, Camden, Me. Windlass .....	276,956	May 1	555	144 145	23	1721
Buckman, Alexander. (See Burns and Buckman.) (Reissue.)						
Buckman, Ira, Brooklyn, N. Y. Fire-escape .....	287,228	Oct. 23	1838	502	25	352
Buckwalter, Lewis. (See Kline, John A., assignor.)						
Bueyrs Foundry and Manufacturing Company. (See Thompson, John, assignor.)						
Buczowski, Heinrich, Vienna, Austria-Hungary. Making soap sheets .....	273,946	Mar. 13	908	248	23	997
Budd, William O., Englewood, Ill. Baling-press .....	285,007	Sept. 18	1049	294	24	1098
Buddenberg, Henry C., Cincinnati, Ohio. Device for preventing the escape of effluvia from privy-vaults and drains .....	282,437	July 31	2671	732	24	487
Buddington, Frank E., Stillwater, Minn. Dress-maker's measure for cutting dresses and other articles of clothing .....	272,204	Feb. 13	768	213	23	585
Budington, Thomas G., <i>et al.</i> (See Hunt, Henry C., assignor.)						
Budington, Walter J., Pittsfield, Mass. Cement compound .....	281,965	July 24	2054		24	376
Budlong, Lyman A., Chicago, Ill. Hand-cultivator .....	272,854	Feb. 27	1622	454	23	747
Budlong, Simeon, and W. O. Talcott, Providence, R. I. Belt-fastener .....	278,393	May 29	2340	640	23	2057



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Buell, Andrew L. (See Buell, Edger, assignor.)						
Buell, Charles E., <i>et al.</i> (See Coy, George W., assignor.)						
Buell, Charles E., New Haven, Conn. System of electric storage and supply	270,734	Jan. 16	1126	323	23	235
Buell, Charles E., New Haven, Conn. System of electric lighting for railway-trains	270,735	Jan. 16	1128	323 324	23	236
Buell, Charles E., New Haven, Conn. Automatic fire extinguishing and alarm system	271,783	Feb. 6	239	67, 68	23	482
Buell, Charles E., New Haven, Conn. Fire extinguisher and alarm	275,752	Apr. 10	1154	317	23	1431
Buell, Charles E., New Haven, Conn. Automatic fire-extinguisher	278,654	May 29	2658	727	23	2112
Buell, Charles E., New Haven, Conn. Combined telegraph and clock system	279,327	June 12	694	249 250	23	2284
Buell, Charles E., New Haven, Conn. Electric-clock system	280,715	July 3	450	129 130	24	61
Buell, Charles E., New Haven, Conn. Electric fire-extinguisher and fire-alarm system	280,906	July 10	699	197	24	130
Buell, Charles E., New Haven, Conn. Fire-extinguishing system	285,459	Sept. 25	1592	447	24	1199
Buell, Charles E., New Haven, Conn. Combined call-bell and fire-alarm system	286,529	Oct. 9	934	251 252	25	180
Buell, Edgar, assignor to himself and A. L. Buell, Clinton, Conn. Tool-handle	289,591	Dec. 4	164	45	25	915
Boell, Edgar, assignor to himself and A. L. Buell, Clinton, Conn. Bit-stock	289,592	Dec. 4	165	45	25	915
Buell, Frank A., assignor to H. W. Peace Company, (limited,) Brooklyn, N. Y. Saw-handle	281,447	July 17	1391	382	24	257
Buell, William C. (See Hagan, William E., assignor.)						
Buerkel, John F. (See Johnson and Buerkel.)						
Buermann, August, Newark, N. J. Spur	272,026	Feb. 13	551	149	23	548
Buermann, August, Newark, N. J. Spur	272,027	Feb. 13	552	149	23	548
Buermann, August, Newark, N. J. Spur. (Reissue)	10,321	May 1	597	156	23	1728
Buffington, Calvin A., Berkshire, N. Y. Thill-coupling	273,808	Mar. 13	735	200	23	968
Buford, Frank G., New York, N. Y. Show-case and counter	283,374	Aug. 21	1101	310	24	710
Bullum, Herbert H., San Francisco, Cal. Automatic governor and cut-off	277,250	Mar. 6	10	3, 4	23	836
Bugbee, Calvin S., assignor to himself and D. F. Van Liew, Aurora, Ill. Whip-socket	273,207	Dec. 18	1032	290	25	1085
Bugbee, George W. (See Doane and Bugbee.)						
Bugbey, Benjamin N., Sacramento, Cal., assignor of one-half to G. C. Perkins and H. G. Smith. Refrigerator-car	270,383	Jan. 9	670	196	23	140
Bugg, Owen T. and D. Ivey, Memphis, Tenn. Ball-rack for pool-tables	269,825	Jan. 2	4	1	23	3
Buie, Duncan M., Wilmington, N. C., assignor, by mesne assignments, to J. B. Whitehead, G. M. Bain, E. M. Stoddard, O. E. Maltby, and G. Dick, Norfolk, Va. Manufacturing oils from organic substances. (Reissue)	10,338	June 5	638	173	23	2231
Bukey, Van Hartness. (See Schubert and Bukey.)						
Bulen, George F., Jersey City, N. J., assignor to Watkins Automatic Signal Telegraph Company, (limited,) New York, N. Y. Station-switch for fire-telegraphs	271,597	Feb. 6	15	4	23	443
Bulen, George F., Jersey City, N. J., assignor to Watkins Automatic Signal Telegraph Company, (limited,) New York, N. Y. Automatic testing apparatus for telegraphic fire-alarm stations	271,598	Feb. 6	18	5	23	443
Bulger, John W., East Liverpool, Ohio. Door-check	290,526	Dec. 18	1465	405	25	1159
Bullock, Rosalvo A., assignor to himself and W. A. Cooper, Odessa, N. Y. Packing steam-joints	287,416	Oct. 30	2071	563	25	402
Bull, George, Maple City, assignor of one-half to J. D. Pryor, Winfield, Kans. Churn	277,830	May 15	1606	438	23	1915
Bull, Henry C., assignor to Bulls Iron and Steel Company, (limited,) Liverpool, county of Lancaster, England. Apparatus for manufacturing iron and steel directly from the ore	282,266	July 31	2443	672 673	24	447
Bullard, Charles W., Maywood, Ill. Door-hanger	277,542	May 15	1272	341	23	1857
Bullard, Henry, assignor to Middletown Plate Company, Middletown, Conn. Ice-pitcher	274,263	Mar. 20	1311	362	23	1075
Bullard, Isaac, Readville, Mass. Piano-action	290,527	Dec. 18	1465	405	25	1160
Bullard, James H., Springfield, Mass. Cartridge-primer	273,394	May 29	2342	640	23	2057
Bullard, James H., Springfield, Mass. Magazine-gun	287,229	Oct. 23	1839	503	25	352
Bullenkamp, Frederick, Jr. (See Hunger and Bullenkamp.)						
Bulley, George N. (See Bulley and Burnham, assignors.)						
Bulley Louis T., and D. W. Burnham; said Bulley assignor to G. N. Bulley, New Haven, Conn. Snap-hook	280,792	July 10	573	160	24	108
Bullock, Walter H., Chicago, Ill. Objective attachment in microscopes	287,904	Nov. 6	143	42	25	533
Bullock, Daniel, assignor to Northwestern Manufacturing Company, Fort Atkinson, Wis. Vehicle-top	276,957	May 1	556	145	23	1721
Bullock, Daniel, and J. Jackson, assignors to North Western Manufacturing Company, Fort Atkinson, Wis. Wagon running-gear	282,490	Aug. 7	12	3, 4	24	503
Bullock, Joseph P., assignor of two-thirds to Dennett Harvesting Machine Company, (limited,) Milwaukee, Wis. Grain-binder	272,823	Feb. 20	1566	440	23	730
Bullock, Joseph P., assignor of two-thirds to Dennett Harvesting Machine Company, (limited,) Milwaukee, Wis. Grain-binder	274,883	Mar. 27	2101	584	23	1218
Bullock, Joseph P., assignor to Dennett Harvesting Machine Company, (limited,) Milwaukee, Wis. Grain-binder	286,899	Oct. 16	1410	387 388	25	269
Bullock, Lovell D., assignor of one-half to J. Gerrard, Jericho, Vt. Machine for jointing fellyes	286,586	Oct. 16	1012	274	25	200
Bullock, Milan C., Chicago, Ill. Variable eccentric for steam-engines	274,436	Mar. 20	1531	421	23	1113
Bullock, Milan C., Chicago, Ill. Compound steam-engine	274,437	Mar. 20	1532	421 422	23	1113
Bullock, William R. (See Wiard and Bullock.)						
Bulls Iron and Steel Company. (See Bull, Henry C., assignor.)						
Bunce, George C., and L. W. Sammis, assignors to themselves and W. T. Seaman, Brooklyn, N. Y. Curry-comb	278,869	June 5	260	78	23	2169
Bunce, Thomas A., Berlin, assignor to A. G. Pomeroy, Hartford, Conn. Portable press	288,006	Nov. 6	280	79	25	555
Bunch, Gilbert H., Lakeville, Ind. Plow-colt	284,810	Sept. 11	805	225	24	1047
Bundy, Frank E., Elmira, N. Y. Hat-holder	275,581	Apr. 10	930	252	23	1393
Bundy, Jephtha, Barnesville, Ohio. Pump-stroke regulator	283,070	Aug. 14	710	109	24	634
Bunker, Augustus S., Lawrence, Mass. Temporary binder	272,028	Feb. 13	552	149	23	548
Bunker, Daniel, Stoddard, N. H. Wash-boiler	273,809	Mar. 13	736	200	23	969
Bunker, Edgar E., Dubuque, Iowa. Stove-grate	273,251	Mar. 6	11	4	23	836
Bunker, Edgar E., Dubuque, Iowa. Fire-box lining	274,160	Mar. 20	1190	328	23	1054
Bunnell & Co., Jesse H. (See Casey, Thomas A., assignor.)						
Bunnell, James F., Cisco, Tex. Insect-trap	280,201	June 26	2058	578	23	2499
Bunte, Hans. (See Schilling and Bunte.)						
Bünzli, Henri, Paterson, N. J. Shedding mechanism for looms	271,033	Jan. 23	1490	429	23	305
Buoy, Dennis, Lancaster, Pa. Counter-scale	277,878	May 22	1672	456	23	1933
Burbank, Ahner, Rochester, N. Y. Tobacco-pipe	270,562	Jan. 9	905	261	23	186
Burcey, Charles J. T., Syracuse, N. Y. Wood-distilling apparatus	275,461	Apr. 10	782	209	23	1368
Burch, Albert. (See Beach and Burch.)						
Borch, Smith W., and J. Gilson, Valley Falls, R. I. Spinning-mule	290,742	Dec. 25	1751	484	25	1217
Burchard, Henry M. (See Bier and Rolph, assignors.)						
Burchfield, James K., Sharon, Pa. Lighting buildings by hydrocarbon-lamps	271,412	Jan. 30	1968	569	23	395

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Burckett, William M., Brooklyn, N. Y. Dish-washer	290,528	Dec. 18	1466	405	25	1160
Burd, John W., Jr., St. Louis, Mo. Seal-lock	289,973	Dec. 11	746	211	25	1025
Burdett, Oliver S. (See Robertson and Burdett.)						
Burdick, James M., Ilion, N. Y. Combined mower and tedder	285,792	Oct. 2	14	5	25	5
Burdick, Norman, and J. A. Sandford, Sing Sing, N. Y. Device for forming dovetails for stove-plates	273,252	Mar. 6	13	4	23	837
Burdiet Orrin C., Buffalo, N. Y. Bolt-forging machine	285,876	Oct. 2	120	35	25	24
Burdine, William B., assignor of one-third to F. Baltzell, Troy, Ala. Cotton-gin	271,570	Jan. 30	2168	624	23	430
Burditt, William F., St. John, New Brunswick, Canada. Trip mechanism for harvester-rakes	279,702	June 19	1354	377	23	2368
Burgan, Elmore Y., Corning, Iowa. Check-rower for corn-planters	278,090	May 22	1920	527	23	1976
Burge, John, Westfield, Mass. Wood-cutter	284,944	Sept. 11	961	270	24	1075
Burgess, Albert C. (See Bradford, Charles W., assignor.)						
Burgess, Andrew, Owego, N. Y. Magazine fire-arm	289,972	Dec. 11	744	210	25	1024
Burgess, Andrew, Owego, N. Y. Magazine fire-arm	290,393	Dec. 18	1270	357	25	1127
Burgess, Andrew, Owego, N. Y. Magazine fire-arm	290,394	Dec. 18	1272	357	25	1127
Burgess, Andrew, Owego, N. Y. Magazine fire-arm	290,529	Dec. 18	1468	406	25	1160
Burgess, Andrew, Owego, N. Y. Magazine fire-arm	290,848	Dec. 25	1880	519	25	1239
Burgess, Andrew, Owego, N. Y. Magazine fire-arm	290,968	Dec. 25	2042	562	25	1265
Burgess, George W., New York, N. Y. Sewing-machine	277,217	May 8	855	235	23	1783
Burgess, George W., Boston, Mass. Sewing-machine shuttle	278,503	May 29	2477	675	23	2082
Burgess, William H. (See Gray, Walter G., assignor.)						
Burgess, William H., Rich Square, N. C. Cradle	281,966	July 24	2055	563	24	376
Burgess, William J., Everett, Mass. Filter	285,965	Oct. 2	235	66	25	45
Burghardt, August C., Port Deposit, Md. Fire-escape	284,180	Sept. 4	29	7	24	909
Burghardt, Edward H. (See De Puy and Burghardt.)						
Burgher, Orlando, Poughkeepsie, N. Y. Horse scuffle-hoe	275,462	Apr. 10	783	209	23	1368
Burgtorf, Charles W., Petaluma, Cal. Two-wheeled vehicle	285,793	Oct. 2	15	5	25	5
Burgtorf, Charles W., Petaluma, Cal. Chafe-pad for harness	286,200	Oct. 9	590	161	25	118
Burgtorf, Charles W., Petaluma, Cal. Single harness	290,530	Dec. 18	1470	406	25	1160
Burgwyn, William H. S., assignor of one-half to R. A. Dunlop, Richmond, Va. Hand motive power	276,665	May 1	155	40	23	1652
Burk, Howard R., Brooklyn, N. Y. Coloring kerosene-oil	284,811	Sept. 11	806		24	1047
Burk, John J., assignor of one-half to E. M. Jewett, Buffalo, N. Y. Hoop coiling and nailing machine	278,773	June 5	119	33, 34	23	2144
Burk, William E., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Mechanical movement	277,988	May 22	1803	492	23	1955
Burk, William E., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Apparatus or device for punching rubber	278,091	May 22	1922	527	23	1977
Burk, William E., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Holder for spittoons	286,113	Oct. 2	410	112	25	75
Burke, Andrew J., Elm Grove, Ill. Wagon-jack	288,772	Nov. 20	1240	340	25	738
Burke, Edward, Bernard, Iowa. Substitute for crank-motion	275,988	Apr. 17	1448	399	23	1491
Burke, Edward, Bernard, Iowa. Substitute for crank-motion	286,900	Oct. 16	1412	388	25	269
Burke, Isaac S., Providence, R. I. Button or stud	278,395	May 29	2343	640	23	2058
Burke, John T., Nebraska City, Nebr. Electric photographer's retouching-point	285,008	Sept. 18	1052	294	24	1098
Burke, Michael, Jr., et al. (See Davey, John F., assignor.)						
Burke, Patrick. (See Dodsworth and Burke.)						
Burket, William, Etna Green, Ind. Device for excavating and moving dirt, &c	277,455	May 15	1169	314	23	1840
Burket, William, Etna Green, Ind. Excavator and grapple	283,963	Aug. 28	1807	511	24	852
Burkhard, Adam, Philadelphia, Pa. Two-wheeled vehicle	275,133	Apr. 3	335	92	23	1284
Burkhard, John P., and F. Novotny, St. Paul, Minn. Breech-loading gun	288,618	Nov. 20	1042	287	25	704
Burkhard, John P., and F. Novotny, St. Paul, Minn. Safety-lock for fire-arms	288,619	Nov. 20	1046	288	25	705
Burkhard, Thomas, Brooklyn, N. Y. Candy-heater	287,621	Oct. 30	2350	634	25	456
Burkhardt, Conrad G., Chicago, Ill. Door-latch	277,879	May 22	1673	456	23	1933
Burkhardt, Gottlieb F., Boston, Mass. Furnace	284,181	Sept. 4	31	8	24	910
Burkhardt, Henry, Chicago, Ill. Draw-bar for cars	271,216	Jan. 30	1717	497	23	351
Burkholder, John, Centreburg, Ohio. Grain-cleaner	272,205	Feb. 13	770	213	23	585
Burks, Jesse H., Los Angeles, Cal. Fire-escape	288,304	Nov. 13	637	174	25	627
Burleigh, John, Lawrence, Mass. Spring-seat for vehicles	290,743	Dec. 25	1753	484	25	1217
Burley, George H., Tyrone, Pa. Valve for steam-engines	281,665	July 24	1664	454	24	308
Burling, Benjamin H., assignor to himself and J. Cunningham, Fort Ann, N. Y. Steam propelling-udder	284,812	Sept. 11	806	225	24	1047
Burlingame, Olive R., Boston, Mass. Foot-rest for piano-stools	280,907	July 10	701	197	24	130
Burlingame, William, Exeter, N. H. Hot-water heating apparatus	280,908	July 10	702	198	24	131
Burlingame, William, Exeter, Mass. Sectional steam-generator	271,031	Jan. 23	1488	429	23	304
Burlington Plow Company. (See Neff, Joseph B., assignor.)						
Burnam, James H., Fayetteville, Tenn. Two-room-heating fire back and frame	287,230	Oct. 23	1841	503	25	352
Burnell, Oscar W., Dorrance, Kans. Wind-locomotive	271,784	Feb. 6	242	68	28	483
Burnes, John C., Hopkins, Minn. Band-cutter	275,463	Apr. 10	783	210	23	1368
Burnet, William B. (See Erb, John C., assignor.)						
Burnet, William H., Newark, N. J., assignor to J. Yereance, New York, N. Y. Steam superheater	278,311	May 29	2233	612	23	2038
Burnett, Edward. (See Browne, Alexander P., assignor.)						
Burnett, Edward, Southborough, assignor to himself and A. P. Browne, Boston, Mass. Stopper for liquid-containing vessels	281,611	July 17	1591	435	24	290
Burnett, Edward, Southborough, assignor to himself and A. P. Browne, Boston, Mass. Truck	281,612	July 17	1592	435	24	290
Burnett, Isaac, and J. E. Clifton, Geneseo, Ill. Coal-chute	270,736	Jan. 16	1131	324	23	236
Burnett, James H., Philadelphia, Pa. Setting for range-boilers	287,231	Oct. 23	1842	503	25	353
Burnett, James H., Newark, N. J. Machine for cutting oval gaskets	287,503	Oct. 30	2179	591	25	423
Burnett, John, et al. (See Dougherty, Michael J., assignor.)						
Burnett, John M., Independence, assignor to J. W. Concher, Dubuque, Iowa. Milk and cream gage	273,947	Mar. 13	910	248	23	997
Burnham, Alfred S., Parkersburg, Iowa. Sofa-bed	278,870	June 5	270	78	23	2169
Burnham, Daniel W. (See Bulley and Burnham.)						
Burnham, George, et al. (See Wilder and Parry, assignors.)						
Burnham, Joseph. (See Wiggin, George B., assignor.)						
Burnham, L. G., et al. (See Hewson, William S., assignor.)						
Burnham, Lycurgus, Somerville, Mass. Egg-beater	277,218	May 8	886	236	23	1784



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Burnham, Lycurgus, Somerville, Mass. Egg-beater	277,219	May 8	887	236	23	1784
Burnham, Nathan F., York, Pa. Cut-off mechanism for steam-engines	274,559	Mar. 27	1713	476	23	1151
Burnham, Nathan F., York, Pa. Turbine wheel	274,884	Mar. 27	2102	585	23	1219
Burnham, Oliver G., Chicago, Ill. Lard-cooler	287,362	Oct. 23	2001	545	25	382
Burnham, Oliver G., Chicago, Ill. Lard-cooler	289,809	Dec. 11	544	152	25	988
Burnison, Sim, Algansee, Mich. Spittoon	285,566	Sept. 25	1714	484	24	1222
Burns, Alexander B. (See Creecy and Burns.)						
Burns, Daniel R., Dayton, Ohio, assignor to himself and A. L. Jackson, Washington, D. C. Straight-way valve	270,009	Jan. 2	217	63	23	45
Burns, Frank, Westfield, N. Y. Bottle stopper and fastener	289,215	Nov. 27	1778	493	25	842
Burns, Frank W., and W. Malick, Erie, Pa., assignors to said Burns. Mop-holder	270,930	Jan. 23	1366	394	23	285
Burns, Gerrono W., Indianapolis, Ind. Cigar-cutter	282,155	July 31	2306	633	24	423
Burns, Hugh A., Ansonia, Conn. Electric battery	284,605	Sept. 11	545	154	24	1003
Burns, Jabez, Brooklyn, N. Y. Mixing-machine	279,328	June 12	896	250	23	2285
Burns, Jabez, Brooklyn, N. Y. Coffee-roaster	279,329	June 12	897	250	23	2285
Burns, James, Chicago, Ill. Club-foot apparatus	282,491	Aug. 7	14	4	24	503
Burns, James, Brooklyn, and A. Buckman, Schodack Depot, assignors of part to J. S. Baker, A. L. Schermerhorn, Stuyvesant, J. R. Downe, and F. P. Harder, Castleton, N. Y. Cigarette-machine. (Reissue)	10,428	Dec. 18	1627	447 448	25	1188
Burns, Robert E., San Francisco, Cal. Cooking-stove	290,316	Dec. 18	1173	328	25	1109
Burns, Samuel A., et al. (See Preston, James, assignor.)						
Burns, Thomas, Brooklyn, N. Y. Extinguisher for lamp-burners	270,631	Jan. 16	995	287	23	211
Burnside, William J., Hilcot Court Road, Lower Norwood, county of Surrey, England. Printing-telegraph	273,810	Mar. 13	737	200	23	969
Burnworth, Hzekiah J., Kimbolton, Ohio. Cutter-bar	284,813	Sept. 11	807	225	24	1047
Burr, Andrew J., Olympia, Wash. Ter. Roller-dredge	273,021	Feb. 27	1823	511	23	780
Burr, Annie E., administratrix. (See Burr, H. Jerome.)						
Burr, Brown & Co. (See Remington, John O., assignor.)						
Burr, Daniel, assignor of one-half to A. Pullen, Milford, Del. Apparatus for drying and conserving fruit	288,973	Nov. 27	1485	411	25	790
Burr, Edward H., et al. (See Bott, Joseph E., assignor.)						
Burr, F. S., et al. (See Fuller, Willard M., assignor.)						
Burr, George S. (See Doyle and Burr.)						
Burr, H. Jerome, deceased, Bloomfield, (A. C. Burr, administratrix,) assignor to W. E. Simonds, Hartford, Conn. Hardening-iron	280,716	July 3	452		24	81
Burr, James B., Bayshore, N. Y. Horseshoe	271,217	Jan. 30	1718	497	23	351
Burr, Lewis, San Antonio, Tex. Cotton-bale binder	277,220	May 8	867	236	23	1784
Burr, Sanford S. (See Miller, Albert F., assignor.)						
Burr, Sanford S., Winnetka, Ill. Inconvertible crib and table	274,716	Mar. 27	1896	529	23	1184
Burrage, John H., Concord, N. C. Bee-hive	279,856	June 19	1533	428	23	2399
Burrell, John B., Fall River, Mass. Shaft-tug	270,931	Jan. 23	1367	394	23	285
Burrell, John H., Jr. (See Metzler and Burrell.)						
Burrichter, Herman C. (See Ryrie, Robert A., assignor.)						
Burridge, Thomas H., assignor of one-third to W. L. Reynolds, St. Louis, Mo. Apparatus for purifying iron	274,717	Mar. 27	1898	529	23	1185
Burridge, Thomas H., assignor of one-third to W. L. Reynolds, St. Louis, Mo. Apparatus for making Bessemer steel	277,831	May 15	1607	439	23	1916
Burnis, Micajah E., Brooklyn, N. Y. Vehicle-axle	271,571	Jan. 30	2168	625	23	430
Burnis, Micajah E., Brooklyn, N. Y. Vehicle-axle	273,458	Mar. 6	282	76	23	882
Burnis, Micajah E., Brooklyn, N. Y. Vehicle-axle	278,396	May 29	2344	641	23	2058
Burnis, Micajah E., Brooklyn, N. Y., and C. E. Staniels, assignors to E. F. Staniels, East Concord, N. H. Foot rest	277,880	May 22	1674	457	23	1933
Burritt, Albert M., assignor to A. Burritt Hardware Company, Waterbury, Conn. Fire-extinguisher alarm apparatus	270,010	Jan. 2	218	63	23	45
Burritt, Albert M., assignor to A. Burritt Hardware Company, Waterbury, Conn. Fire-extinguisher	270,011	Jan. 2	220	63	23	45
Burritt Hardware Company, A. (See Burritt, Albert M., assignor.)						
Burritt Hardware Company, A. (See Castle, Lewis D., assignor.)						
Burritt, Harvey H., Newark, N. J. Air-engine	278,397	May 29	2345	641	23	2058
Burroughs, D. R. (See Cook, Emmanuel T., assignor.)						
Burroughs, William S., et al. (See Heaverin, William H., assignor.)						
Burrows, Frank, Washington, D. C. Door-securer	288,920	Nov. 20	1415	390	25	771
Burrows, William T., East Dubuque, Ill. Device for handling spooled barbed wire	290,969	Dec. 25	2044	562	25	1266
Burrows, William T., assignor of two-thirds to A. G. Children, East Dubuque, Ill. Center for wire-barbing machines	289,750	Dec. 4	476	134	25	970
Burrows, John C., Carrollton, Ill. Lifting-jack	270,012	Jan. 2	221	63	23	46
Burson, Amos, East Palestine, Ohio. Safety-bar attachment for vehicle-poles	277,676	May 15	1430	386	23	1883
Burson, William W., Rockford, Ill. Grain-binder	273,811	Mar. 13	738	200 201 202	23	969
Burson, William W., Rockford, Ill. Cord-knotting apparatus for grain-binders	273,812	Mar. 13	744	202 203	23	970
Burt, Frank C., Columbus, Ohio. Window-cornice	273,459	Mar. 6	283	77	23	882
Burt, George E., Harvard, Mass. Chain-link for horse-powers	283,751	Aug. 28	1556	439	24	807
Burt, J. Bina, et al. (See Zinsmaier and Burt, assignors.)						
Burt, John, Detroit, Mich. Charcoal-furnace	276,222	Apr. 24	1734	480	23	1548
Burt, Meritt. (See Zinsmaier and Burt.)						
Burt, Ransom K., Marshalltown, Iowa. Tug-buckle	282,267	July 31	2446	673	24	447
Burton, Augustus L., New York, N. Y. Necktie or cravat holder	271,871	June 5	271	78	23	2169
Burton, George D., New Ipswich, N. H. Roller-skate	271,785	Feb. 6	243	68	23	483
Burton, George D., New Ipswich, N. H. Spittoon for railway-cars and similar places	272,206	Feb. 13	771	213	23	585
Burton, George D., New Ipswich, N. H. Roller-skate	279,220	June 12	756	208	23	2262
Burton, George D., New Ipswich, N. H. Electric-lamp globe	282,157	July 31	2308	633	24	423
Burton, George D., New Ipswich, N. H. Apparatus for lighting cars by electricity	282,158	July 31	2309	634	24	423
Burton, George D., New Ipswich, N. H. Stock-car	284,116	Aug. 28	2021	562	24	888
Burton, George D., New Ipswich, N. H. Fare-register	284,375	Sept. 4	261	73	24	948
Burton, George D., New Ipswich, N. H. Waiter or tray	285,386	Sept. 25	1506	423	24	1184
Burton, George D., New Ipswich, N. H., assignor of one-half to S. A. Travis, Boston, Mass. Apparatus for drawing liquids	275,134	Apr. 3	336	93	23	1284
Burton, George D., Boston, Mass. Roller-skate	282,156	July 31	2307	633	24	423
Burton, George D., and J. M. Holden, Boston, Mass. Stock-car	274,458	Mar. 27	1570	430	23	1128
Burton, George F., Eau Claire, Wis. Adjustable roller-frame for edgers	283,752	Aug. 28	1557	439	24	807
Burton, George F., Springfield, Ohio. Cover for filters and percolators	284,606	Sept. 11	546	155	24	1003

*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Burton, Joseph, New York, assignor to W. N. Milsted, Brooklyn, and W. H. Down, New York, N. Y. Lubricating gas-meter shafts	282,610	Aug. 7	162	49	24	529
Burton, Joseph, assignor to W. H. Down, New York, and W. N. Milsted, Brooklyn, N. Y. Gas-burner for heating purposes	284,814	Sept. 11	808	225 226	24	1047
Burton, Matthew, Batavia, Ill. Oil-can	271,032	Jan. 23	1489	429	23	305
Burton, Matthew, Batavia, Ill. Pump attachment for oil-cans	275,883	Apr. 17	1329	366	23	1469
Burwell, Edward L., Chelsea, Mass. Book	285,794	Oct. 2	16	5	25	5
Bury, Richard A., and R. M. Bidelman, Adrian, Mich. Device for burning crude petroleum	283,465	Aug. 21	1207	339	24	730
Busch, George W. (See Crongeyer, Charles A., assignor.)						
Buschick, Gustavus E., assignor of one-half to C. E. Gregory, Chicago, Ill. Furnace	277,407	May 8	1101	296	23	1822
Buschor, Charles, and S. Zwicghaft, Philadelphia, Pa. Jeweler's show-window	280,345	July 3	9	3	24	4
Buse, Bernard E., St. Louis, Mo. Cosmetic wash	277,221	May 8	888		23	1784
Busell, James H. (See Orcutt, William D., assignor.)						
Busell, James H., Boston, Mass. Heel-trimming machine	270,632	Jan. 16	996	288	23	211
Busell, James H., Boston, Mass. Rotary cutter	270,633	Jan. 16	998	288	23	211
Busell, James H., Boston, Mass. Heel-trimming machine	280,717	July 3	453	130	24	81
Bush, Arthur W., Boulder, assignor to C. W. Little, Denver, Colo. Watch-maker's tool	281,967	July 24	2056	563	24	377
Bush, Arthur W., assignor of one-half to G. S. Gibson, I. L. Bond, and F. J. Whitney, Boulder, Col. Treadle-power	289,216	Nov. 27	1779	493	25	843
Bush, Donald S., et al. (See Gibney, James N., assignor.)						
Bush, Edward W., Armstrong, Mo. Washing-machine	289,615	Dec. 4	301	84	25	941
Bush, George W., and H. H. Wilzin, New York, N. Y. Monument	275,464	Apr. 10	784	210	23	1368
Bush, Grant A., Clear Lake, Iowa. Fountain	286,261	Oct. 9	590	162	25	118
Bush, Henry J., Westfield, Mass. Whip	288,305	Nov. 13	638	175	25	627
Bush, Ira L., Janesville, Wis. Ice-creeper	276,156	Apr. 24	1057	457	23	1534
Bush, Isaac, St. Louis, Mo. Overalls and drawers	280,444	July 3	134	36	24	25
Bush, James J., Tacoma, Wash. Ter. Vehicle-wheel	283,563	Aug. 21	1323	370	24	751
Bush, Philo P. (See Bodell, Alton W., assignor.)						
Bush, Roderick U., et al. (See Gibney, James N., assignor.)						
Bush, Wesley C., Brooklyn, N. Y. Fire-escape ladder	275,135	Apr. 3	337	93	23	1284
Bush, Wesley C., Brooklyn, N. Y. Flexible fire-escape ladder	277,222	May 8	888	236	23	1784
Bush, William H., et al. (See Gibney, James N., assignor.)						
Bushell, William, and W. T. Haydon, Dover, county of Kent, England. Expressing oil from seed and manufacture of oil cakes therefrom	279,330	June 12	898	251	23	2285
Bushey, Joseph, and R. Woodcock, Detroit, Mich. Roofing compound	273,948	Mar. 13	911		23	997
Bushfield, Samuel B., Denver, Colo. Apparatus for generating and carburizing hydrogen gas	282,492	Aug. 7	15	4	24	503
Bushfield, Samuel B., assignor of five-eighths to R. E. Watson, W. J. Swift, and C. R. Stapp, Denver, Colo. Coffee compound	274,438	Mar. 20	1534		23	1114
Bushman, David, Quincy, Cal. Rotary crusher	277,543	May 15	1273	341	23	1857
Bushnell, George H. and O. P., Worcester, Mass. Press	285,108	Sept. 18	1173	329	24	1119
Bushnell, Orsamus, assignor to himself and F. Overbury, Brooklyn, N. Y. Combined scraper and brush	272,119	Feb. 13	671	183	23	568
Bushnell, Orsamus, assignor to himself and F. Overbury, Brooklyn, N. Y. Box in imitation of a cigar	282,159	July 31	2310	634	24	424
Bushnell, Orsamus, assignor to himself and F. Overbury, Brooklyn, N. Y. Slate-cleaner	264,537	Sept. 4	461	131	24	982
Bushnell, Oscar P. (See Bushnell, George H. and O. P.)						
Bushnell, William B., Chicago, Ill. Ice-machine	285,460	Sept. 25	1594	448	24	1199
Bushong, Joseph L., Oskaloosa, Iowa. Washing-machine	288,543	Nov. 13	949	260	25	681
Bushorr, Dorrick J., assignor of one-half to E. Kinsley, Rockton, Ill. Machine for marking linear measurements on fabrics	279,078	June 5	570	157	23	2221
Buskirk, Theodor. (See Blomquist and Buskirk.)						
Buskirk, Theodor. (See Shoupe and Buskirk.)						
Buss, Charles, Grand Rapids, Mich. Gage for cutter-head knives	273,022	Feb. 27	1824	511	23	781
Busse, George. (See Schoenfeld, Louis, assignor.)						
Busse, Paul, Baltimore, Md. Envelope	271,413	Jan. 30	1969	569	23	396
Busser, W. H., et al. (See Wood, John M., assignor.)						
Busteed, Richard, Brooklyn, N. Y. Telephone-cabinet	282,841	Aug. 7	438	123	24	577
Bustin, John H., assignor of three-fourths to C. H. Duell, E. Laass, and G. W. Hey, Syracuse, N. Y. Two-wheeled vehicle	283,698	Aug. 21	1477	416	24	781
Butcher, Joseph, Providence, R. I. Cyclometer	270,737	Jan. 16	1132	325	23	236
Butel, Alexander H., Bridgeport, Conn., assignor of one-half to R. W. Fryer, Independence, Iowa. Apparatus for extracting grease from wool	276,349	Apr. 24	1906	529	23	1576
Butler, Calvin L., Greenfield, Mass. Carving-fork	278,398	May 29	2346	641	23	2058
Butler, Charles A., Moriah, N. Y. Apparatus for boiling sap	271,786	Feb. 6	244	68	23	483
Butler, Edwin, Toulon, Ill. Motion-converting mechanism	285,223	Sept. 18	1308	368	24	1143
Butler, Eli T., Hamilton, Ohio. Roller-mill	281,237	July 17	1123	309	24	212
Butler, Francis G., West Hartford, Conn., assignor to Vermont Farm Machine Company, Bellows Falls, Vt. Milk-setting apparatus. (Reissue.)	10,357	July 17	1651	450	24	300
Butler, George W. (See Searles, Charles P., assignor.)						
Butler, Horace, Ludington, Mich. Skidding-machine	288,306	Nov. 13	639	175	25	627
Butler, James M., Danville, Ohio. Vegetable-cutter	275,136	Apr. 3	339	93	23	1284
Butler, Jay F., Brooklyn, and U. McClinchie, New York, N. Y. Canopy-support for children's carriages	275,582	Apr. 10	930	253	23	1393
Butler, Jay F., Brooklyn, and U. McClinchie, New York, N. Y. Combined rocking-chair and hobby-horse	275,583	Apr. 10	932	253	23	1393
Butler, John G., Watertown, Mass. Projectile	290,970	Dec. 25	2045	562	25	1266
Butler, Joseph, Kennon, Ohio. Coke-oven	289,887	Dec. 11	647	180	25	1006
Butler, Joseph C., De Kalb, Ill. Windmill	272,525	Feb. 20	1184	331	23	662
Butler, Nathan C., Leipsic, Ohio. Automatic water alarm and regulator	278,872	June 5	272	78	23	2169
Butler, Nathan C., Leipsic, Ohio. Fire-kindler	285,009	Sept. 18	1053	295	24	1099
Butler, Orlando W., and T. W. Kelley, Brooklyn, N. Y. Paper for cards and circulars	273,023	Feb. 27	1826	511	23	781
Butler, Reese H., W. C. Mount, Gainesville, and J. W. Alexander, Atlanta, Ga. Cam for stamp-mills	276,350	Apr. 24	1907	529	23	1576
Butler, Theodore, Cleveland, Ohio. Spring-hinge	277,881	May 22	1675	457	23	1934
Butler, Theodore H., G. W. Earhart, and W. M. Crawford, Columbus, Ohio. Bretzel-cutter	274,264	Mar. 20	1312	362	23	1076
Butler & Ward. (See Ward, Eugene, assignor.)						
Butler, William E., Union, Iowa. Wheel-cultivator	276,766	May 1	310	80	23	1679
Butler, William J., Salinas, assignor of one-half to R. H. Hall, San Francisco, Cal. Arm-rest	281,338	July 17	1247	346	24	231
Butler, William S. (See Duchemin, William, assignor.)						
Butler, Zebulon, Wilkes-Barré, Pa. Stone-working machine	288,544	Nov. 13	950	260	25	681
Butman Furnace Company. (See Butman, Thomas R., assignor.)						
Butman, Thomas R., Cleveland, Ohio. Steam-boiler setting and furnace	279,331	June 12	900	252	23	2286



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Butman, Thomas R., Cleveland, Ohio. Heater and filter for steam-boilers	280,013	July 10	831	231	24	154
Butman, Thomas R., Cleveland, Ohio. Feed-water heater	281,014	July 10	833	232	24	154
Butman, Thomas R., assignor to Butman Furnace Company, Cleveland, Ohio. Furnace-door	273,813	Mar. 13	746	203	23	970
Butt, Bozwell B., Richmond, Va. Right-angled level	283,564	Aug. 21	1325	370	24	751
Butterfield, John C., Chicago, Ill. Power-hammer	285,387	Sept. 25	1506	423	24	1184
Butterfield, John C., Chicago, Ill. Stamp-mill	285,388	Sept. 25	1507	424	24	1184
Butterfield, John C., Chicago, Ill. Atmospheric hammer	285,389	Sept. 25	1509	424	24	1184
Butterfield, John C., Chicago, Ill. Atmospheric hammer	285,390	Sept. 25	1510	424	24	1185
Butterfield, John C., Chicago, Ill. Mortar for stamp-mills	285,391	Sept. 25	1510	425	24	1185
Butterfield, John C., Chicago, Ill. Lock-nut	280,849	Dec. 25	1882	520	25	1240
Butterfield, John C., Chicago, Ill. Atmospheric hammer	280,850	Dec. 25	1883	520	25	1240
Butterfield, Nathaniel, Monroe, Wis. Roof	274,265	Mar. 20	1313	362	23	1076
Butterfield, Reuben J. (See Hastings, E. Warren, assignor.)						
Butterfield, Rodney, Chicago, Ill. Last-block fastener	270,013	Jan. 2	222	61	23	46
Butterfield, William, Boston, Mass. Shutter-bower	285,795	Oct. 2	17	5	25	5
Butterweck, Otto C., St. Louis, Mo. Toy pistol	270,738	Jan. 16	1134	325	23	237
Butterweck, Otto C., St. Louis, Mo. Toy pistol	279,128	June 12	657	180	23	2246
Butterworth, Benjamin. (See Davis, Daniel L., assignor.)						
Butterworth, Charles C., et al. (See Mackinney, William C., assignor.)						
Butterworth, James, et al. (See Mackinney, William C., assignor.)						
Butterworth, William B., et al. (See Mackinney, William C., assignor.)						
Buttlear, William. (See Willets and Buttlear.)						
Buttner, Henry A., San Quentin, Cal. Sealing envelopes	281,448	July 17	1391	382	24	257
Button, Alphonzo, Grand Rapids, Mich. Grocer's scoop	282,493	Aug. 7	16	4	24	504
Button, Miladore A., El Dorado, Kans. Windmill	275,137	Apr. 3	339	93	23	1284
Button, W. G. (See Cardwell, George A., assignor.)						
Buttrick, Charles G., and T. B. Flanders, Holyoke, Mass. Bearing for spindles	285,461	Sept. 25	1595	448	24	1200
Buttrick, Charles G., and T. B. Flanders, Holyoke, Mass. Spindle-bolster	289,971	Dec. 11	742	210	25	1024
Butts, Austin C., Groveston, N. J. Glove	290,664	Dec. 25	1640	451	25	1196
Butzbach, Edward, Evanston, Ill. Wash-board	277,109	May 8	757	199	23	1761
Buzzini, Salvatore J., New York, N. Y. Fire-arm	284,815	Sept. 11	810	226	24	1048
Byar, Lewis N., Pottstown, Pa. Window-grating	284,117	Aug. 28	2022	502 503	24	888
Byard, Washington I., assignor to himself, M. W. Briggs, and G. A. Oppel, Little Falls, N. Y. Car-coupling	282,438	July 31	2672	732	24	487
Byerley, Francis X., Cleveland, Ohio. Process of and apparatus for extracting oil and other substances from seeds and other materials	275,989	Apr. 17	1449	399	23	1491
Byers, Eli A., Birmingham, Iowa. Hay elevator and carrier	271,218	Jan. 30	1719	498	23	351
Byers, Joseph, Newtonville, and G. Taylor, Everett, Mass. Automatic elevator-hatchway guard	276,767	May 1	311	81	23	1680
Byington, A. Homer. (See Northrup, Israel H., assignor.)						
Byrkett, Abijah R., Troy, Ohio. Earth-scraper	273,253	Mar. 6	14	4	23	837
Byrkett, Abijah R., Troy, Ohio. Wheel or pulley	289,335	Nov. 27	1923	534	25	871
Byrkett, Abijah R., assignor to Champion Scraper Company, Troy, Ohio. Earth-scraper. (Reissue)	10,370	Aug. 21	1532	432	24	701
Byrkit, Archibald R., Fairfield, Iowa. Book-rest	289,384	Dec. 4	14	5	25	889
Byrne, John J., Chicago, Ill. Adjusting mechanism for calipers	279,534	June 19	1162	322	23	2335
Byrne, Mary A., New York, N. Y. Toilet-case	283,071	Aug. 14	711	200	24	634
Byrnes, Joseph, assignor of two-thirds to J. Stanson and J. Hollowed, Chicago, Ill. Bottle-stopper	282,953	Aug. 14	568	161	24	608
Byrnes, Thomas F., Emporia, Kans. Strap for overshoes	282,954	Aug. 14	569	161	24	608
Byrnes, Thomas W., Manitowoc, Wis. Apparatus for drafting garments	282,842	Aug. 7	438	124	24	577
Byrns, Isaac N. (See Eccles, William M., assignor.)						
Byron, Edward L., Compton, Quebec, Canada. Vegetable-cutter	283,466	Aug. 21	1208	339	24	730
Byron, Thomas F., Lowell, Mass. Car-coupling	277,677	May 15	1431	386	23	1883
Cabell, Flora B. (See Cabell, Samuel G., assignor.)						
Cabell, Milton S., assignor of one-half to W. Schaefer, Quincy, Ill. Lubricator for engine-slides	289,066	Nov. 27	1601	443	25	810
Cabell, Milton S., assignor of one-half to W. Schaefer, Quincy, Ill. Lubricator	289,888	Dec. 11	648	189	25	1006
Cabell, Samuel G., assignor to F. B. Cabell, Washington, D. C. Lubricator	283,860	Aug. 28	1630	475	24	828
Cable, John A., St. Louis, Mo. Apparatus for separating gold	274,083	Mar. 13	1073	296	23	1026
Cable, Richard V., Poughkeepsie, N. Y. Corset	270,739	Jan. 16	1135	325 326	23	237
Cade, Baylus, Scott's Depot, W. Va. Car-coupling	272,643	Feb. 20	1339	376	23	690
Cade, George, assignor of one-half to H. P. Miller, Milan, Tenn. Nut-lock	271,414	Jan. 30	1970	569	23	336
Cadigan, Edward, assignor to himself and A. B. Mole, Adams, Mass. Beamer	278,873	June 5	273	79	23	2170
Cadwell, Alexander, Petaluma, Cal. Harness-buckle	276,223	Apr. 24	1736	450	23	1548
Cady, D. Lawton, Holly, Mich. Weather-strip	282,160	July 31	2311	634	24	424
Caillat, Frank E. (See Hall, Edward C., assignor.)						
Caesar, Julius, New York, N. Y. Enamelled letter for signs	273,024	Feb. 27	1827	511	23	781
Caffall, Robert M., Philadelphia, Pa. Treating waterproofed building material	275,327	Apr. 3	567		23	1322
Cage, George A., et al. (See Freeman, Walter F., assignor.)						
Cage, George A., Mineola, Tex. Car-coupling	279,332	June 12	903	252	23	2286
Cagle, Alexander W., Hollywood, assignor of one-half to A. C. Rhodes, Little Rock, Ark. Log-wagon	275,016	Apr. 3	173	47	23	1255
Cagney, Timothy J., assignor to Sheldon & Co., New York, N. Y. Book-binding	277,450	May 15	1170	314	23	1840
Cahill, John T., and L. Mangold, Chattanooga, Tenn. Service-pipe box	279,703	June 19	1356	378	23	2369
Cahn, Levi F., New York, N. Y. Snap for neck-chains	275,554	Apr. 10	933	253	23	1394
Caibone, Edwin R. (See Bea, John H., Jr., assignor.)						
Caillat, Louis D., Paris, France. Manufacture of pasteboard boxes	270,740	Jan. 16	1136	326	23	237
Cain, Andrew C. W., Pittsburg, Pa. Wooden half-sole for boots or shoes	273,460	Mar. 6	284	77	23	882
Cain, Ephraim D., Wigan, Mo. Car-coupling	273,949	Mar. 13	911	249	23	997
Cain, Harry, assignor of one-half to C. H. Mickel, Bridgeton, N. J. Fruit-jar	279,535	June 19	1163	322	23	2335
Cain, John, Pittsburg, Pa. Apparatus for drilling wells	285,010	Sept. 18	1054	295	24	1099
Caine, Robert E., Battle Creek, Mich. Salt-box	286,384	Oct. 9	761	206	25	148
Cajar, Friedrich, New York, N. Y. Pipe-wrench	270,741	Jan. 16	1137	326	23	237
Calahan, Edward A. (See Delany, Patrick B., assignor.)						
Calahan, Edward A., Brooklyn, and P. B. Delaney, New York, N. Y., assignors to Standard Electric Manufacturing Company. Multiplex telegraph	281,339	July 17	1249	346 347 348	24	233
Calder, George, Mill Creek, Utah Ter. Game-table	289,217	Nov. 27	1780	493	25	843
Calder, Robert A. (See Farmer and Calder.)						
Calderwood, Alexander C., Johnstown, N. Y. Glove-finishing apparatus	276,768	May 1	312	81	23	1680

## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Caldwell, George R., Troy, N. Y. Wire-cloth for the manufacture of paper, &c	284,273	Sept. 4	143	40	24	928
Caldwell, Henry W., Chicago, Ill. Elevator-bucket	280,909	July 10	703	198	24	131
Caldwell, James S., Angus, Tex. Washing-machine	282,955	Aug. 14	569	161	24	609
Caldwell, John A., Bay Ridge, N. Y. Crane	284,274	Sept. 4	144	40	24	928
Caldwell, John H., Basco, Ill. Gate	276,769	May 1	313	81	23	1680
Caldwell, William C., Chicago, Ill. Sirup-pitcher	280,012	June 26	1728	484	23	2440
Caldwell, William L., Chicago, Ill. Combined blotter, calendar, and rule	282,702	Aug. 7	286	80	24	540
Calef, Joseph W., North Easton, Mass. Pipe cutter and tongs	272,526	Feb. 20	1185	331	23	662
Calef, Joseph W., North Easton, Mass. Wrench	273,461	Mar. 6	285	77	23	882
Caler, John H. (See Small and Caler.)						
Caley, Jeremiah, Brazil, assignor of two-thirds to C. Schrepferman and G. W. Mathis, Clay County, Ind. Adjustable-frame sulky	287,622	Oct. 30	2352	634	25	456
Calhoon, John C., New Brighton, Pa. Truss	282,268	July 31	2447	673	24	447
Calhoun, D. Irving, Weedsport, N. Y. Excavator and loader	278,399	May 29	2347	642	23	2058
Calhoun, D. Irving, Weedsport, N. Y. Car for hoisting and conveying machines	283,964	Aug. 28	1808	512	24	853
Calkins, Henry, Vinton, Iowa. Washing-machine	273,346	Mar. 6	140	39	23	857
Calkins, James B., Pacific, Mo. Car-door fastening	271,415	Jan. 30	1971	569	23	396
Call, Edward B., Peoria, Ill. Cutting and abrading disk	270,384	Jan. 9	670	197	23	140
Call, Libbie A., Oshkosh, Wis. Dress-chart	281,666	July 24	1666	455	24	309
Callahan, Amos, Maryville, Tenn., assignor to himself and W. J. Davis, New York, N. Y. Millstone-driver	271,034	Jan. 23	1491	430	23	305
Callahan, Charles, <i>et al.</i> (See Ring and Bradshaw, assignors.)						
Callahan, Cornelius, assignor to American Fire Hose Manufacturing Company, Chelsea, Mass. Coupling for uniting streams from fire-engines	276,131	Apr. 17	1625	447	23	1521
Callahan, Cornelius, assignor to American Fire Hose Manufacturing Company, Chelsea, Mass. Hose	278,312	May 29	2234	612	23	2038
Callahan, James F., Knoxville, Tenn. Millstone-driver	271,572	Jan. 30	2170	625	23	430
Callahan, Russel B., Lansing, Mich. Sash-holder	280,445	July 3	135	36	24	25
Callan, John P., Aurora, Ill. Saddle for vehicle-springs	280,910	July 10	704	198	24	131
Callan, Michael, Jr., Lytle City, Iowa. Check-rower for corn-planters	274,266	Mar. 20	1314	362	23	1076
Callanen, Frank J. (See Beckwith, Samuel H., assignor.)						
Callard, John W., Toledo, Ohio. Filter	281,177	July 10	1039	288	24	190
Callen, Jacob B., <i>et al.</i> (See House, Alfred B., assignor.)						
Callow, John J., Cleveland, Ohio. Stencil-plate for graining	280,446	July 3	135	37	24	25
Calver, Timothy, Portsmouth, Ohio. Force-pump	288,007	Nov. 6	280	79	25	555
Calver, Timothy, Portsmouth, Ohio, and S. H. Stont, Covington, Ky. Balanced slide-valve	281,015	July 10	834	232	24	155
Calver, William, Washington, D. C. Apparatus for storing and distributing solar heat	290,851	Dec. 25	1884	520	25	1240
Calver, William, Washington, D. C. Water-lens for solar heaters	290,852	Dec. 25	1886	520	25	1240
Calvert, Callender I., Philadelphia, Pa. Sod transplanter and cutter	284,720	Sept. 11	695	195	24	1028
Calvert, William H., <i>et al.</i> (See Heaverin, William H., assignor.)						
Calvin, John J., <i>et al.</i> (See Moore and Heaberlin, assignors.)						
Cameron, Allen P., <i>et al.</i> (See Pavey, Samuel, assignor.)						
Cameron, Arthur, Kalamazoo, and C. E. Russell, Grand Rapids, Mich. Car-step	280,129	June 26	1865	526	23	2465
Cameron, George H., Oshkosh, Wis. Saw-mill dog	282,048	July 31	2155	501	24	399
Cameron, James W., assignor to J. H. Roberts, E. Seymour, and J. B. Hyde, New York, N. Y. Button-hole attachment for sewing-machines	272,527	Feb. 20	1186	331	23	662
Cameron, Joseph, Cynthia, Ohio. Harrow	274,267	Mar. 20	1315	363	23	1076
Camp, Bushrod H. (See Camp, Wallace H., assignor.)						
Camp, Edward E., <i>et al.</i> (See Angel, Joseph R., assignor.)						
Camp, Hiram, assignor to New Haven Clock Company, New Haven, Conn. Clock-bell	278,874	June 5	273	79	23	2170
Camp, John C. (See Merritt, Wiley, assignor.)						
Camp, Joseph D., East Randolph, Vt. Method of and apparatus for separating apple-seed from pomace	280,130	June 26	1866	526	23	2465
Camp, Louis F., <i>et al.</i> (See Angel, Joseph R., assignor.)						
Camp, Mortimer M., New Haven, Conn., assignor to Indestructible Water Pipe Company, of New York. Pipe-coupling	283,072	Aug. 14	712	200	24	634
Camp, Thomas, Covington, Ga. Cotton-gin	277,223	May 8	889	237	23	1784
Camp, Wallace H., Waterbury, Conn., assignor of one-half to B. H. Camp, Boston, Mass. Lock for post-office boxes	280,718	July 3	454	130	24	81
Camp, Wallace H., assignor to Scovill Manufacturing Company, Waterbury, Conn. Key-rack	287,623	Oct. 30	2352	634	25	456
Campbell, Alanson, <i>et al.</i> (See Vincent, John, Jr., assignor.)						
Campbell, Alexander H., Waynesborough, Pa. Key-seat-milling machine	274,906	Apr. 3	17	5	23	1230
Campbell, Allen G. (See Chambers, Daniel T., assignor.)						
Campbell, Andrew, Brooklyn, assignor to J. and E. McLoughlin, New York, N. Y. Mechanism for operating the beds of printing-presses	274,560	Mar. 27	1715	476	23	1151
Campbell, Andrew, Brooklyn, assignor to J. and E. McLoughlin, New York, N. Y. Variable bed-motion for printing-machines	278,875	June 5	274	79, 80	23	2170
Campbell, Andrew, Brooklyn, assignor to J. and E. McLoughlin, New York, N. Y. Face-cloth for printing-presses	279,129	June 12	658	180	23	2246
Campbell, Andrew, Brooklyn, assignor to J. and E. McLoughlin, New York, N. Y. Printer's inking and distributing roller	280,447	July 3	136	37	24	26
Campbell, Andrew, Brooklyn, assignor to J. and E. McLoughlin, New York, N. Y. Grinding-machine	282,049	July 31	2156	591, 592	24	399
Campbell, Andrew, Brooklyn, assignor to J. and E. McLoughlin, New York, N. Y. Mounting form-rollers for printing-presses	282,956	Aug. 14	570	161	24	609
Campbell, Andrew, Brooklyn, assignor to J. and E. McLoughlin, New York, N. Y. Printing-press	283,201	Aug. 14	870	243	24	662
Campbell, Andrew, Brooklyn, assignor to J. and E. McLoughlin, New York, N. Y. Mechanism for shifting the angle-rollers of printing-presses	284,607	Sept. 11	548	155	24	1003
Campbell, Andrew, Brooklyn, assignor to J. and E. McLoughlin, New York, N. Y. Printer's inking-roller	285,011	Sept. 18	1057	296	24	1099
Campbell, Andrew, Brooklyn, assignor to J. and E. McLoughlin, New York, N. Y. Sliding bearer for beds of printing-presses	286,997	Oct. 23	1538	424	25	296
Campbell, Andrew, Brooklyn, assignor to J. and E. McLoughlin, New York, N. Y. Oscillating-cylinder printing-machine	289,810	Dec. 11	546	152, 153	25	988
Campbell, Andrew J., New York, N. Y. Fire-proof floor	289,218	Nov. 27	1781	493	25	843
Campbell, Angus K., Newton, Iowa. Apparatus for heating and ventilating rooms	275,585	Apr. 10	934	254	23	1394
Campbell, Bryant D., assignor to Patent Flue Thimble Company, Richmond, Ind. Stove-pipe fastener	275,586	Apr. 10	935	254	23	1394
Campbell, Charles, Binghamton, N. Y., assignor of one-half to S. L. Wilsey, Manson, Iowa. Ironing-table	275,753	Apr. 10	1157	317	23	1431
Campbell, Charles B., Buffalo, N. Y. Roller-mill	272,644	Feb. 20	1340	376	23	690
Campbell, Charles C., Cincinnati, Ohio. Driving-belt	277,678	May 15	1432	386	23	1884



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Campbell, Charles L., and M. T. Martin, Chicago, Ill. Machine for manipulating cards or tickets for creating value	290,395	Dec. 18	1274	358	25	1127
Campbell, David, <i>et al.</i> (See Schilling, William, assignor.)						
Campbell, Elijah W. (See Campbell, Solon O., assignor.)						
Campbell, Frank E., Piqua, Ohio. Combined leg and clasp for folding lounges	279,536	June 19	1164	322	23	2335
Campbell, Franklin P., assignor to himself and T. E. Hayes, Bloomfield, N. J. Adjustable eaves-trough bracket	288,307	Nov. 13	640	175	25	628
Campbell, George, Toronto, Ontario, Canada. Forge	285,224	Sept. 18	1309	368	24	1143
Campbell, Gertrude, Chicago, Ill. Monthly-protector	276,770	May 1	314	82	23	1680
Campbell, Henry A., Metuchen, N. J. Steam-condenser	277,457	May 15	1171	315	23	1840
Campbell, Henry F., Concord, N. H. Barrel-hoop-planing machine	272,029	Feb. 13	553	150	23	548
Campbell, Henry F., Concord, N. H. Hoop-preparing mechanism	288,205	Nov. 13	513	143	25	606
Campbell, Henry F., Concord, N. H. Electrical conductor	290,853	Dec. 25	1887	521	25	1241
Campbell, Henry F., Concord, N. H. Electrical cable	290,854	Dec. 25	1888	521	25	1241
Campbell, Henry F., Concord, N. H. Electrical conductor	290,971	Dec. 25	2045	562	25	1266
Campbell, Herbert. (See Crawford, Middleton, assignor.)						
Campbell, Howard. (See Scott and Campbell.)						
Campbell, Howard, assignor to Gaar, Scott & Company, Richmond, Ind. Grain-separator	287,756	Oct. 30	2525	681	25	489
Campbell, James A., Waco, Tex. Oil-can	274,718	Mar. 27	1899	530	23	1185
Campbell, James A., Waco, Tex. Oil-can	287,232	Oct. 23	1843	504	25	353
Campbell, James M., Brushland, N. Y. Fruit-drier	283,202	Aug. 14	874	244	24	662
Campbell, James W., Germantown, N. Y. Window-cornice	273,814	Mar. 13	748	203	23	970
Campbell, James W., Germantown, assignor to H. L. Judd & Co., New York, N. Y. Combined cornice and cornice-pole	281,340	July 17	1252	348	24	234
Campbell, John, San Francisco, Cal. Smelting refractory ores	290,629	Dec. 13	1595	438	25	1181
Campbell, John, Walden, N. Y. Bench-plane	271,219	Jan. 30	1721	498	23	351
Campbell, John, Walden, N. Y. Cooking-utensil	284,608	Sept. 11	549	155 156	24	1003
Campbell, John, Walden, N. Y., assignor to Stanley Rule and Level Company, New Britain, Conn. Bench-plane. (Reissue.)	10,394	Oct. 23	2049	557	25	390
Campbell, Joseph. (See Raymond, Seymour, assignor.)						
Campbell, Malcolm, Holyoke, Mass. Adjustable hinge	279,857	June 19	1534	499	23	2399
Campbell, Mark, Chicago, Ill. Hair rooter, knitter, and hackle	281,834	July 24	1891	516	24	349
Campbell, Myron, South Bend, Ind. Check-book	273,254	Mar. 6	15	5	23	637
Campbell, Newton, Elizabethtown, Ohio. Car-coupling	275,138	Apr. 3	341	94	23	1285
Campbell, Rebecca A., Quincy, Mass. Milk-pail	274,268	Mar. 20	1816	363	23	1076
Campbell, Robert, Allegheny, Pa. Gearing	290,855	Dec. 25	1889	521	25	1241
Campbell, Smith, <i>et al.</i> (See Vincent, John, Jr., assignor.)						
Campbell, Solon O., Van Wert, Iowa, assignor of one-half to E. W. Campbell, Fort Worth, Tex. Device for converting motion	279,513	June 12	1131	313	23	2322
Campbell, William C., Corning, N. Y. Wagon-jack	276,771	May 1	314	82	23	1680
Campbell, William H., New York, N. Y. Ticket-punch	281,835	July 24	1891	516	24	349
Campbell, William M., Mount Clemens, Mich., assignor to National Continuous Stone Conduit Company, New York, N. Y. Apparatus for forming underground pipes of concrete	272,410	Feb. 20	1043	292	23	637
Campbell, William M., Mount Clemens, Mich., assignor to National Continuous Stone Conduit Company, New York, N. Y. Apparatus for forming continuous conduits of concrete	272,411	Feb. 20	1044	292	23	637
Campbell, William R., and W. J. Chambers, Kirkwood, Ill. Corn-planter check-rower	278,876	June 5	277	80	23	2170
Campen, William W., Wilmington, N. C. Mechanical movement	284,816	Sept. 11	811	226	24	1048
Campbell, William W., San Francisco, Cal. Station-indicator	287,094	Oct. 23	1666	457	25	321
Campbell, William W., assignor of one-half to W. H. Thomas, Indianapolis, Ind. Pulley-covering	276,559	May 1	17	5	23	1630
Campbell, William W., assignor of one-half to W. H. Thomas, Indianapolis, Ind. Cementing composition	278,681	June 5	6		23	2126
Campfield, Matthew E., assignor to himself and C. G. Luttiff, Cleveland, Ohio. Blank for monkey-wrenches	285,796	Oct. 2	18	6	25	5
Canaday, Winfield S., assignor of one-half to J. N. Watkins, New Castle, Ind. Balanced valve	280,346	July 3	10	3	23	4
Canavan, John H., Globe, Ariz. Ter. Water-jacket for furnaces	277,989	May 22	1805	492 493	23	1955
Canavan, John H., Globe, Ariz. Ter. Reverberatory furnace	285,462	Sept. 25	1597	448	24	1200
Candlish, Thomas C., St. Louis, Mo. Corset-clasp	279,910	June 26	1600	449	23	2418
Candrian, Herman A., assignor, by mesne assignments, to H. Pulver, Chicago, Ill. Barber's chair	285,109	Sept. 18	1175	329	24	1119
Canessa, Paride, San Francisco, Cal. Folding box	280,013	June 26	1729	485	23	2440
Canfield Company, I. A. (See Canfield, Isaac A., assignor.)						
Canfield, Felix P., Boston, Mass. Safety-stop for elevators	281,016	July 10	835	232	24	155
Canfield, Henry C. (See Dull, Norman R., assignor.)						
Canfield, Isaac A., assignor to I. A. Canfield Company, Middletown, Conn. Cutting-die	286,901	Oct. 16	1413	388	25	269
Cannefax, George R., Dixon, Mo. Middlings-purifier	280,571	July 3	280	77	24	50
Canney, John F. (See Tousey, Donald F., assignor.)						
Cannon, Albert P., Farmingdale, Me. Fastening for reflectors upon tubular lanterns	274,170	Mar. 20	1192	328	23	1054
Cannon, Fred. C., New Haven, Conn. Carriage-lamp	270,385	Jan. 9	671	197	23	141
Cannon, H. C., <i>et al.</i> (See Gates, Thomas, assignor.)						
Cannon, James F., and W. C. Von Buchwald, Philadelphia, Pa. Sewing-machine	288,008	Nov. 6	281	80	25	555
Cannon, Richard, Washington, Pa. Sight for fire-arms	274,269	Mar. 20	1317	363	23	1077
Cannon, Robert J., and J. M. Ward, Des Moines, Iowa. Seal-lock	276,666	May 1	155	40	23	1653
Cantelo, John S., Taunton, Mass. Adjustable drawing-knife	286,385	Oct. 9	761	206	25	149
Cantelo, John S., Boston, Mass. Drawing-knife	290,396	Dec. 18	1275	358	25	1128
Canvas Slide Fire Escape Company. (See Bailey, Ezra H., assignor.)						
Capen, Thomas W., assignor to Yale Lock Manufacturing Company, Stamford, Conn. Traveling crane	270,279	Jan. 9	533	156 157 197 198 199 200 201	23	114
Capen, Thomas W., assignor to Yale Lock Manufacturing Company, Stamford, Conn. Traveling crane	270,386	Jan. 9	672	177 178 179	23	141
Capen, Thomas W., assignor to Yale Lock Manufacturing Company, Stamford, Conn. Crane	271,311	Jan. 30	1830	531 532	23	371
Capen, Thomas W., assignor to Yale Lock Manufacturing Company, Stamford, Conn. Hoisting apparatus	273,462	Mar. 6	286	77 78	23	882
Capen, Thomas W., assignor to Yale Lock Manufacturing Company, Stamford, Conn. Overhead traveling apparatus	275,465	Apr. 10	785	210 211	23	1369
Capen, Thomas W., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Traveling crane	275,774	June 5	121	34	23	2144

*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Capen, Thomas W., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Traveling crane	278,775	June 5	122	34, 35	23	2144
Capen, Thomas W., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Hoisting apparatus	279,704	June 19	1357	378	23	2369
Capewell, George J. (See Murphy, Daniel H., assignor.)						
Cappel, Fredrick, Hoboken, N. J. Cork puller or screw	287,504	Oct. 30	2181	592	25	423
Cappel, Friedrich. (See Bauer, Ernst, assignor.)						
Capron, Elisha P. H. Hudson, N. Y. Friction-clutch	275,466	Apr. 10	787	211	23	1369
Capron, Jacob, New York, N. Y. Pneumatic indicator and speaking-tube	277,110	May 8	757	159	23	1761
Capron, Jacob, New York, N. Y. Electrical indicator for speaking-tubes	283,073	Aug. 14	713	200	24	634
Carbonate Mining Company. (See Davis, Robert W., assignor.)						
Card, William L. (See Dane and Card.)						
Cardwell, George A., assignor to W. G. Button, Brooklyn, N. Y. Automatic telephone-exchange	281,613	July 17	1593	436	24	290
Cardwell, Thomas M., and N. B. Berry, Harrodsburg, Ky. Hinged mouth-piece for mail-pouches	280,572	July 3	281	77	24	51
Cardy, Joseph. (See Parker and Cardy.)						
Carey, Dennis, Lynn, Mass. Horseshoe	276,157	Apr. 24	1658	457	23	1335
Carey, Ebenezer M. (See McMurray and Carey.)						
Carey, Eustace, H. Gaskell, Jr., and F. Hurter, Widnes, county of Lancaster, England. Manufacture of bicarbonate of soda	276,990	May 1	592	156	23	1727
Carey, Henry W., Manistee, Mich. Band for shingle-bunches	286,386	Oct. 9	762	206	25	149
Carey, William J., Millvale, assignor of one-half to H. P. Staving, Allegheny, Pa. Freight-car-door fastening	278,092	May 22	1923	528	23	1977
Carey, Wilson W., Lowell, Mass. Wood-rim pulley	271,416	Jan. 30	1972	510	23	396
Carey, Wilson W., Lowell, Mass. Band-sawing machine	275,139	Apr. 3	341	94	21	1285
Carey, Wilson W., Lowell, Mass. Wood-rim pulley	282,161	July 31	2312	635	24	424
Cargill, Frank R., Chicago, Ill. Journal-bearing	280,347	July 3	11	3	24	4
Carl, George. (See Gorrell, Albert, assignor.)						
Carl, John, New York, N. Y. Combined jelly and ice-cream tray	284,721	Sept. 11	696	195	24	1028
Carl, Robert. (See Smith, Curtis A., assignor.)						
Carlaw, John A. (See Bradshaw, Edwin, assignor.)						
Carleton, Albert S., Brownville, N. Y. Carriage-gearing	281,667	July 24	1668	455	24	309
Carleton, Cyrus. (See Wilcox and Carleton.)						
Carleton, Cyrus, assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Bolt and nut lock	277,408	May 8	1102	296	23	1822
Carleton, Monroe G., assignor to G. W. Austin and V. S. Pease, Jackson, Mich. Bouquet-badge	273,666	Mar. 6	545	145	23	927
Carleton, Roswell. (See Keith and Carleton.)						
Carleton, Roswell. (See Keith, Thomas K., assignor.)						
Carley, Benjamin, Paterson, N. J., assignor to C. Holland, New York, N. Y. Slide-valve	282,162	July 31	2313	635	24	424
Carley, Harvey. (See Page and Carley.)						
Carley, Timothy L., assignor of one-half to L. F. Powell, Syracuse, N. Y. Saw-frame for circular-saw mills	290,174	Dec. 11	983	277	25	1069
Carley, Timothy L., L. F. Powell, and H. H. Boggs, Syracuse, N. Y.; said Boggs assignor to said Powell. Set-works for saw-mills	290,531	Dec. 18	1471	406	25	1161
Carlile, George F., Bloomington, Ill. Railway-signal	269,385	Dec. 4	15	5	25	890
Carlisle, Frederick, assignor to National Chemical Machine and Manufacturing Company, Newark, N. J. Apparatus for the manufacture of hydrated sulphurous acid	284,817	Sept. 11	812	236	24	1048
Carlisle, George, Attleborough, Mass. Universal joint	285,966	Oct. 2	236	66	25	45
Carlisle, James D. (See Smither and Carlisle.)						
Carlisle, William S., Watertown, N. Y. Ruffling attachment for sewing-machines	282,843	Aug. 7	441	125	24	578
Carlisle, William S., assignor to Davis Sewing Machine Company, Watertown, N. Y. Sewing-machine	270,540	Jan. 9	876	254 } 255 }	23	181
Carlock, Charles F., New York, and C. H. Davids, Brooklyn, N. Y.; said Davids assignor to said Carlock. Book adjuster and supporter	274,719	Mar. 27	1900	530	23	1185
Carlsen, Hans M., Cleveland, Ohio. Binding pole and chain	276,351	Apr. 24	1908	529	23	1576
Carlson, William H. (See Leaming, Christopher, assignor.)						
Carlsson, Theodore. (See Lindgren, Carl A., assignor.)						
Carlton, Galen, Brooklyn, N. Y., and D. M. Smyth, assignors to Smyth Manufacturing Company, Hartford, Conn. Apparatus for pasting sheets in binding books	276,224	Apr. 24	1736	480 } 481 }	23	1548
Carlton, Harry W., Peoria, Ill. Electric train-aster	277,990	May 22	1805	493	23	1956
Carman, A. F., et al. (See Williamson, S. Stuart, assignor.)						
Carman, Alonzo G., Marengo, Ill. Attachment for windmills	275,140	Apr. 3	342	94	23	1285
Carman, Alvin O., Potterville, Mich. Combined harvester and grain-binder	269,826	Jan. 2	5	2, 3, 4	23	3
Carman, Benjamin F., San Francisco, Cal. Cable-grip	288,690	Nov. 20	1138	313	25	730
Carman, Hiram, Portland, assignor to Hyde, Kline & Co., Ridgway, Pa. Adjustable saw-guide	270,387	Jan. 9	677	201	23	142
Carman, John W., Fort Atkinson, Wis., assignor of part to E. Terhune, Chicago, Ill., and G. F. Patterson, Fort Atkinson, Wis. Window-screen	277,111	May 8	759	200	23	1762
Carman, Theodore F. (See Stevens and Boud, assignors.)						
Carmichael, Henry, Brunswick, Me. Treating paper-stock. (Reissue)	10,282	Feb. 6	529		23	531
Carmichael, John P., Milwaukee, Wis. Rubber-dam clamp	277,224	May 8	891	237	23	1785
Carmien, Charles C. (See Yoder and Carmien.)						
Carneli, George, Philadelphia, Pa. Brick-pressing machine	283,565	Aug. 21	1326	370	24	751
Carney, S. H. (See Maloney, James A., assignor.)						
Carney, S. H., trustee. (See Maloney, James A., assignor.)						
Carney, Thomas, Arbnuckle, W. Va. Lifting-jack	288,009	Nov. 6	283	80	25	555
Caro, Heinrich, Mannheim, Germany, and A. Kern, Basle, Switzerland, assignors to Badische Anilin and Soda Fabrik, Mannheim, Germany. Manufacture of dye-stuff	290,856	Dec. 25	1890		25	1241
Caron, Charles K. (See Maxwell, George S., assignor.)						
Carpenter, Alexis C., Rochester, N. Y. Truck	281,017	July 10	837	232	24	155
Carpenter, Augustine. (See Hitchcock, Henry, assignor.)						
Carpenter, Coles A., Oyster Bay, N. Y. Apparatus for excavating and screening sand, &c.	288,545	Nov. 13	951	261	25	681
Carpenter, Delos, Orion, Mich. Fanning-mill	282,050	July 31	2159	592 } 593 }	24	400
Carpenter, Edd, Owosso, Mich. Harness-pad press	271,417	Jan. 30	1973	570	23	396
Carpenter, Edwin P. (See Wilson, Eugene M., assignor.)						
Carpenter, Francis W., Harrison, N. Y. Toy horse	274,270	Mar. 20	1318	364	23	1077
Carpenter, Francis W., Harrison, N. Y. Dust-pan	277,225	May 8	891	237	23	1785
Carpenter, Francis W., Harrison, N. Y. Dust-pan	285,877	Oct. 2	124	36	25	24
Carpenter, Francis W., Harrison, N. Y. Toy horse and cart	287,095	Oct. 23	1668	458	25	322
Carpenter, George A. (See Rickel and Carpenter.)						
Carpenter, George O., et al. (See Simonds, George W., assignor.)						
Carpenter, James M., Pawtucket, R. I. Screw-plate	290,857	Dec. 25	1891	522	25	1241



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Carpenter, Jesse, Wyman, Mich. Cant-hook.....	283,203	Aug. 14	875	241	24	663
Carpenter, Juliette W. B., Medford Mass. Halter.....	283,012	Sept. 18	1057	296	24	1099
Carpenter, Lorin D., Brush Creek, Iowa. Tread-power.....	281,018	July 10	838	233	24	153
Carpenter, Peter M., Buffalo Gap, Tex. Sheep-dip.....	279,705	June 19	1359	.....	23	2369
Carpenter, Robert K., Medford, Mass. Horse-clipping machine.....	281,668	July 24	1669	455	24	309
Carpenter, S. M. (See Kantholz, John N., assignor.).....						
Carpenter, William A., Bankers, Mich. Measure.....	289,974	Dec. 11	748	211	25	1025
Carpenter, William B., Newark, N. J. Plastic eyelet.....	271,035	Jan. 23	1492	430	23	305
Carpentier, Henri. (See Lartigue, Charles F. M. T., assignor.).....						
Carper, Samuel B., Buda, Ill. Harrow.....	275,990	Apr. 17	1450	399	23	1492
Carquerville, Edward, <i>et al.</i> (See Hartman, George J., assignor.).....						
Carr, Annie. (See Chace, John K., assignor.).....						
Carr, Clark E., Galesburg, Ill. Car-coupling.....	290,317	Dec. 18	1174	329	25	1109
Carr, George W., assignor to Carr & Hobson, (limited,) New York, N. Y. Guide-wheel for plows.....	270,742	Jan. 16	1138	396	23	238
Carr & Hobson. (See Carr, George W., assignor.).....						
Carr & Hobson. (See Hobson, Joseph W., assignor.).....						
Carr, Howard, San Francisco, Cal. Magazine-gun.....	281,341	July 17	1253	348	24	234
Carr, James, Syracuse, N. Y. Pool-ball rack.....	286,114	Oct. 2	411	113	25	76
Carr, James, Covington, Ky. Fountain-pen.....	288,010	Nov. 6	283	80	25	556
Carr, Jerome S., Cincinnati, Ohio. Velocipede.....	273,815	Mar. 13	748	{ 203 204 }	{ 23 23 }	970
Carr, John I. (See Strong and Carr.).....						
Carr, John I., Chicago, Ill., assignor to L. W. Tatum, Cleveland, Ohio. Tool-holder for grindstones.....	277,882	May 22	1675	457	23	1934
Carr, John I., Chicago, Ill., assignor to L. W. Tatum, Cleveland, Ohio. Tool-holder for grindstones.....	277,883	May 22	1676	457	23	1934
Carr, John F., Camden, N. J. Gas-lighter.....	280,573	July 3	282	78	24	51
Carr, Joseph E., assignor of one-half to O. E. Michaelis, Philadelphia, Pa. Therapeutic electric appliance.....	287,096	Oct. 23	1669	458	25	322
Carr, Laurence, Shakopee, Minn. Hame.....	270,577	Jan. 16	926	267	23	198
Carr, Robert L., Fall River, Mass. Warping-machine.....	276,667	May 1	156	40	23	1653
Carr, Robert L., Fall River, Mass. Apparatus for rewinding yarn from broken or damaged cops.....	276,668	May 1	159	41	23	1653
Carr, Robert S., assignor, by mesne assignments, to Sohn Ridge Implement Company, Hamilton, Ohio. Seeder.....	274,460	Mar. 27	1573	431	23	1128
Carr, Robert S., assignor, by mesne assignments, to Sohn Ridge Implement Company, Hamilton, Ohio. Planter.....	279,221	June 12	757	209	23	2262
Carr, Robert S., assignor to Sohn Ridge Implement Company, Hamilton, Ohio. Horse hay-rake.....	283,324	Aug. 14	1020	285	24	690
Carr, Robert S., and J. W. See, assignors, by mesne assignments, to Sohn Ridge Implement Company, Hamilton, Ohio. Grain-drill attachment.....	274,459	Mar. 27	1572	430	23	1128
Carr, Seaborn, Eminence, Mo. Spoke-socket for wheels.....	284,183	Sept. 4	32	8	24	910
Carr, Stephen B. (See Hall, Benjamin F., assignor.).....						
Carr, Sydney H., assignor to M. C. Schlessinger & Co., New York, N. Y. Toy locomotive.....	273,347	Mar. 6	141	39	23	857
Carr, William, assignor of one-half to J. K. Martin and C. Vander Voet, St. Louis, Mo. Needle-bar cover for sewing-machines.....	284,538	Sept. 4	462	131	24	983
Carrick, Thomas J., assignor to H. Snowden and C. H. Cowman, Baltimore, Md. Dental vulcanizer.....	279,079	June 5	571	157	23	2221
Carrick, William, Boston, Mass. Ribbon or label holder for hats.....	278,877	June 5	278	81	23	2171
Carrier, Arthur, Bay City, Mich. Lath-sawing machine.....	289,219	Nov. 27	1782	494	25	843
Carrier, Louis N. (See Anyot, Jean B., assignor.).....						
Carrington, George L., <i>et al.</i> (See Howe, Solon G., assignor.).....						
Carroll, Erastus A., East Bloomfield, N. Y. Horseshoe.....	275,141	Apr. 3	343	94	23	1285
Carroll, George D., assignor to M. C. Carroll, Yonkers, N. Y. Drying printed sheets.....	273,816	Mar. 13	751	204	23	911
Carroll, Henry S. (See Smith, Robert M., assignor.).....						
Carroll, John, Owings's Mills, Md. Cask-rest.....	279,706	June 19	1359	379	23	2369
Carroll, John, Rushville, Ind. Vehicle-spring.....	289,067	Nov. 27	1602	444	25	810
Carroll, Julius, <i>et al.</i> (See Whiting, James M., assignor.).....						
Carroll, Manfred C. (See Carroll, George D., assignor.).....						
Carroll, Martin, Chicago, Ill. Brick-machine.....	289,889	Dec. 11	648	181	25	1007
Carroll, Samuel T., Denton, Tex. Mud-shoe.....	288,406	Nov. 13	787	213	25	652
Carroll, William. (See Martin, William F., assignor.).....						
Carroll, William T., Worcester, assignor to G. Draper & Sons, Hopedale, Mass. Bearing for spinning-spindles.....	272,528	Feb. 20	1190	332	23	663
Carroll, William T., Worcester, assignor to G. Draper & Sons, Hopedale, Mass. Spindle-bearing.....	290,397	Dec. 18	1276	358	25	1128
Carruth, William H., Bolivar, assignor of one-half to G. W. Randolph, Montezuma, Tenn. Harrow and cultivator.....	271,599	Feb. 6	21	5	23	444
Carruthers, William H., Monksville, W. Va. Pulley.....	281,669	July 24	1671	455	24	309
Cariscadin, Charles A., and F. P. Fish, New York, N. Y. Safety attachment for elevators.....	277,223	May 8	892	238	23	1785
Carson, Azariah. (See Patterson, George W., assignor.).....						
Carson, Francis B., Staunton, Va. Wagon-brake.....	288,546	Nov. 13	953	262	25	681
Carson, Howard A., Boston, Mass. Mechanism for moving earth and excavated material.....	282,163	July 31	2314	635	24	424
Carson, John, Cleveland, Ohio. Furnace.....	271,418	Jan. 30	1973	570	23	396
Carson, Robert J., Chicago, assignor of one-half to E. Rutz, Springfield, Ill. Iron or steel fence-post.....	278,220	May 22	2091	575	23	2005
Carson, Robert J., Chicago, assignor to T. Gilmore, Macomb, Ill. Transom-lifter.....	219,858	June 19	1536	429	23	2400
Carson, Robert J., Chicago, assignor of six-eighths to T. Gilmore, Macomb, Ill., and J. R. Hammond, Leadville, Colo. Iron fence-post.....	281,019	July 10	839	233	24	155
Carstensen, Ingwer A. (See Carstensen, Peter C. and I. A.).....						
Carstensen, Peter C. and I. A., Walnut, Iowa. Socket for harrow-teeth.....	288,773	Nov. 20	1241	340	25	738
Carter, Alba B., Raymond, N. H. Apple-parer.....	273,255	Mar. 6	16	5	23	837
Carter, Alba B., Great Falls, assignor of one-half to C. W. Prescott, Raymond, and S. H. Atkins, Milton Mills, N. H. Device for attaching wheels to axles.....	285,341	Sept. 18	1439	407	24	1167
Carter, Alba B., assignor of one-half to C. W. Prescott and S. P. Blake, Raymond, N. H. Apple-parer.....	288,974	Nov. 27	1486	412	25	791
Carter, Alexander, <i>et al.</i> (See Lattimer, Francis, assignor.).....						
Carter, Charles D., Spring Arbor, Mich. Wheel-cultivator.....	274,720	Mar. 27	1901	530	23	1185
Carter, Clement L., Union City, Ind. Post-hole digger.....	278,878	June 5	279	81	23	2171
Carter, Clement L., Union City, Ind. Post-hole digger.....	283,753	Aug. 28	1559	439	24	807
Carter, Cyrus C., Neelyville, Ill. Wheat-sowing machine.....	284,376	Sept. 4	262	73	24	948
Carter, Edward D., Weimar, Tex. Cotton-planter.....	278,682	June 5	7	2	23	2126
Carter, Edward D., Weimar, Tex. Combined cotton and corn planter and cultivator.....	284,609	Sept. 11	551	156	24	1003

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Carter, Edward H. (See Brong and Carter.)						
Carter, Edward S., Keokuk, Iowa. Car-coupling	270,014	Jan. 2	222	64	23	46
Carter, Edward S., Keokuk, Iowa. Car-coupling	273,950	Mar. 13	912	249	23	997
Carter, Edwin E., assignor to S. E. Carter, Waynesburg, Pa. Removable valve-cover	277,227	May 8	893	238	23	1785
Carter, Edwin E., assignor to S. E. Carter, Waynesburg, Pa. Fire-box for steam-boilers	284,010	Sept. 11	553	157	24	1004
Carter, Ezra W., et al. (See McCreary and Smith, assignors.)						
Carter, Ezra W., et al. (See Smith and McCreary, assignors.)						
Carter, Ezra W., Cohoes, and D. R. Smith, Green Island, assignors of one-half to R. S. Clark and J. McCleary, Cohoes, N. Y. Perculator	288,547	Nov. 13	953	202	25	681
Carter, Fannie. (See Carter, Henry, assignor.)						
Carter, Francis M., Marlborough, Mass., assignor to Shepherd Nailing Machine Company, Nashua, N. H. Machine for driving headless nails	270,280	Jan. 9	534	{ 157 158 }	{ 23	114
Carter, George W. T. (See Jackson and Carter.)						
Carter, Henry, et al. (See Lauten, Frank H., assignor.)						
Carter, Henry, assignor of one-fourth to F. Carter, Gold Hill, Nev. Weather-strip	284,539	Sept. 4	462	131	24	983
Carter, Henry, and W. Rennie, Toronto, Ontario, Canada; said Carter assignor to said Rennie. Ditching-machine	285,225	Sept. 18	1311	{ 369 370 }	{ 24	1143
Carter, James F., and T. Seely, Indianapolis, Ind. Saw-mill	279,537	June 19	1165	322	23	2335
Carter, John B., et al. (See Ball, Wilber W., assignor.)						
Carter, John F. (See Walker and Carter.)						
Carter, John H., assignor of one-half to F. A. Whitney, Keokuk, Iowa. Letter-box	290,532	Dec. 18	1472	407	25	1161
Carter, John R., Toronto, Ontario, Canada. Memorandum-book	273,223	Feb. 27	2075	583	23	825
Carter, John R., Toronto, Ontario, Canada. Manifold copying-book. (Reissue)	10,359	July 24	2127	533	24	388
Carter, John S., Syracuse, and I. C. Wightman, Norwich, N. Y. Milk-cooler	288,011	Nov. 6	284	80	25	556
Carter, John W., Jr., Brooklyn, N. Y. Card-support	272,120	Feb. 13	672	183	23	568
Carter, Nathan P., Brooklyn, N. Y. Ornamental chain	273,025	Feb. 27	1827	512	23	781
Carter, Robert A., Pittsburg, Pa. Roll-mounting	285,567	Sept. 25	1715	485	24	1222
Carter, S. E. (See Carter, Edwin E., assignor.)						
Carter, Sarah E. (See Carter, Edwin E., assignor.)						
Carter, Wendell, and H. T. Woods, Boston, Mass. Car-coupling	286,175	Oct. 9	484	134	25	101
Carter, William, Highlandville, Mass. Mitten	275,142	Apr. 3	344	95	23	1285
Carter, William, Highlandville, Mass., assignor to G. A. Leighton, Manchester, N. H. Knitting-machine	272,529	Feb. 20	1190	{ 332 333 }	{ 23	663
Carter, William, Toronto, Ontario, Canada. Overalls	280,574	July 3	282	78	24	51
Carter, William, Oldham, county of Lancaster, England. Gas-regulator	281,449	July 17	1392	382	24	257
Carter, William F. (See Adams and Carter.)						
Carter, William F., and J. M. Adams, San Francisco, Cal. Ore-concentrator	285,110	Sept. 18	1177	{ 329 330 }	{ 24	1119
Carter, William W., Bristol, Conn. Egg-beater	270,015	Jan. 2	223	64	23	46
Carter, Winfield S., Ashtabula, Ohio. Carpet-sweeper	282,957	Aug. 14	972	162	24	609
Cartier, Antonio E., et al. (See Bemis, Charles, assignor.)						
Cartmell, Robinson, Middlebury, Vt., and A. Ball, Claremont, N. H. Wood-pulp machine	286,902	Oct. 16	1413	389	25	270
Cartter, David K. (See Williamson, S. Stuart, assignor.)						
Cartwright, Edward, assignor of two-thirds to W. H. Mann and J. S. Edwards, Wilber, Nebr. Smelting-furnace	286,777	Oct. 16	1255	339	25	242
Cartwright, Henry. (See Frost and Cartwright.)						
Cartwright, John B. (See Kemper and Cartwright.)						
Cartwright, Robert, Rochester, N. Y. Axle-box	273,463	Mar. 6	288	79	23	882
Carty, John J., Cambridge, assignor to American Bell Telephone Company, Boston, Mass. Telephone signaling apparatus	288,691	Nov. 20	1140	314	25	720
Carvalho, Solomon N., New York, N. Y. Apparatus for superheating steam and heating air	270,281	Jan. 9	540	159	23	115
Carver Cotton Gin Company. (See Strong, Frederick S., assignor.)						
Carver, George H., Ravenswood, assignor to W. Deering, Chicago, Ill. Sickle-driving mechanism for harvesters	282,494	Aug. 7	18	5	24	504
Carver Gin and Machine Company. (See Horne, Edward G., assignor.)						
Carver, Thomas F., assignor of one-half to M. F. McMahon, Worcester, Mass. Friction-clutch. (Reissue)	10,365	Aug. 14	1086	305	24	702
Carver, William, Scottsville, N. Y. Cultivator and bean-harvester	274,224	Feb. 27	2076	583	23	825
Carves, Francois, St. Etienne, France. Coke-oven	287,905	Nov. 6	143	42, 43	25	533
Carwardine, Thomas. (See Hughes and Carwardine.)						
Cary, James H., Boston, Mass. Individual signaling apparatus for telephones	281,450	July 17	1394	383	24	258
Cary, James H., Boston, assignor to H. P. Tobey, Wareham, Mass. Individual signaling apparatus	278,221	May 22	2091	576	23	2005
Cary, James H., Boston, assignor to H. P. Tobey, Wareham, Mass. Individual telephone call	281,614	July 17	1596	436	24	291
Cary, James H., assignor to Cary Telephone Signal Company, Boston, Mass. Signaling apparatus for telephone-exchange systems	285,342	Sept. 18	1440	407	24	1167
Cary, Joseph C., assignor to J. H. J. Ronner, New York, N. Y. Box for carrying bottles	278,504	May 29	2478	676	23	2082
Cary Telephone Signal Company. (See Cary, James H., assignor.)						
Caryl, Charles W., Philadelphia, Pa. Fire-extinguisher	278,879	June 5	280	81	23	2171
Casad, Thomas F., Yellow Springs, Ohio. Tobacco-cutter	289,975	Dec. 11	748	211	25	1025
Casaday, William L. (See Gray and Casaday.)						
Casaday, William L. (See Smith and Casaday.)						
Casamajor, Paul, Brooklyn, N. Y. Filtering saccharine solutions, &c	270,634	Jan. 16	999	288	23	211
Casanova, Bernardin, Moca-Croce, Corsica, France. Destruction of phylloxera	271,036	Jan. 23	1492		23	305
Case, A. Welles, et al. (See Case, Henry F., assignor.)						
Case, A. Welles. (See Case, Henry F. and A. W.)						
Case, A. Welles, South Manchester, Conn. Car-coupling	273,464	Mar. 6	288	79	23	883
Case, A. Welles, South Manchester, Conn. Car-coupling	278,880	June 5	281	81	23	2171
Case, A. Welles, South Manchester, Conn. Pipe-wrench	280,793	July 10	574	160	24	108
Case, A. Welles, South Manchester, Conn. Grinding attachment for valves	285,568	Sept. 25	1716	485	24	1223
Case, A. Willard, et al. (See Case, Henry F., assignor.)						
Case, Alber R. (See Nine and Case.)						
Case, Asabel B., et al. (See Duteuple, William R., assignor.)						
Case, Charlie, Emlenton, Pa. Automatic safety attachment for steam-boilers	269,827	Jan. 2	12	4	23	4
Case, Charles P., assignor of one-half to G. F. Tomlinson, Horseheads, N. Y. Rotary engine	273,951	Mar. 13	913	{ 249 250 251 }	{ 23	998
Case, Charles W., J. O. Pattee, and A. M. Long, Minneapolis, Minn. Machine for forming and cleaning ditches	272,412	Feb. 20	1045	{ 293 294 295 }	{ 23	637
Case, Dudley W., Bay City, Mich. Sectional boat	274,171	Mar. 20	1193	328	23	1054
Case, Edwin, East Toledo, Ohio. Cultivator	270,887	Jan. 23	1311	379	23	276
Case, Francis M. and W., Denver, Colo. Rock-pulverizer	284,611	Sept. 11	554	157	24	1004



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Case, George C., <i>et al.</i> (See Duteuple, William R., assignor.)						
Case, Henry, assignor to M. A. Case, Brooklyn, N. Y. Pier or ferry rack	258,308	Nov. 13	641	176	25	628
Case, Henry F., South Manchester, Conn. Elastic roll	269,828	Jan. 2	12	4	23	5
Case, Henry F., South Manchester, Conn. Tool-handle and extension-blade	272,944	Feb. 27	1735	484	23	764
Case, Henry F., South Manchester, Conn. Paper-making machine	286,587	Oct. 16	1013	274	25	201
Case, Henry F., assignor to A. W. and A. W. Case, South Manchester, Conn. Grinding finishing-machine plates	269,915	Jan. 2	108	32	23	23
Case, Henry F. and A. W., South Manchester, Conn. Floor-clamp	275,017	Apr. 3	174	47	23	1255
Case, John, and J. A. Whitaker, McDonald, Pa. Device for automatically opening and shutting doors in coal-mines	282,269	July 31	2448	673	24	447
Case, John K., Vincennes, Ind. Harvester cutter-bar	271,787	Feb. 6	245	69	23	483
Case, John M., Columbus, Ohio. Reduction-machine	276,132	Apr. 17	1636	448	23	1521
Case, John M., assignor of one-half to W. M. Kurtz, Columbus, Ohio. Portable railway dining-table and lunch-case	275,991	Apr. 17	1451	399 400	23	1492
Case, John M., assignor to Case Manufacturing Company, Columbus, Ohio. Apparatus for casting hollow chilled rolls	275,992	Apr. 17	1452	400	23	1492
Case Manufacturing Company. (See Case, John M., assignor.)						
Case, Margaret A. (See Case, Henry, assignor.)						
Case, Margaret A. (See Randolph, Mahlon, assignor.)						
Case, Theodore P., Powell, Ohio. Vehicle-tongue	278,505	May 29	2479	676	23	2082
Case, Willard E., Auburn, N. Y. Making electrodes	289,386	Dec. 4	17		25	890
Case, Willis. (See Case, Francis M. and W.)						
Casebeer, Jacob B., <i>et al.</i> (See Henning, William B., assignor.) (Reissue.)						
Casey, Charles F., <i>et al.</i> , trustees. (See Warren, John, assignor.)						
Casey, Dennis D., Springfield, Mass. Pump-box	290,211	Dec. 18	1037	292	25	1086
Casey, John, Philadelphia, Pa. Banker's case, note-book, &c.	283,965	Aug. 28	1810	512	24	853
Casey, Thomas A., assignor to J. H. Bunnell & Co., New York, N. Y. Signaling apparatus for district and fire-alarm telegraphs	272,645	Feb. 20	1341	376	23	690
Casgrain, Henri E., Quebec, Quebec, Canada. Cigarette-machine	281,451	July 17	1397	383	24	258
Cash, Arthur W., Decatur, assignor of one-half to O. L. Cash, Macon, Ill. Check-rower for corn-planters	271,788	Feb. 6	246	69	23	483
Cash, Arthur W., assignor of one-half to A. H. Imboden, Decatur, Ill. Paper-bag and twine holder	279,333	June 12	903	252	23	2286
Cash, Oscar L. (See Cash, Arthur W., assignor.)						
Caslow, Henry, York, Pa. Pump	285,226	Sept. 18	1313	370	24	1144
Casperson, William P., Chicago, Ill. Lamp-burner	282,958	Aug. 14	573	162	24	609
Cass, Fredrick G., Cambridgeport, Mass. Machine for scouring and polishing tin cans	279,222	June 12	758	209	23	2263
Cassady, George, Flint, Mich. Feed-water heater	274,561	Mar. 27	1718	477	23	1151
Cassady, George, Flint, Mich. Feed-water heater	288,206	Nov. 13	516	143	25	606
Cassagnes, Gilbert A., Paris, France. Ordnance	279,636	June 19	1277	354	23	2355
Cassedy Coupling Company. (See Cassedy, William F., assignor.)						
Cassedy, William F., Cape May, N. J., assignor to Cassedy Coupling Company, of New Jersey. Pipe or hose coupling	285,732	Sept. 25	1927	546	24	1260
Cassedy, William S., Kelly's Station, Pa. Fire-escape	287,233	Oct. 23	1844	504	25	353
Cassell, Edwin E., Philadelphia, Pa. Shelf-support	278,506	May 29	2480	676	23	2082
Cassidy, John, Cambridge, Mass. Clog or shoe	277,458	May 15	1172	315	23	1841
Cassidy, Thomas C., New York, N. Y. Bustle	280,533	Dec. 18	1473	407	25	1161
Cassin, William, assignor to L. Brandeis, Brooklyn, N. Y. Fancet	280,448	July 3	138	37	24	26
Castell, James, Centerville, Iowa. Refrigerator	278,507	May 29	2481	677	23	2082
Castle, Goswin, and G. D. Pohl, Awa, N. Y. Curd-mill	277,228	May 8	896	239	23	1786
Castle, Lewis D., assignor to A. Burritt Hardware Company, Waterbury, Conn. Machine for tapping steam, gas, and water fittings	280,575	July 3	283	78	24	51
Castle, Lewis D., assignor to A. Burritt Hardware Company, Waterbury, Conn. Tap for steam and gas fittings	284,377	Sept. 4	263	73, 74	24	949
Castle, Samuel D., Bridgeport, Conn. Base-ball	281,238	July 17	1124	310	24	212
Castle, Samuel D., and A. Skaats, Bridgeport, Conn. Swinging arm for securing folding steps to movable berths	285,569	Sept. 25	1717	485	24	1223
Castle, Samuel D., and A. Skaats, Bridgeport, Conn. Counter-balance for folding steps for berths	286,098	Oct. 23	1540	424	25	297
Castle, Samuel N., assignor to Ashtabula Carriage Bow Company, Ashtabula, Ohio. Carriage-bow	272,374	Feb. 13	976	273	23	622
Castle, William H., Ashtabula, Ohio. Car-coupling	280,449	July 3	139	37, 38	24	26
Castle, William H., assignor to Ashtabula Bolt and Shaft Company, Ashtabula, Ohio. Carpet-sweeper	277,229	May 8	897	239	23	1786
Castor, William S., Marston, Ill. Door	270,635	Jan. 16	1000	288 289	23	212
Castor, William S., Marston, Ill. Fruit-picker	282,051	July 31	2161	593	24	400
Caswell, Ezra, Lyons, N. Y. Hub-boring machine	282,495	Aug. 7	19	5	24	504
Caswell, John H. (See McDermott, Joseph A., assignor.)						
Caswell, Walter, Napoleon, Mo. Vehicle-hub	275,993	Apr. 17	1453	400	23	1492
Caswell, Walter, Napoleon, Mo. Vehicle-axle	275,994	Apr. 17	1453	400	23	1492
Cate, Stephen M., and C. O. Smith, Bridgeport, Conn. Car-coupling	279,911	June 26	1601	449	23	2418
Cartcart, James L., Alexandria, Va. Steering mechanism for vessels	274,172	Mar. 20	1194	328	23	1054
Cather, Lorenzo D., White Pigeon, Mich. Fence	285,570	Sept. 25	1718	486	24	1223
Catlin, A. D. (See Tavencor, Robert W., assignor.)						
Catlin, Charles A. (See Horsford and Catlin.)						
Catlin, Charles A., Providence, R. I. Preparing salt for table use	273,256	Mar. 6	17		23	837
Catlin, Eli, Post Oak, Tex. Well-drilling apparatus	288,975	Nov. 27	1488	412	25	791
Caulfman, H. Howard, Norristown, Pa. Tag or ticket fastener	273,708	Mar. 13	602	162	23	945
Caugbell, Robert N., Shedd, Oreg. Spoke-extractor	277,991	May 22	1807	493	23	1956
Cavanagh, James, trustee. (See Scott, Jacob R., assignor.)						
Caverly, Amos K., Moline, Ill. Two-wheeled vehicle	278,222	May 22	2093	576	23	2006
Caviness, Richard E., and G. McCormick, Beckwith, Iowa. Trip-wire for check-row corn-planters	271,419	Jan. 30	1975	570	23	397
Cavitt, Bruce, <i>et al.</i> (See Luckey, George E., assignor.)						
Cawley, Samuel H., El Dorado, Ohio. Sulky-harrow	289,616	Dec. 4	302	84	25	941
Cayce, John M., Nashville, assignor to himself and C. A. Bailey, trustee, Franklin, Tenn. Sewing-machine motor	288,620	Nov. 20	1047	288 289	25	705
Caywood, Ernest, Vinings, Kans. Floor-clamp	281,968	July 24	2056	563	24	377
Cease, David A., Coon's Corners, Pa. Fence	275,884	Apr. 17	1330	366	23	1470
Cebrian, John C. (See Molera and Cebrian.)						
Cebrian, John C. (See Molera, Eusebius J., assignor.)						
Celler, Charles Z., New York, N. Y. Drawer	288,012	Nov. 6	235	81	25	556

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Celluloid Manufacturing Company. (See Everding, John, assignor.)						
Celluloid Manufacturing Company. (See Hyatt, Isaiah S., assignor.)						
Celluloid Manufacturing Company. (See Hyatt, John W., assignor.)						
Celluloid Manufacturing Company. (See Lefferts, Marshall C., assignor.)						
Celluloid Manufacturing Company. (See Olszewski, Alexander, assignor.)						
Celluloid Manufacturing Company. (See Sanborn, Albert A., assignor.)						
Center, Joshua C., Haynesville, assignor of one-half to L. Mayo, Leavenworth, Kans. Seed-drill	284,378	Sept. 4	264	74	24	940
Center, Robert, New York, N. Y. Flag-pole	289,976	Dec. 11	749	212	25	1025
Central Refining Company. (See Smith and Doig, assignors.)						
Chabot, Cyprien, Philadelphia, Pa. Machine for channeling soles	280,576	July 3	284	78, 79	24	51
Chabot, Cyprien, Philadelphia, Pa. Sewing-machine	280,577	July 3	287	79, 80	24	53
Chabot, Cyprien, Philadelphia, Pa. Machine for making watch-pendants.	290,858	Dec. 25	1891	522	25	1241
Chace, John K., New York, assignor to A. Carr, Yonkers, N. Y. Sheet-metal joint for oil-cans and other articles.	274,271	Mar. 20	1319	364	23	1077
Chadborn & Coldwell Manufacturing Company. (See Johnston, Thomas, assignor.)						
Chadwell, Henry C., Portsmouth, Va. Animal-trap	275,995	Apr. 17	1454	401	23	1492
Chadwick, Charles N., Brooklyn, N. Y. Corset	274,272	Mar. 20	1319	364	23	1077
Chadwick, Edward W., Edgartown, Mass. Ventilator for window-sashes	269,387	Dec. 4	18	6	25	890
Chadwick, James M., Washington, D. C. Vapor-bath	280,348	July 3	12	4	24	4
Chadwick, Jay L., assignor of one-half to M. Sherman, St. Paul, Minn. Wagon-tonguesupport	288,401	Nov. 13	788	213	25	653
Chadwick, John L., Belleville, N. J., assignors of three-fourths to W. H. Lyman, Tottenham, N. Y. Reclaiming india-rubber and fiber from scraps of india-rubber cloth	288,013	Nov. 6	286		25	556
Chaffee, H. L. (See Willis, George E., assignor.)						
Chaffee, Willard L. (See Crowther, Henry, assignor.)						
Chaffin, Walter W. (See Lucas, Charles H., assignor.)						
Chaine, Joseph, A. Durand, and F. S. De Chaligny, Lyons, France. Process of and apparatus for coloring photographs	271,789	Feb. 6	248	69	23	484
Chalk, Timothy C., Pawtucket, R. I. Non-heat-conducting pail	274,461	Mar. 27	1574	431	23	1128
Chalk, Timothy C., Pawtucket, R. I. Oil-can	286,588	Oct. 16	1015	275	25	201
Challiner, Charles, Jr., Pittsburg, Pa. Manufacture of open-ended glassware	275,996	Apr. 17	1454	401	23	1493
Challoner, John. (See Bridgman and Challoner.)						
Chalmers, George, San Juan, Cal. Railway-switch	286,682	Oct. 16	1137	306	25	232
Chalpaat, Walter A. (See Moore, Joel, assignor.)						
Chamhard, Peter F., Fayette, Ohio. Ditching-shovel	270,016	Jan. 2	224	64	23	46
Chamberlain, Addis E., Cincinnati, Ohio. Cook stove and range	269,829	Jan. 2	13	4, 5	23	5
Chamberlain, Amos P., London, England. Apparatus for the manufacture of gas for illuminating and heating purposes	278,693	May 22	1925	598	23	1977
Chamberlain, Amos P., London, England. Manufacturing gas	286,589	Oct. 16	1016	275	25	201
Chamberlain, Blanchard, assignor of six-eighths to R. Lamb, J. H. Wilson, H. E. and G. H. Palmer, Bellefontaine, Ohio. Windmill	284,945	Sept. 11	962	270	24	1075
Chamberlain, Charles M. (See Roberts, Henry P., assignor.)						
Chamberlain, Harvey W., and F. G. Harris, Lockport, assignors of one-half to M. A. Lesen and M. S. Greenbaum, Chicago, Ill. Running-gear for vehicles	285,227	Sept. 18	1315	370	24	1144
Chamberlain, John N., Springfield, Mass. Exhibition-cabinet for gas-burners	273,952	Mar. 13	915	251	23	998
Chamberlain, Roscoe. (See Austin and Chamberlain.)						
Chamberlain, William T., assignor of one-half to B. M. Prince, Norwich, Conn. Air-gun	279,538	June 19	1166	323	23	2335
Chamberlain, William T., assignor of one-half to B. M. Prince, Norwich, Conn. Air-projectile	279,539	June 19	1167	323	23	2335
Chamberlain, William T., assignor of one-half to B. M. Prince, Norwich, Conn. Charging air-guns and projectiles	279,540	June 19	1167	323	23	2336
Chamberlin, Amzi Y., Alpha, Ill. Check-row-wire reeling and laying device	273,953	Mar. 13	917	251	23	998
Chamberlin, Edward K., Cleveland, Ohio. Sidewalk-light	273,257	Mar. 6	18	5	23	837
Chamberlin, Franklin L. (See Turner and Chamberlin.)						
Chamberlin, Gurden L., Marietta, Ohio. Car-coupling	274,106	Mar. 20	1109	306	23	1039
Chamberlin, Hiram M., Reading, Vt. Shutter-worker	284,722	Sept. 11	697	195	24	1028
Chamberlin, Ira J. (See Chamberlin, Lewis E. and I. J.)						
Chamberlin, James N., Marietta, Ohio. Cylinder-cock	283,566	Aug. 21	1327	370	24	772
Chamberlin, John H., Ypsilanti, Mich. Wagon-iron	282,496	Aug. 7	20	5	24	504
Chamberlin, Lewis E. and I. J., North Liberty, Iowa. Apparatus for tiling	270,932	Jan. 23	1367	394 } 395 } 395 }	23	985
Chamberlin, Volney R., Cambridge, Mass. Window-screen	288,921	Nov. 20	1416	320	25	771
Chamberlin, Volney R., assignor to F. L. Hewlett, Cambridge, Mass. Window-screen	288,100	Nov. 6	451	126	25	586
Chambers, Bering & Quinlan. (See Bering, James E., assignor.)						
Chambers, Bering, Quinlan Company. (See Bering, James E., assignor.) (Reissue.)						
Chambers, Burton L. (See Jay and Chambers.)						
Chambers, Cyrus, Jr. (See Cockell, Harvey, assignor.)						
Chambers, Cyrus, Jr. (See Lator, Sanford W., assignor.)						
Chambers, Cyrus, Jr., Philadelphia, Pa. Kiln for drying bricks, &c.	274,907	Apr. 3	19	5	23	1230
Chambers, Cyrus, Jr., Philadelphia, Pa. Brick-making machinery	275,467	Apr. 10	788	211 } 212 } 213 } 214 }	23	1369
Chambers, Cyrus, Jr., Philadelphia, Pa. Apparatus for preparing clay	277,459	May 15	1174	315	23	1841
Chambers, Cyrus, Jr., Philadelphia, Pa. Sand-scraper for brick-machines	285,013	Sept. 18	1059	226	24	1100
Chambers, Cyrus, Jr., Philadelphia, Pa. Engine-register	288,976	Nov. 27	1490	413	25	791
Chambers, Daniel T., Washington, D. C. Glove-fastener	281,969	July 24	2057	564	24	377
Chambers, Daniel T., assignor of one-half to A. G. Campbell, Washington, D. C. Fastener for gloves, &c.	272,945	Feb. 27	1736	485	23	765
Chambers, Job C. and S., Dallas, Tex. Well-digging machine	271,600	Feb. 6	22	5	23	444
Chambers, John, Te Mata, New Zealand. Apparatus for cooling air for refrigerating, freezing, and other like purposes	280,131	June 26	1867	526 } 527 }	23	2466
Chambers, Josephus C., Cincinnati, Ohio, assignor of one-half to W. Pelling, Newport, Ky. Device for attaching roofing-slates	282,439	July 31	2672	733	24	487
Chambers, Josephus C., assignor of part to J. S. Vine, Cincinnati, Ohio, W. A. Jackson, Detroit, Mich., and N. C. Gridley, Chicago, Ill. Telegraph and telephone conductor	289,890	Dec. 11	650	181	25	1007
Chambers, Josephus C., assignor of part to J. S. Vine, Cincinnati, Ohio, W. A. Jackson, Detroit, Mich., and N. C. Gridley, Chicago, Ill. Telegraph and telephone cable	289,891	Dec. 11	651	181	25	1007
Chambers, Silas. (See Chambers, Job C. and S.)						
Chambers, William J. (See Campbell and Chambers.)						
Champ, George W. (See Floyd, Halleck, assignor.)						
Champion, Josiah P., Phelps, N. Y. Car-coupling	285,228	Sept. 18	1315	371	24	1144
Champion Scraper Company. (See Byrket, Abijah R., assignor.) (Reissue.)						
Champlain, L. Eugene, Ypsilanti, Mich. Check-rein carrier	279,707	June 19	1360	370	23	2369



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Champlin, Charles C., <i>et al.</i> (See Welles, Richard J., assignor.)						
Champlin, Charles W., and J. Bland, Chicago, Ill. Folding chair, camp-stool, and settee.	273,954	Mar. 13	917	252	23	998
Champney, George F., Taunton, Mass. Manufacture of metal dies and similar articles.	281,970	July 24	2058	564	24	377
Chance, Albert. (See Howard and Chance.)						
Chandler, Adanior J., Fern Bank, Ohio. Awning.	288,207	Nov. 13	516	143	25	606
Chandler, Clarence A., East Bridgewater, Mass. Machine for making paper bags.	285,392	Sept. 25	1512	425 426 427	24	1185
Chandler, Clarence A., East Bridgewater, Mass. Bridle-bit.	290,859	Dec. 25	1893	522	25	1242
Chandler, David E., and J. C. Williams, Aurora, Ill. Two-wheeled vehicle.	279,080	June 5	572	157	23	2222
Chandler, David E., and J. C. Williams, assignors of one-half to L. W. Blakesly and F. J. Randall, Aurora, Ill. Sulky.	275,143	Apr. 3	345	95	23	1286
Chandler, David E., and J. C. Williams, assignors of one-third to C. Howard, Aurora, Ill. Two-wheeled vehicle.	281,971	July 24	2059	564	24	377
Chandler, David E., and J. C. Williams, assignors of one-third to C. Howard, Aurora, Ill. Two-wheeled vehicle.	281,972	July 24	2060	565	24	377
Chaudler, Hiram C., Peru, Ind. Lifting-jack.	283,204	Aug. 14	876	244	24	663
Chandler, John, Brooklyn, N. Y. Stopping railway-trains.	273,465	Mar. 6	290	79, 80	23	883
Chandler, John, Brooklyn, N. Y. Stopping railway-trains.	283,754	Aug. 28	1560	440	24	808
Chandler, Mary B., Concord, N. H. Instrument for drafting patterns.	270,933	Jan. 23	1368	395	23	285
Chandler, Melchior W. (See McConnell and Chandler.)						
Chandler, Ralph, U. S. Navy. Sash-fastener.	275,018	Apr. 3	175	47	23	1255
Chandler, William H. (See Dow and Chandler.)						
Chandler, William S., Jackson, Mich. Fire and water proof paint.	288,621	Nov. 20	1049		25	706
Chaney, Oliver P. (See Berger, Peters, and Chaney.)						
Chaney, Phineas Jr., Brooklyn, N. Y. Dust-collector.	288,014	Nov. 6	287	81	25	556
Chaney, Salathiel C., Chico, Cal. Dry gold-separator.	285,111	Sept. 18	1179	330	24	1120
Chantrell, John, assignor to Hazeltine & Chantrell, Bridgeport, Conn. Bit-stock.	284,275	Sept. 4	145	40	24	920
Chantrell, John, assignor to Hazeltine & Chantrell, Bridgeport, Conn. Bit-brace.	284,276	Sept. 4	147	41	24	920
Chantrell, John, assignor to Hazeltine & Chantrell, Bridgeport, Conn. Ratchet brace.	286,683	Oct. 16	1139	307	25	222
Chapel, Adoniram J., Arkansas City, Kans. Car-coupling.	289,617	Dec. 4	304	85	25	941
Chapelain, Paul, Paris, France. Atomizer.	275,997	Apr. 17	1455	401	23	1493
Chapelle, Elisha S., Pembroke, Me. Toy.	286,262	Oct. 9	591	162	25	118
Chapron, Georges. (See De Lalande and Chapron.)						
Chapin, Lebus C. (See Chapin, Lucius D. and L. C.)						
Chapin, Lebus C., Kalamazoo, Mich. Wheel-cultivator.	285,797	Oct. 2	18	6	25	5
Chapin, Lucius D., Chicago, Ill. Manufacture of wrought-iron.	283,074	Aug. 14	714		24	634
Chapin, Lucius D., Chicago, Ill., and L. C. Chapin, Kalamazoo, Mich. Metallurgic furnace.	283,075	Aug. 14	716	201	24	635
Chapin, Marcus D., Poultnie, Vt. Churn-cover.	277,001	May 8	613	161	23	1737
Chaplin, Alonzo C., Cape Elizabeth, assignor of one-half to D. W. Clark & Co., Portland, Me. Ice-cutting machine.	271,220	Jan. 30	1721	498	23	352
Chaplin, Edwin D. (See Amborn and Chaplin.)						
Chaplin, Orril R., Boston, Mass. Clutch mechanism.	277,002	May 8	614	161	23	1737
Chapman, Albert, Corunna, Mich. Stock-car.	275,998	Apr. 17	1456	401	23	1493
Chapman, Alfred, <i>et al.</i> (See Beechey, Charles G., assignor.)						
Chapman & Armstrong Manufacturing Company. (See Chapman, Samuel A., assignor.)						
Chapman, Cass, Chicago, Ill. Automatic hatch, &c.	289,068	Nov. 27	1603	444	25	810
Chapman, Eugene F., Wilson, Nebr. Wagon-stake.	280,132	June 26	1869	527	23	2466
Chapman, Frank H. (See Griswold and Chapman.)						
Chapman, Frank H., assignor to C. Parker Company, Meriden, Conn. Extension-chandelier.	271,420	Jan. 30	1975	571	23	397
Chapman, Frank H., assignor to C. Parker Company, Meriden, Conn. Coffee-mill.	279,130	June 12	659	160 181	23	2246
Chapman, Genry A., Strawberry Point, Iowa. Boiler-cleaner.	273,026	Feb. 27	1828	512	23	781
Chapman, George, assignor to F. F. Adams & Co., (limited,) Erie, Pa. Tobacco-cutter.	270,178	Jan. 2	411	120	23	84
Chapman, James G., <i>et al.</i> (See Beechey, Charles G., assignor.)						
Chapman, John, Newington, Conn. Knitting-machine.	290,972	Dec. 25	2048	563 564	25	1266
Chapman, John A., assignor to Northwestern Sleigh Company, Milwaukee, Wis. Two-wheeled vehicle.	277,409	May 8	1103	296	23	1822
Chapman, John A., assignor to Northwestern Sleigh Company, Milwaukee, Wis. Two-wheeled vehicle.	280,794	July 10	575	160	24	108
Chapman, John A., assignor to Northwestern Sleigh Company, Milwaukee, Wis. Two-wheeled vehicle.	280,795	July 10	576	161	24	108
Chapman, John A., assignor to Northwestern Sleigh Company, Milwaukee, Wis. Sleigh.	283,325	Aug. 14	1021	286	24	690
Chapman, John C., Boston, Mass. Reciprocating mechanical movement.	275,144	Apr. 3	346	95	23	1286
Chapman, Joseph L., Philadelphia, Pa. Railway-tie and fastening.	283,076	Aug. 14	718	201	24	635
Chapman, Luke, Collinsville, Conn. Snap-hook.	286,530	Oct. 9	936	252	25	181
Chapman, Melville S., Elkhart, Ind. Picket-fence.	274,173	Mar. 20	1195	329	23	1055
Chapman, Nathan, Nantucket, Mass. Bread-cutter.	280,796	July 10	577	161	24	108
Chapman-O'Neill Manufacturing Company. (See O'Neill, Charles W., assignor.)						
Chapman, Samuel A., assignor to Chapman & Armstrong Manufacturing Company, Watertown, Conn. Curtain loop or holder.	287,234	Oct. 23	1846	505	25	354
Chapman & Son, W. D. (See Chapman, William D., assignor.)						
Chapman, Stanley L., Winnetka, Ill. Elevator-bucket.	286,590	Oct. 16	1017	275	25	201
Chapman, Stephen E. (See Stanton, Lafayette J., assignor.)						
Chapman, Thomas L., Huntington, W. Va. Telegraph-insulator.	281,452	July 17	1398	384	24	258
Chapman, Thomas M., Oldtown, Me. Feed-roll for saw-mills.	273,817	Mar. 13	752	204	23	971
Chapman, William D., Theresa, N. Y. Oil-safe.	285,967	Oct. 2	237	67	25	45
Chapman, William D., assignor to W. D. Chapman & Son, Theresa, N. Y. Bird-cage-spring.	279,081	June 5	573	157	23	2222
Chapman, William H. (See Peck and Chapman.)						
Chapman, William H., assignor of one-half to C. C. Peck, Middlebury, Vt. Commutator for electric apparatus.	278,881	June 5	282	82	23	2171
Chappell, Alonzo, Brooklyn, N. Y. Lincarscope.	281,020	July 10	839	233	24	155
Chappell, Chase, Maxwell and Company. (See Maxwell and Quint, assignors.)						
Chappell, Edwin B., Bradford, Pa. Self-watering flower-vase.	283,966	Aug. 28	1811	512	24	853
Chappell, George F., New York, N. Y. Self-feeding machine for coating pills.	272,207	Feb. 13	772	214	23	555
Chappell, George F., New York, N. Y. Pill-coating machine.	281,973	July 24	2061	565	24	377
Chappell, Philip E., Baltimore, Md. Chair-seat.	277,544	May 15	1274	341	23	1857
Charbonneau, Pascal B., assignor of two-thirds to H. A. Fraser and J. B. Barber, Bay City, Mich. Saw-swage.	287,363	Oct. 23	2002	545	25	382
Charles, Charles C., Chicago, Ill. Foot and scenic lamp.	282,497	Aug. 7	21	6	24	504
Charles, Robert, Buffalo, N. Y. Pen-rack.	277,003	May 8	615	161	23	1737
Charnbury, Henry, Newark, N. J. Sewing-machine.	276,560	May 1	17	5	23	1630

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Charmock, John. (See Klima, Martin, assignor.)						
Charnley, James A., Providence, R. I. Machine for engraving wire	290,318	Dec. 18	1176	330	25	1110
Charon, Wilfred L. (See Cyr, Oliver, assignor.)						
Charsley, Robert H., Oxford, county of Oxford, England. Tricycle	284,612	Sept. 11	556	157	24	1004
Charter, John, Sterling, Ill. Gas-engine	270,202	Jan. 9	441	130	23	97
Charter, John, Sterling, Ill. Gas-engine	270,203	Jan. 9	445	131	23	98
Chase, Albert, Boston, assignor of one-half to C. A. Wellington, Lexington, Mass. Tile-fastening	282,164	July 31	2316	636	24	425
Chase, Albert, Boston, assignor to C. A. Wellington, Lexington, Mass. Fire-place grate	286,176	Oct. 9	487	135	25	101
Chase, Andrew J., Boston, Mass. Process of and apparatus for curing articles of food	275,145	Apr. 3	347	95	23	1286
Chase, Andrew J., Boston, Mass. Butter-dish	275,587	Apr. 10	936	254	23	1394
Chase, Andrew J., Boston, Mass. Manufacture of artificial butter	286,778	Oct. 16	1256	340	25	243
Chase, Charles A. (See Collyer, William C., assignor.)						
Chase, Charles D., St. Louis, Mo. Apparatus for extracting gluten from the waste water of starch-works	289,979	Dec. 11	755	213	25	1027
Chase, Edward M., assignor to E. L. Motte, Boston, and H. N. Glover, Milton, Mass., trustees. Pneumatic railway-signal	275,019	Apr. 3	177	48, 49	23	1256
Chase, Frank, Boston, Mass. Reversing and cut-off valve	279,912	June 26	1603	450	23	2419
Chase, George F., Lowell, Mass. Shoe	274,721	Mar. 27	1902	531	23	1185
Chase, George S., New York, N. Y., assignor of one-half to F. Armstrong, Bridgeport, Conn. Tripod	281,239	July 17	1125	310	24	212
Chase, Henry F. (See Warren and Packard, assignors.)						
Chase, Horace, <i>et al.</i> (See Chase, Milton, assignor.)						
Chase, Horace P., Lowell, assignor of one-half to G. Draper & Sons, Hopedale, Mass. Yarn-catcher and guide-eye for spinning-machines	270,179	Jan. 2	412	120	23	84
Chase, Horace P., Lowell, assignor of one-half to G. Draper & Sons, Hopedale, Mass. Thread-guide for spinning-machines	275,020	Apr. 3	187	50	23	1257
Chase, Horace P., Lowell, assignor of one-half to G. Draper & Sons, Hopedale, Mass. Spindle-bearing	285,908	Oct. 2	238	67	25	45
Chase, J. S. (See Ball, Jacob, assignor.)						
Chase, James, Rochester, N. Y. Slide-knife lathe	289,978	Dec. 11	752	{ 212 213 }	{ 25 25 }	{ 1026 1026 }
Chase, John H., Rochester, N. Y. Grain-car unloader	277,460	May 15	1175	315	23	1841
Chase, John H., Rochester, N. Y. Cylinder for grain-scoopers	288,309	Nov. 13	642	176	25	638
Chase, Lucius C., Boston, Mass. Bridle	278,882	June 5	283	82	23	2172
Chase, Lucius C., Boston, Mass. Snap-hook	288,774	Nov. 20	1242	341	25	738
Chase, Milton, Haverhill, assignor of two-thirds to E. De La Granja and H. Chase, Boston, Mass. Tire for vehicle-wheels	271,194	Jan. 23	1689	487	23	337
Chase, Oliver R., Boston, Mass. Machine for molding or shaping confectionery and other plastic materials	279,131	June 12	660	181	23	2246
Chase, Oliver R., Boston, Mass. Machine for molding or shaping confectionery and other plastic materials	279,132	June 12	662	{ 181 182 }	{ 23 23 }	{ 2246 2246 }
Chase, Oliver R., Boston, Mass. Machine for molding, shaping, and combining confectionery and other plastic materials	279,133	June 12	664	{ 182 183 450 451 }	{ 23 23 23 23 }	{ 2247 2247 2419 2419 }
Chase, Oliver R., Boston, Mass. Lozenge-machine	279,913	June 26	1604	451	23	2419
Chase, Oren M., Detroit, Mich. Horseshoe	279,223	June 12	759	210	23	2263
Chase, Rolla M., Bethel, Vt. Fire-escape	277,992	May 22	1307	493	23	1956
Chase, Stephen H., San José, Cal. Device for dressing saw-teeth	272,530	Feb. 20	1195	333	23	663
Chase, Walter G. (See Williamson, George, assignor.)						
Chase, Walter G., <i>et al.</i> (See Williamson, George, assignor.)						
Chase, Warren A., Boston, Mass. Refrigerating-car	269,977	Dec. 11	750	212	25	1026
Chase, Whitman, North Dighton, Mass. Fire-escape	278,635	May 29	2659	727	23	2113
Chassé, Joseph G., assignor to B. Fagnant and M. A. B. Chassé, Springfield, Mass. Electric light	279,224	June 12	760	210	23	2263
Chassé, Marie A. B., <i>et al.</i> (See Chassé, Joseph G., assignor.)						
Chatain, Amand J. B. A., New York, N. Y. Flooring	283,375	Aug. 21	1101	310	24	711
Chatfield, Eben S., Hyde Park, Pa. Expandible wheel	269,916	Jan. 2	109	32	23	23
Chattillon, George H., assignor to J. P. and G. H. Chattillon, New York, N. Y. Scale-pan	271,790	Feb. 6	249	69	23	484
Chattillon, John P., <i>et al.</i> (See Chattillon, George H., assignor.)						
Chaumont, Jules. (See Milligan and Chaumont.)						
Chaumont, Jules, Wood Haven, assignor to Lalancé & Grosjean Manufacturing Company, New York, N. Y. Handle for covers of vessels	276,772	May 1	315	82	23	1690
Chaumont, Jules, Wood Haven, assignor to Lalancé & Grosjean Manufacturing Company, New York, N. Y. Machinery for sheet-metal spinning	286,115	Oct. 2	414	113	25	76
Chaumont, Jules, Wood Haven, assignor to Lalancé & Grosjean Manufacturing Company, New York, N. Y. Wrought and sheet iron vessel	287,624	Oct. 30	2353	635	25	456
Chanvet, Joseph J. M., New York, N. Y. Machine for making sewing-machine needles	273,027	Feb. 27	1829	{ 512 513 }	{ 23 23 }	{ 781 781 }
Chaux, Louis, Paris, France. Manufacturing woolen fabric from short-staple fiber	288,015	Nov. 6	291		25	557
Chavers, Elizabeth, Siddon, Mich. Sewing-machine shuttle	281,453	July 17	1398	384	24	258
Chedister, Winfield S., Newark, N. J., assignor of one-half to J. S. Cooley, New York, N. Y. Permutation-lock	273,466	Mar. 6	292	80	23	883
Chedister, Winfield S., Newark, N. J., assignor of one-half to J. S. Cooley, New York, N. Y. Permutation-padlock	286,903	Oct. 16	1415	389	25	270
Cheaney, Nathaniel J., East Greenwich, R. I. Car-coupling	281,974	July 24	2062	565	24	378
Cheesman, Charles D., Ansonia, Conn. Suspenders	276,352	Apr. 24	1908	530	23	1577
Cheesman, Frederick E., Flushing, N. Y. Decorating ceilings and walls	289,811	Dec. 11	549	153	25	989
Cheever, Charles A. (See Rose and Cheever.)						
Cheever, Charles A., trustee. (See Vander Weyde, Peter H., assignor.)						
Cheever, Charles A., New York, N. Y. Electro-magnetic dispatch-tube	282,165	July 31	2318	{ 636 637 }	{ 24 24 }	{ 425 425 }
Cheever, John D., New York, N. Y. Cover for floors and for other purposes	285,343	Sept. 18	1446		24	1168
Cheever, Joseph H., Somerville, Mass. Telephone-transmitter	281,240	July 17	1126	310	21	212
Chellis, Edgar W. (See Drawbaugh, Daniel, assignor.)						
Chemical Fire Company. (See McAllister, Guy W., assignor.)						
Chenot, Prosper, Paris, France. Machine for branding bottle-corks	283,567	Aug. 21	1328	371	24	752
Cheney, Charles W., Athol, Mass. Mowing-machine	278,508	May 29	2482	{ 677 678 }	{ 23 23 }	{ 2082 2082 }
Cheney, John L., Lowell, Mass. Spool and bobbin	290,534	Dec. 18	1474	407	25	1161
Cheney, Jacob, Denver, Colo. Hand drilling-machine	275,885	Apr. 17	1331	366	23	1470
Cherry, Cummings, Sr., Chicago, Ill. Rotort-furnace for roasting ores	290,212	Dec. 18	1038	292	25	1086
Cherry, Cummings, Sr., Chicago, Ill. Desulphurizing and purifying ores preparatory to smelting	290,213	Dec. 18	1040	293	25	1087



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Cherry, Cummings, Sr., Chicago, Ill. Apparatus for roasting and preparing ores for smelting	290,214	Dec. 18	1042	293	25	1087
Cherry, Cummings, Sr., Chicago, Ill. Purifying iron ore preparatory to smelting	290,215	Dec. 18	1045	294	25	1087
Cherry, John G., Cedar Rapids, Iowa. Can for transporting milk and cream	282,844	Aug. 7	443	125	24	578
Cherry, Peterson H., Parsons, Kans. Lemonade-mixer	288,775	Nov. 20	1213	341	25	738
Chortomps, Alexandre, and L. Danden, Paris, France. Dynamo-electric machine	270,017	Jan. 2	224	65, 66	23	46
Chesbrough, Frederick, assignor to Ithaca Calendar Clock Company, Ithaca, N. Y. Calendar-clock	283,568	Aug. 21	1329	371	24	752
Chesbrough, Robert A., New York, N. Y. Safety appliance for elevators	286,684	Oct. 16	1141	307	25	222
Chesnut, Robert, Richmond, Ind. Truck for moving reapers	271,221	Jan. 30	1722	499	23	352
Chess, Harvey B. (See Chess, Henry and H. B.)						
Chess, Henry and H. B., Pittsburg, Pa. Gage for metal sheets	299,503	Dec. 4	166	45	25	915
Chess, Henry and H. B., Pittsburg, Pa. Roll-brasses and making the same	290,535	Dec. 18	1475	407	25	1161
Chester, William F., New York, N. Y. Electric burglar-alarm attachment for automatic signaling apparatus	280,578	July 3	291	80, 81	24	52
Chesterman, Edwin, Philadelphia, Pa. Passenger-car	269,917	Jan. 2	110	33	23	23
Chestnut, John W. (See Banks and Chestnut.)						
Chevalier, Frank, Lexington, Ky. Plow	288,776	Nov. 20	1243	341	25	739
Chervallot, Nicolas A. B., Paris, France. Filtering apparatus	289,980	Dec. 11	756	213	25	1027
Chevassus-Clément, Emile, Paris, France. Manufacture of artificial gems or precious stones	270,018	Jan. 2	226	66	23	47
Chew, Charles F., Bridgeport, Conn. Lamp	265,393	Sept. 25	1515	427	24	1185
Chew, Charles F., Philadelphia, Pa. Portable turn-table	288,408	Nov. 13	789	214	25	653
Chicago Attachment Company. (See Griest, John M., assignor.)						
Chicago Gas Apparatus Manufacturing Company. (See Ransom, Newman A., assignor.)						
Chicago Stamping Company. (See Kasson, Amasa C., assignor.)						
Chileote, John W., et al. (See Chileote, Stephen H., assignor.)						
Chileote, Robinson F., et al. (See Chileote, Stephen H., assignor.)						
Chileote, Samuel F., et al. (See Chileote, Stephen H., assignor.)						
Chileote, Stephen H., assignor of one-half to R. F., J. W., and S. F. Chileote, Sego, Ohio. Combined can-opener and corkscrew	283,967	Aug. 28	1812	512	24	853
Chilcott, Amos W., Mattoon, Ill. Gate	272,646	Feb. 20	1343	377	23	690
Child, Cyril C., Boston, Mass. Friction-clutch	270,636	Jan. 16	1001	289	23	212
Child, Cyril C., Boston, Mass. Paper-cutting machine	274,273	Mar. 20	1321	364, 365	23	1077
Childers, John F. (See Richardson, Francis M., assignor.)						
Children, Arthur G. (See Burrows, William T., assignor.)						
Childen, Edwin, East Dubuque, Ill. Cultivator-shovel	271,791	Feb. 6	250	70	23	484
Childs, Albert F. (See Conover, Jacob A., assignor.)						
Childs, Edward H., and C. R. Powell, Bellaire, Ohio. Blown-glassware manufacture	275,999	Apr. 17	1457	402	23	1493
Childs, Edwin B., Rockford, Ill. Neck-yoke	278,400	May 29	2348	642	23	2058
Childs, J. Wallace, Chicago, Ill., assignor, by mesne assignments, to Washburn & Moen Manufacturing Company, Worcester, Mass. Barbed fence	285,229	Sept. 18	1316	371	24	1144
Childs, William, Brooklyn, N. Y. Folding center-board	278,776	June 5	124	35	23	2145
Childs, William A. (See Shaw and Childs.)						
Chiles, Hiram C., Rogers, Ark. Animal-shears	281,454	July 17	1399	384	24	259
Chinnock, Charles E., Brooklyn, N. Y. Suspending cables or conductors	274,562	Mar. 27	1719	477	23	1152
Chinnock, George H., Brooklyn, N. Y. Ornamenting glass lamps	272,946	Feb. 27	1736	485	23	765
Chinnock, George H., and J. G. Stephens, Brooklyn, N. Y.; said Chinnock assignor to C. V. Ware. Carpet-lining	277,832	May 15	1608	439	23	1916
Chinnock, George H., Brooklyn, N. Y., assignor to himself, A. Sichel, and J. Lemon. Manufacture of metal	286,904	Oct. 16	1417		25	270
Chipman, William W., Brooklyn, assignor of two-thirds to W. Courtenay and J. C. Tiffany, New York, N. Y. Manufacture of steel	287,235	Oct. 23	1847		25	354
Chisholm, John A., Sank Centre, Minn. Snow-plow	286,779	Oct. 16	1258	340	25	243
Chittenden, Harriet M., New York, N. Y. Garment-protector	290,319	Dec. 18	1177	330	25	1110
Chivill, John. (See Webster and Chivill.)						
Chivill, John, assignor to Webster & Comstock Manufacturing Company, Chicago, Ill. Screw-conveyor coupling	289,751	Dec. 4	477	135	25	970
Choate, Warren. (See Bawse, Edward E., assignor.)						
Chorlton, Isaac, Jr. (See Hodgson, Alfred, assignor.)						
Christ, Benjamin F., Peabody, Kans. Check-rower and drill for corn-planters	272,855	Feb. 27	1623	454	23	747
Christ, Benjamin F., Peabody, Kans. Harrow	224,818	Sept. 11	813	227	24	1048
Christensen, Christoffer A., Willamina, Oreg. Centrifugal pump	288,409	Nov. 13	790	214	25	653
Christensen, William O., Marshfield, Oreg. Center-board	276,353	Apr. 24	1910	520	23	1577
Christian, John B., Hamburg, Iowa. Cultivator	284,379	Sept. 4	267	74	24	949
Christian, John B., Hamburg, Iowa. Cultivator	284,379	Sept. 4	268	75	24	949
Christie, Andrew J. (See Christie, James J., assignor.)						
Christie, James J., assignor of one-half to A. J. Christie, Camden, N. J. Bottle-stopper	283,569	Aug. 21	1332	371	24	752
Christie, Jonathan S., Boston, Mass. Safe	270,880	Jan. 23	1312	379	23	276
Christie, Richard, Truro, Nova Scotia, Canada. Fire-escape	285,238	Sept. 18	1317	371	24	1144
Christman, Augustus G., Litiz, Pa. Plow	275,354	Apr. 10	637	170	23	1343
Christman, Augustus G., Litiz, Pa. Feed-cutter	282,052	July 31	2162	593	24	400
Christman, Charles, et al. (See Schunk, Henry, assignor.)						
Christmas, William W., Washington, D. C., and F. B. Jonas, New Orleans, La. Cartridge implement	290,973	Dec. 25	2052	565	25	1267
Christopher, Calvin F., and R. B. Alexander, Spartanburg, S. C. Tether	274,462	Mar. 27	1574	431	23	1128
Christy, George H., et al. (See Haskin, Uri, assignor.)						
Christy, George H., trustee. (See Greer, Howard, assignor.)						
Christy, Loudon, Holly Springs, Miss. Two-wheeled vehicle	281,670	July 24	1672	456	24	309
Christy, Thomas J., Olney, assignor to F. M. Goodall, Marion, Ill. Railway chair and joint	271,573	Jan. 30	2171	625	23	430
Chubb, Thomas H., Post Mills, Vt. Fishing-rod tip	277,230	May 8	898	239	23	1786
Chubb, Thomas H., Post Mills, Vt. Fishing-rod	282,270	July 31	2449	674	24	447
Church, Andrew J., Sherborn, Mass. Carriage-jack	287,625	Oct. 30	2354	635	25	456
Church, Charles B., Washington, D. C. Ice cutter and harvester	281,751	July 24	1778	484	24	328
Church, Charles B., Washington, D. C. Ice-harvester	281,752	July 24	1779	485	24	328
Church, Duane H., Chicago, Ill., assignor to American Watch Company, Waltham, Mass. Stem-winding watch	280,719	July 3	455	130	24	81
Church, Emily R. (See Henninger, Julius, assignor.)						
Church, George W., Roseville, N. J. Micrometer-gage	278,094	May 22	1926	528	23	1977
Church, Henry A. (See Field and Halkyard, assignors.) (Reissue.)						
Church, Henry A. (See Halkyard, William, assignor.)						
Church, Henry A., Providence, R. I. Roller-chain cap	289,618	Dec. 4	304	85	25	941

*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.-g.	Vol.	Page.
Church, Henry B., Grand Rapids, Mich. Fire-escape .....	283,968	Aug. 28	1813	513	24	853
Church, James, St. Louis, Mo. Bung .....	275,588	Apr. 10	937	255	23	1394
Church, Louis J., Washington, D. C. Fan attachment for sewing-machines .....	278,683	June 5	9	3	23	2126
Church, Thomas T., Fort Hamilton, N. Y. Fire-escape .....	289,220	Nov. 27	1783	494	25	843
Church, Walter W., Carthage, Mo. Check-row corn-planter .....	289,619	Dec. 4	305	85	25	941
Churchill, James T., St. Joseph, Mo. Support for swinging or pendent scaffolds .....	288,977	Nov. 27	1492	413	25	792
Churchill, Lee. (See Gallup and Churchill.)						
Chute, Charles R., Minneapolis, Minn. Rein-guard .....	273,955	Mar. 13	918	252	23	999
Cilley, Frank H., Boston, Mass. Spring tongs or fork .....	284,118	Aug. 28	2023	563	24	888
Cilley, George W., Norwich, Conn. Lock for revolvers .....	270,204	Jan. 9	448	131	23	99
Cilley, William H. (See Maynadier, Gustavus B., assignor.)						
Cincinnati Coffin Company. (See Howdon, Robert J., assignor.)						
Cincinnati Electric Clock Company. (See Happersberger, John, assignor.)						
Cincinnati Sulky Buggy Company. (See Wood, Richard G., assignor.)						
Cizek, Martin. (See Ekl, Skala, Hoya, and Cizek.)						
Clardy, Thomas, Greenbush, N. Y. Spinning-top .....	286,177	Oct. 9	488	135	25	101
Claffin, Arthur B. (See Sawyer, William A., assignor.)						
Clamer, Francis J. (See Delaplaine, Hendrickson, and Clamer.)						
Clamer, Francis J., and J. G. Hendrickson, Philadelphia, Pa. Composition to be used in fluxing and protecting molten metals .....	280,349	July 3	13		24	4
Clamer, Francis J., assignor of one-half to J. G. Hendrickson, Philadelphia, Pa. Treating lead to impart to it the property of adhering to other metals .....	283,077	Aug. 14	719		24	635
Clamond, Charles, Paris, France. Illuminating-burner .....	282,053	July 31	2163	{ 593 594 213 214 }	24	400
Clancy, Patrick G., Lexington, Miss. Vehicle-spring .....	289,981	Dec. 11	757		25	1027
Clapham, Thomas. (See Laycock and Clapham.)						
Clapp, George A., Quincy, Mass. Fire-escape .....	283,755	Aug. 28	1562	440	24	808
Clapp, Harry A., and C. F. Baker, White Pigeon, Mich. Ice-elevator .....	286,116	Oct. 2	414	113	25	76
Clapp, Harry A., and C. F. Baker, White Pigeon, Mich. Ice-elevator .....	290,536	Dec. 18	1475	408	25	1161
Clapp, John W. (See Tilton and Clapp.)						
Clapp, William J., Nantyglo, and T. Griffiths, Blaenavon, county of Monmouth, England. Cupola-furnace .....	271,683	Feb. 6	118	32, 33	23	460
Clark, Aaron T., Dannemora, N. Y. Hat-sizing machine .....	278,509	May 29	2483	678	23	2083
Clark, Albert M., Marshalltown, Iowa, assignor to himself, C. F. Fogg, and J. B. Shute, Chicago, Ill. Pulley block and tackle .....	276,561	May 1	19	6	23	1630
Clark, Alvin B., assignor of one-half to J. B. Dougan, Richmond, Ind. Spring-hoe for cultivators .....	275,146	Apr. 3	349	96	23	1286
Clark, Arra F., Boston, Mass. Car-starter .....	274,463	Mar. 27	1575	{ 431 432 }	23	1128
Clark, Augustus, <i>et al.</i> (See Harvey, Peter I., assignor.)						
Clark, Augustus, <i>et al.</i> (See Wheelock, John A., assignor.)						
Clark, Benjamin S. W., <i>et al.</i> (See Martin, William F., assignor.)						
Clark, Charles, Smyrna, Tenn. Door-bolt .....	279,334	June 12	904	{ 252 253 }	23	2296
Clark, Charles B., Detroit, Mich. Spring-hinge .....	276,958	May 1	557	145	23	1721
Clark, Charles E., Belmont, N. Y. Saw-mill dog .....	285,969	Oct. 2	238	67	25	45
Clark, Charles T., administrator. (See Fairlamb, Charles C.)						
Clark, Charles W., Philadelphia, Pa. Window-shade pull .....	273,028	Feb. 27	1774	513	23	782
Clark, Charles W., assignor to L. A. Murray, Cincinnati, Ohio. Return-ball .....	289,221	Nov. 27	1785	494	25	844
Clark & Co., D. W. (See Chaplin, Alonzo C., assignor.)						
Clark, Cullen B., Detroit, Mich. Reelette .....	277,231	May 6	899	239	23	1786
Clark, Dallas P., Jersey City, N. J., assignor of one-half to R. Vose, New York, N. Y. Die for bending eyes for elliptical springs .....	285,231	Sept. 18	1318	371	24	1145
Clark, Daniel S., Amboy, Ill. Bed spring cover .....	269,918	Jan. 2	111	31	23	23
Clark, David, and T. G. Blatch, Hazleton, Pa. Valve-gear for steam-engines .....	276,773	May 1	316	12	23	1681
Clark, David A., assignor of one-half to F. T. Fletcher, St. Louis, Mo. Toy pistol .....	273,956	Mar. 13	919	252	23	999
Clark, David A., assignor of one-half to F. T. Fletcher, St. Louis, Mo. Toy pistol .....	281,455	July 17	1400	384	24	259
Clark, David E., <i>et al.</i> (See Pritchard, Nathaniel J., assignor.)						
Clark, Eddy L., <i>et al.</i> (See Bott, Joseph E., assignor.)						
Clark, Edward, New York, N. Y. Platform-gear for wagons .....	275,147	Apr. 3	370	96	23	1287
Clark, Edward, New York, N. Y. Steam-boiler turnace .....	282,845	Aug. 7	441	125	24	578
Clark, Edward, Jersey City, N. J. Christstone and sidewalk conduit for electric wires .....	278,095	May 22	1926	529	23	1977
Clark, Edward, Cornwall, N. Y. Metallic insulating-covering for telegraph-wires .....	287,236	Oct. 23	1847	505	25	354
Clark, Edward, Cornwall, N. Y. Gutter, curbstone, and sidewalk conduit for electric wires .....	287,237	Oct. 23	1848	{ 505 506 }	25	354
Clark, Ecbert B. (See Sammons, Thomas J., assignor.)						
Clark, Elijah C., Cannelton, Ind. Coping for walls .....	278,656	May 29	2659	727	23	2113
Clark, George. (See Maliphant, Charles, assignor.)						
Clark, George, Brooklyn, N. Y. Button-hook .....	277,232	May 8	900	240	23	1786
Clark, George, Marinette, Wis. Steam-feed works for saw-mills .....	275,600	Apr. 17	1229	336	23	1451
Clark, George, and W. J. Taylor, Marinette, Wis. Steam set-works for saw-mills .....	275,468	Apr. 10	796	{ 215 216 }	23	1370
Clark, George, assignor of one-eighth to C. Tenseher, West Troy, N. Y. Steam-radiator .....	286,780	Oct. 16	1259	340	25	243
Clark, George B., Bethesda, Ohio. Hand seed-planter .....	277,626	Oct. 30	2355	635	25	456
Clark, George E., Kingman, Me. Baking-pan .....	277,679	May 15	1434	386	23	1884
Clark, George H., Manville, R. I. Tool for connecting and disconnecting the ends of bolts .....	287,417	Oct. 30	2072	563	25	402
Clark, George K. (See Murphy, Daniel H., assignor.)						
Clark, George L. (See Sloan, William D., assignor.)						
Clark, George L., Meriden, Conn. Horse-whipping device .....	276,158	Apr. 24	1659	458	23	1535
Clark, George M. (See Harris and Clark.)						
Clark, George T., Delmar, Iowa. Socket for fence-posts .....	275,801	Apr. 17	1230	337	23	1452
Clark, Guy M., <i>et al.</i> (See Martin, William F., assignor.)						
Clark, Henry. (See Ball and Clark.)						
Clark, Henry, assignor of two-thirds to F. W. Erbacher and C. Helms, Jr., Milwaukee, Wis. Car-starter .....	280,450	July 3	140	38	24	26
Clark, Henry, assignor of two-thirds to F. W. Erbacher and C. Helms, Jr., Milwaukee, Wis. Car-starter .....	288,016	Nov. 6	291	62	25	557
Clark, Henry F., Poughkeepsie, N. Y. Patched bullet and making the same .....	286,387	Oct. 9	763	207	25	149
Clark, James B. (See Kendall, Francis B., assignor.)						
Clark, James M. (See Platt, Benjamin G., assignor.)						
Clark, James T., Bath, Cal. Stone-drilling machine .....	271,792	Feb. 6	251	70	23	484
Clark, James W., Etna, Ohio. Mechanical telephone .....	289,620	Dec. 4	306	85, 86	25	941



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Clark, Jennie M., Manchester, N. H. Garment-protector	271,037	Jan. 23	1493	430	23	305
Clark, John, Silchester Road, Kensington, county of Middlesex, England. Reducing metals from their ores	277,884	May 22	1677	458	23	1934
Clark, John, Silchester Road, Kensington, county of Middlesex, England. Reducing metals from their ores	277,885	May 22	1678	458	23	1934
Clark, John, New York, N. Y. Clearer for pipes	283,205	Aug. 14	876	244	24	663
Clark, John K., Buffalo, N. Y. Spring-hinge	276,000	Apr. 17	1459	402	23	1493
Clark, John K., Buffalo, N. Y. Lock-hinge	277,680	May 15	1434	387	23	1884
Clark, John K., Buffalo, N. Y. Knob attachment	284,381	Sept. 4	269	75	24	950
Clark, John L. (See Weber, Theodore A., assignor.)						
Clark, John W., et al. (See Baker, Loring J., assignor.)						
Clark, Joseph, Brooklyn, N. Y. Vehicle-wheel	269,919	Jan. 2	112	33	23	23
Clark, Joseph, Brooklyn, N. Y. Metallic railway-tie	270,637	Jan. 16	1002	289	23	212
Clark, Joseph, Green Point, N. Y. Alarm-signal for railway-tracks	285,571	Sept. 25	1719	486	24	1233
Clark, Josiah L. (See Hill and Clark.)						
Clark, Levi S., assignor to himself, O. G. Franks, and G. T. Baughman, Doylestown, Ohio. Two-wheeled vehicle	286,905	Oct. 16	1419	389	25	271
Clark, Lewis E., Lynn, Mass. Bell	287,238	Oct. 23	1850	506	25	354
Clark, Milton. (See Elliott, Gilbert R., assignor.)						
Clark, Milton, assignor to Continental Cash Car Company, Baltimore, Md. Cash and parcel carrying system	290,175	Dec. 11	984	278	25	1069
Clark, Moses M., New Haven, Conn. Car-brake	279,914	June 26	1607	452	23	2419
Clark, Nathan B., Philadelphia, Pa. Deflecting-armor for war-ships	282,498	Aug. 7	22	6, 7, 8	24	504
Clark, Norman, Sterling, Ill. Folding table	270,388	Jan. 9	678	201	23	142
Clark, Norman, Sterling, Ill. Alcohol-lamp	279,915	June 26	1608	452	23	2419
Clark, Ogden C., Newton, Mass. School-chair	275,021	Apr. 3	188	50	23	1257
Clark, R. Neilson, and N. H. Cone, Leadville, Colo. Ore-concentrating table	285,970	Oct. 2	240	67, 68	25	46
Clark, Richard. (See Wills, Samuel, assignor.)						
Clark, Richard S., et al. (See Carter and Smith, assignors.)						
Clark, Robert A., Liverpool, county of Lancashire, England. Potato digging and separating machinery	271,601	Feb. 6	23	6	23	444
Clark, Robert S., Helena, Mont. Ter. Whiffletree-clip	288,922	Nov. 20	1417	390	25	771
Clark, Robert W., Buffalo, N. Y. Steam-trap and boiler-feeder	289,388	Dec. 4	18	6	25	890
Clark, Rollin C., and W. F. Beecher, Cleveland, Ohio. Distilling petroleum	275,589	Apr. 10	937	255	23	1395
Clark, Rollin C., Corry, Pa., and W. F. Beecher, Cleveland, Ohio. Oil-filter	287,627	Oct. 30	2356	635	25	457
Clark, Rollin C., assignor to himself and M. H. Warren, Corry, Pa. Renewing bone-black	279,335	June 12	905	253	23	2826
Clark, Roswell M., McPherson, Kans. Corn-planter	289,232	Nov. 27	1785	495	25	844
Clark, Roswell M., McPherson, Kans. Wheel-plow	289,233	Nov. 27	1787	495	25	844
Clark, Samuel E., Philadelphia, Pa. Spring gun	288,548	Nov. 13	955	262	25	682
Clark, Samuel H., Cincinnati, Ohio, and J. G. Parsons, Oshkosh, Wis. Fifth-wheel	280,350	July 3	13	4	24	4
Clark, Samuel J., Ypsilanti, Mich. Whip-socket	279,708	June 19	1361	379	23	2369
Clark, Scott. (See Kelly, George, assignor.)						
Clark, Stephen A. D., St. Joseph, Mo. Combined chair and bed	276,774	May 1	317	83	23	1681
Clark, Thomas K., Tie Siding, Wyo. Ter. Machine for channeling harness-straps	283,570	Aug. 21	1332	372	24	753
Clark, Tolivar B., North Manchester, Ind. Broadcast hand seed-sower	275,590	Apr. 10	939	255	23	1395
Clark, Walter A. (See Phillips, George H., assignor.)						
Clark, Warren R., et al. (See Fickett, William S., assignor.)						
Clark, William, Brooklyn, Md. Ore-crushing machine	277,233	May 8	901	240	23	1786
Clark, William, assignor of one-half to P. Main, Baltimore, Md. Wheelbarrow	273,225	Feb. 27	2077	583	23	825
Clark, William H., Chicago, Ill. Grooming-machine	270,389	Jan. 9	678	{ 201 202 }	23	142
Clark, William H., Thomaston, Conn. Apparatus for making angular cuts in sheet-metal pipes	279,336	June 12	906	253	23	2247
Clark, William H. and W. J. Salem, Ohio. Fluid-can	272,647	Feb. 20	1344	377	23	690
Clark, William J. (See Clark, William H. and W. J.)						
Clark, William S., S. R. Farrington, and T. Sheard, Little Falls, N. Y. Tension device for sewing-machines	278,096	May 22	1927	529	23	1977
Clark, William W., Chicago, Ill. Sand-drier	278,883	June 5	924	82	23	2172
Clarke, Alexander D., New York, N. Y. Ore-concentrator	276,775	May 1	318	83	23	1681
Clarke, Alexander D., New York, N. Y. Ore-concentrator	285,242	Sept. 18	1318	372	24	1145
Clarke, Ambrose J., Brooklyn, N. Y. Marine drag	289,224	Nov. 27	1788	495	25	844
Clarke Automatic Steam Valve Company. (See Clarke, George, assignor.)						
Clarke, Charles, Ovid, assignor of one-half to T. Tandy, Detroit, Mich. Seal-lock	271,684	Feb. 6	120	33	23	460
Clarke, Charles L. (See Edison and Clarke.)						
Clarke, Charles L., assignor to R. Hewitt, Jr., New York, N. Y. Circuit and apparatus for electric temperature and pressure indicators	284,382	Sept. 4	270	76	24	950
Clarke, Charles L., assignor to R. Hewitt, Jr., New York, N. Y. Telthermometer	285,572	Sept. 25	1720	{ 486 487 }	24	1223
Clarke, Christopher, Northampton, Mass. Car-coupling	286,999	Oct. 23	1541	425	25	297
Clarke, George, assignor to Clarke Automatic Steam Valve Company, Cincinnati, Ohio. Steam-actuated valve	281,836	July 24	1893	516	24	349
Clarke, George H. (See Thompson, Richard, assignor.)						
Clarke, James D., Harvard, Ill. Mechanism for converting motion	271,421	Jan. 30	1977	571	23	397
Clarke, John A. (See Rowe, William, assignor.)						
Clarke, John J., Patapa, Peru, assignor of one-half to A. W. Colwell, New York, N. Y. Dumping-car and apparatus for transporting the same	274,439	Mar. 20	1534	423	23	1114
Clarke, John J., Patapa, Peru, assignor of one-half to A. W. Colwell, New York, N. Y. Device for connecting portable railway-tracks	287,418	Oct. 30	2073	563	25	402
Clarke, John N., assignor of two-thirds to S. T. J. Coleman and E. B. Reynolds, Cincinnati, Ohio. Horseshoe-blank roll	275,022	Apr. 3	189	50	23	1257
Clarke, John N., assignor of two-thirds to S. T. J. Coleman and E. B. Reynolds, Cincinnati, Ohio. Horseshoe	285,573	Sept. 25	1724	487	24	1224
Clarke, John S., assignor to himself and J. F. Dunneback, Detroit, Mich. Feed-water apparatus for steam-boilers	276,354	Apr. 24	1910	530	23	1577
Clarke, John S., East China, assignor of one-half to J. F. Dunneback, Detroit, Mich. Feed-water regulator						
Clarke, Merritt, Poughkeepsie, N. Y. Coin-tester	276,355	Apr. 24	1912	530	23	1577
Clarke, Robert, Brooklyn, N. Y. Plumber's trap	273,667	Mar. 6	545	146	23	927
Clarke, Thomas, Sheffield, county of York, England. Sheath for razors	289,389	Sept. 25	1725	487	24	1224
Clarke, Willard A., Stillwater, Minn. Reversing-gear for steam-engines	272,648	Feb. 20	1345	{ 377 378 }	23	691
Clarke, Willard A., assignor to Northwestern Manufacturing and Car Company, Stillwater, Minn. Exhaust-nozzle for steam-engines	270,743	Jan. 16	1139	327	23	238
Clarke, Willard A., assignor to Northwestern Manufacturing and Car Company, Stillwater, Minn. Cut-off valve	270,744	Jan. 16	1140	327	23	238

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Clarke, Willard A., assignor to Northwestern Manufacturing and Car Company, Stillwater, Minn. Steam-engine cylinder	270,875	Jan. 16	1290	372	23	266
Clarke, Willard A., assignor to Northwestern Manufacturing and Car Company, Stillwater, Minn. Water-gage	278,223	May 22	2094	576	23	2006
Clarke, Willard A., Stillwater, Minn., assignor to Northwestern Manufacturing and Car Company. Traction-engine	286,906	Oct. 16	1419	390	25	271
Clarke, William E., St. Louis, Mo. Cleaning compound	289,621	Dec. 4	308		25	942
Clarke, William M. (See Dassau, Edward, assignor.)						
Clarkson, Frank M., et al. (See Taylor, Harrison H., assignor.)						
Clarkson, Frank S., assignor to F. B. Sloan, Baltimore, Md. Lock	281,615	July 17	1598	437	24	291
Clarkson, Frank S., assignor to F. B. Sloan, Baltimore, Md. Friction-hinge	290,398	Dec. 18	1276	359	25	1128
Clarkson, George C., et al. (See Taylor, Harrison H., assignor.)						
Clarkson, Joseph T., Amesbury, Mass. Two-wheeled vehicle	272,208	Feb. 13	773	214	23	585
Clarkson, Joseph T., Amesbury, Mass. Harrow-tooth	282,054	July 31	2164	594	24	400
Clarkson, William R., Buffalo, N. Y. Ratchet bit-brace	286,368	Oct. 9	764	207	25	149
Clary, Stephen. (See Brown, Thomas H., Jr., assignor.)						
Clason, William P., U. S. Navy, assignor to J. G. Berret, Washington, D. C. Sash-holder	280,292	June 26	2059	579	23	2499
Class, John, Canton, Ohio. Saw-handle	274,274	Mar. 20	1324	365	23	1078
Class, John, Canton, Ohio. Saw-handle	280,579	July 3	293	81	24	52
Classen, Alexander, Aachen, Germany. Electroplating	273,467	Mar. 6	295		23	883
Claudon, Gustav, and C. Vigneux, Paris, France. Production and collection of fertile yeast from juices of grain, &c.	279,337	June 12	907		23	2287
Claudon, Joseph A. I., Paola, Kans. Steam-cock and check-valve	279,338	June 12	909	253	23	2287
Claus, Adolph, assignor of one-half to J. S. Ludlam, Lowell, Mass. Loom-shuttle	280,797	July 10	578	161	24	109
Claus, Carl F., London, England. Manufacture of a white pigment	272,375	Feb. 13	977		23	622
Clause, John J., Chicago, Ill. Paper-dampening machine	286,591	Oct. 16	1017	276	25	201
Clausen, Adler C., assignor of one-half to J. C. Slafter, Minneapolis, Minn. Escapement and regulator	286,531	Oct. 9	937	252	25	181
Clausen, James, San Luis Obispo, Cal. Plow	285,463	Sept. 25	1598	449	24	1200
Claussen, Henry, and T. Staebler, Ellinwood, Kans. Coal-chute	280,133	June 26	1870	527	23	2466
Clawson, Clement C., Newark, N. J. Curtain-roller	278,884	June 5	286	82	23	2172
Clawson, Leonard E., San Francisco, Cal. Portable chimney	285,112	Sept. 18	1181	331	24	1120
Clawson, S. P., et al. (See See, James W., assignor.)						
Clay, Alonzo C., et al. (See Benner, Lorenzo D., assignor.)						
Clay, Cyrus C., Dunning, Pa. Brake-lock	281,222	July 10	1096	303	24	201
Clay, Henry, Philadelphia, Pa. Telephone	277,112	May 8	760	200	23	1762
Clay, Henry, Philadelphia, Pa. Switch-board for telephones	280,351	July 3	15	4	24	5
Clay, Henry, Philadelphia, Pa. Telephone call-bell	280,451	July 3	141	38	24	27
Clay, Henry, Philadelphia, Pa. Transmitter for telephones	280,580	July 3	294	81	24	53
Clay, Henry, Philadelphia, Pa. Telephonic transmitter	288,017	Nov. 6	292	82	25	557
Clay, Henry, assignor of one-half to J. B. Apple, Philadelphia, Pa. Underground conduit for electric wires	275,023	Apr. 3	190	50	23	1258
Clay, Robert J., Jersey City, N. J. Escapement	286,685	Oct. 16	1143	307 308	25	223
Clay, Robert J., Jersey City, N. J., assignor to G. F. Seward and O. B. Bradford, New York, N. Y. Carriage-clock	277,234	May 8	901	240	23	1787
Clay, William W., Paris, Ontario, Canada. Knitting-machine	277,004	May 8	616	161 162	23	1738
Clayton, George W., assignor of one-half to Barrett Machine Company, Cleveland, Ohio. Elevator	287,802	Nov. 6	16	5	25	510
Clayton, Henry. (See Wigmore, William H., assignor.)						
Clayton, Henry, Dayton, Ohio. Harvester-truck	288,208	Nov. 13	517	144	25	607
Clayton, William, St. Louis, Mo. Car-brake	289,982	Dec. 11	759	214	25	1027
Clayton, William M. (See Jones, William C., assignor.)						
Clear, Justin H., Mazeppa, Minn. Hame-tug clip	270,399	Dec. 18	1277	359	25	1128
Cleaves, N. Porter, Boston, Mass. Safety attachment for elevators	272,413	Feb. 20	1047	294	23	638
Cleveland, William B., Bridgeport, Conn. Car-starter	281,975	July 24	2063	565	24	378
Cleeland, William M., McCauleyville, Minn. Hoof-trimmer	271,038	Jan. 23	1493	430	23	305
Cleland, A. Vincent. (See Williams, Edwin S., assignor.)						
Clem, Jackson S., et al. (See Fry, John, assignor.)						
Clemence, Addison B., Worcester, Mass. Wire-coating for drawing	282,055	July 31	2165		24	401
Clemens, John. (See Todd, James, assignor.)						
Clemens, Julius, et al. (See Lindner, Ferdinand, assignor.)						
Clement, Charles E., assignor of two-fifths to C. W. Hoitt, Nashua, N. H. Automatic cutting and feeding attachment for printing-presses	287,239	Oct. 23	1850	506 507 508	25	354
Clement, Daniel B. (See Wetherell and Clement.)						
Clement & Dunbar. (See Dunbar, John H., assignor.)						
Clemmons, George F., Springfield, Mass. Apparatus for transmitting differential rotary motion	276,776	May 1	321	83, 84	23	1681
Clemmons, Thomas F., Tiverton, county of Devon, England, assignor to A. C. Baldwin, Boston, Mass. Stone-turning lathe	274,563	Mar. 27	1720	477	23	1152
Clemson, William, Middletown, N. Y. Buck-saw frame	281,837	July 24	1805	517	24	349
Clench, Frank B., Lockport, N. Y. Device for embossing photographs	269,830	Jan. 2	15	5	23	5
Clerk, William F., Boston, Mass. Fire-escape	276,669	May 1	161	41	23	1633
Cleveland Block Company. (See Ford, George A., assignor.)						
Cleveland, George H., Camden, Me. Shirt	286,781	Oct. 16	1260	341	25	243
Cleveland, John S., Neponset, Ill. Sulky-harrow	282,271	July 31	2456	674	24	448
Cleveland Non-Explosive Lamp Company. (See Hammond, William E., assignor.)						
Cleveland, Thomas B., Newark, N. J. Combined salt and pepper cup	287,628	Oct. 30	2357	636	25	457
Cleveland, William B., Cleveland, Ohio. Dynamo-electric machine	284,277	Sept. 4	149	41	24	929
Cleveger, Nelson T. (See Lantz, Michael H., assignor.)						
Cleves, William E., Brooklyn, N. Y. Hinge for sewing-machines	272,121	Feb. 13	673	183	23	568
Cliff, Edward, assignor to Cliff & Righter Company, (limited), Oswego, N. Y. Car-spring	283,078	Aug. 14	720	202	24	635
Cliff & Righter Company. (See Cliff, Edward, assignor.)						
Clifford, Alfred W., Johnstown, Pa. Stock-car	284,819	Sept. 11	815	227	24	1048
Clifford, Charles W., trustee. (See McCoy, John A., assignor.)						
Clifford, Frank, Carson City, Nev. Automatic railway-alarm	279,225	June 12	761	210	23	2263
Clifford, James P., Brooklyn, N. Y. Air-gas machine	277,113	May 8	761	200	23	1762
Clifford, John F., Milford, and E. Corbett, Boston, Mass. Harmonic attachment for key-boards	274,464	Mar. 27	1576	432 433	23	1129
Clifford, Joseph W. (See Clifford, Thomas G., assignor.)						
Clifford, Thomas G., Atlantic City, N. J., assignor of one-half to J. W. Clifford, New York, N. Y. Merry-go-round	288,018	Nov. 6	294	82	25	557



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Clifton, Joseph E. (See Burnett and Clifton.)						
Clifton, Oliver P. (See Briggs, Marvin A., assignor.)						
Clinch, Andrew F. (See Clinch, James H., assignor.)						
Clinch, James H., Pittsburg, assignor to himself and A. F. Clinch, York, Pa. Device for riveting hollow cylinders	280,452	July 3	143	38	24	27
Clinch, Nicholas B., Green Cove Spring, Fla. Two-wheeled vehicle	287,000	Oct. 23	1543	425	25	297
Cline, George A., Philadelphia, Pa. Car-coupling	270,390	Jan. 9	682	202	23	142
Cline, George J., Goshen, Ind. Roofing-knife or tinner's scraper	272,649	Feb. 20	1346	378	23	691
Cline, George J., Goshen, Ind. Sliding-jaw wrench	281,456	July 17	1401	385	24	259
Cline, James E., <i>et al.</i> (See Cline, John B., assignor.)						
Cline, John B., Jefferson, Iowa, assignor one-half to F. Thompson, J. E. Cline, O. R. Gray, and E. F. Billings. Machine for applying barbs to fence-wires	279,339	June 12	909	{ 254 255 }	23	2287
Cline, John B., assignor to Boone Steel Barb Wire Company, Jefferson, Iowa. Barbed fence-wire	290,974	Dec. 25	2053	565	25	1267
Cline, Oliver W., Frohna, Mo. Saddle adjuster and fastener	289,225	Nov. 27	1789	495	25	845
Clingman, Joseph L., Cynthia, Ky. Nut-lock for rail-joints	273,029	Feb. 27	1834	513	23	783
Clingman, Thomas L., Asheville, N. C. Incandescent electric light	276,133	Apr. 17	1627	448	23	1521
Clinton, De Witte, Lemoore, Cal. Combined seeder and harrow	286,263	Oct. 9	592	162	25	118
Clinton, P. F., <i>et al.</i> (See Henry, John C., assignor.)						
Clinton Wire Cloth Company. (See Waters, Charles H., assignor.)						
Cloak, Bickley W., assignor of one-half to J. Cloak, Dayton, Ohio. Car-coupling	274,908	Apr. 3	20	6	23	1230
Cloak, John. (See Cloak, Bickley W., assignor.)						
Clock, Jesse M., New York, N. Y. Refrigerator	274,275	Mar. 20	1324	366	23	1078
Clock, Jesse M., New York, N. Y. Refrigerator	274,276	Mar. 20	1326	366	23	1078
Cloes, Benjamin J., Lake Bluff, assignor of one-half to A. B. Pullman, Chicago, Ill. Door-hanger	285,575	Sept. 25	1726	488	24	1224
Clooney, Joseph, New York, N. Y. Extension-table	276,159	Apr. 24	1660	458	23	1535
Close, Gideon A., Bridgeport, Conn. Device for clamping patterns on goods	288,410	Nov. 13	791	{ 214 215 }	25	653
Close, Thomas J., Philadelphia, Pa. Button	277,005	Mar. 8	618	162	23	1738
Closset, Mathien, Liege, Belgium. Preserving meat	275,148	Apr. 3	350	96	23	1287
Clother, Jane A., Cumberland, Wis. Hair-crimper	273,957	Mar. 13	920	252	23	999
Clothier, Henry R., J. Grogan, and J. McMullen, Philadelphia, Pa. Composition paint for metallic surfaces	286,117	Oct. 2	415		25	76
Clotworthy, William P., Baltimore, Md. Baking-powder	273,958	Mar. 13	921		23	999
Clotworthy, William P., Baltimore, Md. Preserving edible animal fats	284,184	Sept. 4	33		24	910
Cloud, John W. (See Ely, Cloud, and Wall.)						
Cloud, John W., Altoona, Pa. Fuel-feeding device for locomotives	289,226	Nov. 27	1790	496	25	845
Cloud, William H., Detroit, Mich., assignor to C. Styer, Kokomo, Ind. Bench-vice	288,549	Nov. 13	956	263	25	682
Clough, Enos M., Lake Village, assignor of one-half to A. R. Tinkham, Lancaster, N. H. Latch for sliding doors	275,149	Apr. 3	351	96	23	1287
Clough Manufacturing Company. (See Clough, W. Rockwell, assignor.)						
Clough, Milo M., Carlisle, Iowa. Corn planter and marker	290,320	Dec. 18	1178	330	25	1110
Clough, William R., New York, N. Y. Buckle	286,264	Oct. 9	593	162	25	119
Clough, William R., Brooklyn, assignor of one-half to B. Goodman, New York, N. Y. Hose-supporter	288,161	Nov. 6	453	126	25	587
Clough, W. Rockwell, Newark, N. J. Binder or holding device	276,001	Apr. 17	1460	402	23	1493
Clough, W. Rockwell, Newark, N. J., assignor to Clough Manufacturing Company, of New Jersey. Binder or holding device	272,650	Feb. 20	1347	378	23	691
Clous, George W., Reading, Pa. Show-case	272,209	Feb. 13	774	214	23	586
Clow, Adam S., Wheatland, Ill. Grain-binder	274,909	Apr. 3	20	6	23	1230
Clow, Lewis E., assignor of one-half to J. Beckwith, St. Louis, Mo. Lamp-wick	285,971	Oct. 2	241	68	25	46
Clow, William M., Wheatland, Ill. Wire-fence nail	279,113	June 5	633	172	23	2231
Clow, William M., Wheatland, Ill. Barbed fence-wire	285,014	Sept. 18	1060	296	24	1100
Clow, William M., Wheatland, Ill. Barbed wire for fences	287,803	Nov. 6	17	6	25	510
Clowes, George H., <i>et al.</i> (See Stever, Jeremiah, assignor.)						
Clowes, George H., and E. L. Frisbie, Jr., Waterbury, Conn. Fire-escape	271,422	Jan. 30	1977	571	23	397
Clowes, George H., and E. L. Frisbie, Jr., Waterbury, Conn. Fire-escape	283,969	Aug. 28	1813	513	24	854
Cloyes, James H., assignor of one-half to C. B. Hitchcock, Cortland, N. Y. Top-prop	282,611	Aug. 7	164	49	24	529
Clocus, William, Cleveland, Ohio. Carriage-top	273,959	Mar. 13	921	253	23	999
Cluett, Brother & Co., George B. (See Norton, Rowland S., assignor.)						
Cluett, Robert, Troy, N. Y. Shirt	271,574	Jan. 30	2171	625	23	430
Cluett, Robert, Troy, N. Y. Shirt	277,006	May 8	619	162	23	1738
Clutter, Albert E., Lima, Ohio. Grain-drier	283,970	Aug. 28	1815	513	24	854
Clymer, Daniel R., Reading, Pa. Fire-escape	290,630	Dec. 18	1596	438	25	1181
Coales, Samuel L., Newport-Pagnell, England. Door-latch	280,581	July 3	295	81, 82	24	53
Coas, Edward K., Philadelphia, Pa. Making metal tubes	285,576	Sept. 25	1727	488	24	1225
Coast and Harbor Defence Company. (See Graydon, James W., assignor.)						
Coates, Charles E. (See Rorebeck, Henry, assignor.)						
Coates, Henry. (See Wiener, Coates, and Wiener.)						
Coates, John, London, England. Apparatus for the manufacture of sulphate of ammonia	272,651	Feb. 20	1348	{ 378 379 }	23	691
Coates, Joseph H. (See Potts, Joseph C., assignor.)						
Coates, Thomas, and J. J. Bissicks, Bristol, county of Bristol, England. Paper-bag machine	282,166	July 31	2321	{ 637 638 639 640 641 }	24	425
Coats, James & Peter. (See Watson, Thomas, assignor.)						
Coats, Samuel, Upper Merion, Pa. Thrashing-machine	283,206	Aug. 14	877	245	24	663
Cobb, Henry B., Wilmington, Del. Car-seat	277,114	May 8	762	{ 200 201 }	23	1762
Cobb, Henry B., Wilmington, Del. Car or other seats	277,115	May 8	763	201	23	1763
Cobb, Henry B., Wilmington, Del. System of laying subterranean lines of electric wires	288,310	Nov. 13	643	176	25	628
Cobb, Henry B., Wilmington, Del. Subterranean line of electric wires	288,311	Nov. 13	643	177	25	628
Cobb, Hiram, Kalamazoo, Mich. Harrow	284,278	Sept. 4	150	41	24	929
Cobb, John P., College City, Cal. Supply apparatus for feeders for thrashing-machines	276,225	Apr. 24	1737	481	23	1548
Cobb, Maria L., Natick, Mass. Oil-can	272,030	Feb. 13	555	150	23	548
Cobbett, George W., and J. E. Cunningham, Chartiers township, Allegheny county, Pa. Continuous rolling-mill	285,113	Sept. 18	1182	331	24	1120
Coble, Riley. (See Finly, James R., assignor.)						
Coburn, Augustus B., Rosedale, Kans. Device for fasteningsaw-clamps, &c., to work-benches	289,227	Nov. 27	1791	496	25	845
Coburn, Charles E., <i>et al.</i> (See King, George W., assignor.)						
Coburn, Daniel W., Buffalo, Tex. Car-coupling	275,150	Apr. 3	352	97	23	1287

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Coburn, Jehiel C. (See Coburn, Lemuel and J. C.)						
Coburn, John G., South Carthage, assignor to himself and G. B. Staples, Carthage, Me. Dumping-wagon	270,391	Jan. 9	683	203	23	143
Coburn, Lemuel and J. C., Worcester, Mass. Machine for cutting corsets, rags, &c.	272,856	Feb. 27	1624	455	23	747
Coburn, Llewellyn H., Seneca, Kans., and E. D. Thompson, Havana, Ill. Cane stripper and header	287,240	Oct. 23	1857	508	25	355
Cochel, Charles T., Uniontown, Md. Window-shutter	287,906	Nov. 6	145	43	25	533
Cochran, Noah L., Brooklyn, assignor to himself, T. Y. Brown, New York, and G. B. Walton, Brooklyn, N. Y., trustees. Manufacturing electrolyte-rollers for imitating leather and other materials	276,777	May 1	323	84	23	1682
Cochran, Henry S., assignor to S. A. Cochran, Philadelphia, Pa. Match-safe	282,272	July 31	2451	674	24	448
Cochran, James, Lockport, N. Y. Snatch-block	279,916	June 26	1609	452	23	2420
Cochran, James, Lockport, N. Y. Bashing for sheaves of pulley-blocks	282,056	July 31	2165	594	24	401
Cochran, James, New Lots, N. Y. Spout and strainer	283,207	Aug. 14	878	245	24	663
Cochran, James, New Lots, assignor to Lalance & Grosjean Manufacturing Company, New York, N. Y. Coffee-pot	285,972	Oct. 2	242	68	25	46
Cochran, John, Jr., Millwood, assignor to S. A. Tague, Briscoe, Mo. Mechanical movement	281,976	July 24	2064	566	24	378
Cochran, John, Jr., Millwood, assignor to himself and J. A. Wirick, Clarksville, Mo. Car-coupling	289,228	Nov. 27	1792	496	25	845
Cochran, John B. (See Beach, John S., assignor.)						
Cochran, Samuel H., Everett, Mass. Making artificial butter	285,878	Oct. 2	125	36	25	24
Cochran, Samuel H., Everett, Mass. Churn and like apparatus for use in the manufacture of artificial butter, &c.	285,973	Oct. 2	243	69	25	46
Cochran, Samuel H., Everett, Mass. Churn or mixer for use in the manufacture of artificial butter	285,974	Oct. 2	244	69	25	47
Cochran, Stephen A. (See Cochran, Henry S., assignor.)						
Cochran, Thomas, Brooklyn, N. Y. Telegraphic relay	272,210	Feb. 13	775	214	23	586
Cochran, William J., assignor to himself, G. W. Apple, and H. G. Peters, Denison, Iowa. Horse-collar pad	275,886	Apr. 17	1333	367	23	1470
Cochrane, Brodie. (See Fenwick and Cochrane.)						
Cochrane, Brodie, Durham, county of Durham, England. Coke-oven	276,002	Apr. 17	1461	403	23	1493
Cochrane, Charles, Stourbridge, county of Worcester, England. Manufacture of iron in blast-furnaces	284,383	Sept. 4	275		24	950
Cochrane, William, East Woodstock, Conn. Cover-fastener for fruit-jars	276,670	May 1	162	41	23	1653
Cockburn, Donald B. S., Jersey City, N. J. Wheelbarrow	288,019	Nov. 6	294	83	25	557
Cockcroft, Thomas, Birkenhead, county of Chester, assignor to W. P. Thompson, Liverpool, England. Packing-case	276,356	Apr. 24	1912	531	23	1577
Cocke, John, Jr., Greensborough, Ala. Hay and cotton press	283,571	Aug. 21	1334	372	23	753
Cockell, Harvey, Chicago, Ill., assignor to C. Chambers, Jr., Philadelphia, Pa. Kiln for drying brick, &c.	274,910	Apr. 3	21	6	23	1230
Cockell, Harvey, assignor to R. S. Reynolds, Chicago, Ill. Machine for separating stones from clay	284,613	Sept. 11	557	158	24	1005
Cocker, Frederick, assignor to Hat Curling Machine Company, Danbury, Conn. Hat-brim-curling machine	286,907	Oct. 16	1421	390	25	271
Cocker, Frederick, assignor to Hat Curling Machine Company, Danbury, Conn. Hat-brim-curling machine	286,908	Oct. 16	1423	391	25	271
Cockshaw, Herbert, assignor to Cox & Sedgwick, New York, N. Y. Bracelet	272,829	Feb. 20	1566	440	23	730
Cockson, Charles, Wigan, county of Lancaster, England. Ventilating-fan	284,279	Sept. 4	151	42	24	930
Codd, Hiram, London, and D. Rylands, Barnsley, county of York, England. Bottle for containing aerated liquids	270,392	Jan. 9	685	203	23	143
Codding, David D., North Attleborough, Mass. Manufacture of ornamental chains	279,340	June 12	915	255	23	2288
Codding, Frederick W., assignor to himself and Desper, Rogers & Co., Barre, Mass. Automatic belt-tightener	283,572	Aug. 21	1336	373	24	753
Coddington, Marion, Rahway, N. J. Waist, drawers, and stocking supporter	288,020	Nov. 6	295	83	25	557
Cody, John W. (See Simms and Cody.)						
Coe Brothers. (See Thomas, Boyel S., assignor.)						
Coe, Carlos C., Rome, N. Y. Fence	275,591	Apr. 10	940	256	23	1395
Coe, Henry L. (See Thackston, Richard D., assignor.)						
Coe, John W., and D. Merritt, Brooklyn, N. Y. Two-wheeled vehicle	261,457	July 17	1402	385	24	259
Coe, Mary E. (See Coe, Winfield R., assignor.)						
Coe, Wash, Leavenworth, Kans. Door securer	290,400	Dec. 18	1277	359	25	1128
Coe, Winfield R., assignor to M. E. Coe, Meriden, Conn. Check-rein fastener	281,616	July 17	1599	437	24	292
Coes, John H., Worcester, Mass. Wrench	289,069	Nov. 27	1605	445	25	811
Coker, Thomas W., Portsmouth, Va. Fly-fan	288,021	Nov. 6	296	83	25	557
Cofey, Wiley D., Pangburn, Ark. Horseshoeing-stand	286,389	Oct. 9	766	207	25	149
Coffield, Peter T., assignor to himself and A. L. Wolley, Springfield, Ohio. Wind-engine	273,226	Feb. 27	2077	584	23	825
Coffield, Peter T., assignor of one-half to C. H. Paxson, Springfield, Ohio. Force-pump	276,134	Apr. 17	1628	449	23	1521
Coffin, Edward J., Little Falls, N. Y. Indicator and alarm for steam-boilers	285,798	Oct. 2	19	6	25	6
Coffin, George W., Lynn, Mass. Buffing-machine	271,222	Jan. 30	1723	499	23	352
Coffin, George W., Lynn, Mass., assignor of three-fifths to H. Bohr, New York, N. Y. Abrading and polishing machine for boots and shoes	274,440	Mar. 20	1536	423	23	1114
Coffin, James H., et al. (See Vincent and Smith, assignors.)						
Coffin, Joseph W. (See Maloney, James, assignor.)						
Coffin, Prince H. (See Sullivan, Michael E., assignor.)						
Coffin, Prince H., et al. (See Vincent and Smith, assignors.)						
Coffin, Zebulon E., Newton, Mass. Machine for drilling pipe-flanges	272,857	Feb. 27	1626	455	23	747
Coffin, Zebulon E., Newton, Mass. Machine for turning pipe-flanges	283,376	Aug. 21	1102	310	24	711
Cogger, William B., and H. A. Hamlin, Minneapolis, Minn. Door-hanger	283,208	Aug. 14	879	245	24	664
Coggeshall, William T., Lowell, Mass. Spindle for loom-shuttles	273,468	Mar. 6	296	80	23	883
Coggin, Frederick G. (See Richards and Coggin.)						
Coggin, Frederick G., Lake Linden, Mich. Dash pot bumper	272,652	Feb. 20	1350	379	23	691
Coggins, O. Chester, New Haven, Conn. Shifting rail	274,174	Mar. 20	1196	329	23	1055
Cogswell, Eliza R., New York, N. Y. Life-preserver	270,745	Jan. 16	1142	327	23	238
Cogswell, Eliza R., New York, N. Y. Life-preserver	281,178	July 10	1039	288	24	191
Cogswell, Henry D., San Francisco, Cal. Producing a cool atmosphere in rooms and apartments	272,653	Feb. 20	1351	379	23	691
Cogswell, Henry D., San Francisco, Cal. System of and apparatus for producing and distributing refrigerated air and water	272,654	Feb. 20	1352	380	23	692
Cogswell, William S., Hyde Park, Mass. Ceiling	282,167	July 31	2326	641	24	426
Cogswell, William S., Hyde Park, Mass. Machine for transferring figures upon glass	282,168	July 31	2327	642	24	426
Cogswell, William S., Hyde Park, Mass. Marbleizing glass	283,861	Aug. 28	1682	475	24	828
Cohen, Alfred N., New York, N. Y. Fastener for gloves and other articles	270,019	Jan. 2	227	66	23	47



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Cohen, Isaac S., <i>et al.</i> (See Prince, David, assignor.)						
Cohen, Jacob S., <i>et al.</i> (See Prince, David, assignor.)						
Cohen, Moses, Hallettsville, Tex. Fan attachment	270,020	Jan. 2	223	66	23	47
Cohlman, William, Philadelphia, Pa. Underground-telegraph line	277,007	May 8	620	162 163	23	1738
Cohlman, William, Philadelphia, Pa. Collar	257,241	Oct. 23	1858	508	25	355
Cohn, Julius M., New York, N. Y. Corset-clasp	258,022	Nov. 6	297	83	25	558
Cohn, Julius M., New York, N. Y. Corset-clasp	258,023	Nov. 6	297	84	25	558
Cohn, Oscar J., New York, N. Y. Pin-tag	290,537	Dec. 18	1476	408	25	1162
Coburn, Frank, assignor of one-half to H. Turner, Detroit, Mich. Machine for cleaning feathers and separating the down therefrom	270,180	Jan. 2	413	120	23	84
Coil, George, Ashley, Pa. Apparatus for upholstering cushioned seats	250,911	July 10	705	198	24	131
Coit, Henry A. (See White, John E., assignor.)						
Colahan, Charles. (See Dickey, James H., assignor.)						
Colahan, Charles, Cleveland, Ohio. Harvester-rake	254,723	Sept. 11	698	196	24	1028
Colahan, Charles, Cleveland, Ohio. Harvester	255,464	Sept. 25	1509	449	24	1200
Colahan, Samuel, Cleveland, Ohio. Neck-yoke holder	258,024	Nov. 6	298	84	25	558
Colbert, John, Mantua, N. J. Can-filling machine	256,762	Oct. 16	1261	341	25	243
Colbert, Michael J. (See Melick and Colbert.)						
Colburn, Fuller & Co. (See Daggett, John C., assignor.)						
Colburn, George S., Gardner, Mass. Rattan-scraping machine	277,235	May 8	902	240	23	1787
Colburn, Henry J., assignor to himself and H. Baker, Toledo, Ohio. School-desk	277,545	May 15	1275	342	23	1857
Colburn, Richard R., Ansonia, Conn. Paper box	253,209	Aug. 14	880	245	24	664
Colby, Caleb K., Brooklyn, N. Y. Watch-pendant	257,001	Oct. 23	1544	425	25	298
Colby, Charles C. (See Wiswell, Frederick A., assignor.)						
Colby, George H., Boston, Mass. Coupling attachment for locomotive-tenders	288,200	Nov. 13	518	144	25	607
Colby, John N., assignor of one-half to J. H. Amies, New London, Conn. Umbrella	289,229	Nov. 27	1793	496	25	846
Colby, John N., assignor of one-half to J. H. Amies, New London, Conn. Combined umbrella and cane	289,230	Nov. 27	1794	497	25	846
Colcord, Joseph L. (See Pettinier and Colcord.)						
Colcord, Joseph W., Lynn, Mass. Bottle-tap	280,798	July 10	579	161 162	24	109
Colcord, Otis B., Greenville, Ill. Grain-elevator for harvesters	277,993	May 22	1808	494	23	1956
Colcord, Samuel M., Dover, Mass. Method of and device for preserving ensilage in silos	280,352	July 3	16	5	24	5
Colditz, William, Rochelle, Ill. Milk-skimming device	272,655	Feb. 20	1354	360	23	692
Coldwell, Thomas and W. H., Newburg, N. Y. Machine for clipping hats, furs, &c.	271,423	Jan. 30	1979	571 572	23	397
Coldwell, Thomas and W. H., Newburg, N. Y. Lawn-mower	273,469	Mar. 6	297	81	23	884
Coldwell, William H. (See Coldwell, Thomas and W. H.)						
Cole, Aaron, Fillmore, Mo. Curtain-fixture	282,846	Aug. 7	445	125	24	579
Cole, Charles O., Las Vegas, N. Mex. Ter. Overalls	278,313	May 29	2235	613	23	2038
Cole, David S., Columbus Junction, Iowa. Breech-loading fire-arm	289,070	Nov. 27	1606	445	25	811
Cole, Henry, Denver, Colo. Device for exhibiting cards and samples	277,681	May 15	1436	387	23	1884
Cole, Isaac, Newark, N. J. Wood-screw	258,923	Nov. 20	1418	391	25	771
Cole, James, St. Louis, Mo. Smoking-pipe	273,709	Mar. 13	603	162	23	945
Cole, James, Dixon, Ky. Destroying insects	277,008	May 8	621		23	1738
Cole, James W., Huntington, Mass. Car-coupling	275,754	Apr. 10	1158	318	23	1432
Cole, James W., Nashville, Tenn. Saw-table	279,341	June 12	915	255	23	2228
Cole, James W., assignor to himself and J. W. Hamilton, Boston, Mass. Button	277,886	May 22	1680	458	23	1934
Cole, John O., Portsmouth, Ohio. Printed blank, form, &c.	289,892	Dec. 11	653	181 182	25	1007
Cole, Perry F., <i>et al.</i> (See Reynolds, David R., assignor.)						
Cole, Seth, Alton, N. Y. Glod-crusher	281,021	July 10	840	233	24	156
Cole, Shuman M., Anamosa, Iowa. Measuring-pump	270,021	Jan. 2	229	67	23	47
Cole, Thomas Z., assignor of one-half to L. G. and L. G. Jeffers, Jr., Kansas City, Mo. Dredging-machine	277,236	May 8	904	241 242 243	23	1787
Cole, Wesley, Menomonee, Wis. Vehicle-spring	256,532	Oct. 23	938	252	25	181
Cole, Wesley, Menomonee, Wis. Wagon-bolster spring	290,860	Dec. 25	1893	522	25	1242
Cole, Wesley, assignor to J. Gray, Menomonee, Wis. Sand-band	274,885	Mar. 27	2103	585	23	1219
Cole, Wesley, assignor to A. G. Anderson and S. A. Peterson, Menomonee, Wis. Sand-band for vehicles	287,364	Oct. 23	2003	546	25	382
Cole, William E., Montgomery, Ala. Locomotive	277,994	May 22	1809	494	23	1956
Cole, William R., Pottsville, Pa. Combined hat and coat hanger and button-hook	270,889	Jan. 23	1313	379	23	276
Colebrook, Cemer T., Islington, county of Middlesex, England, assignor to himself and J. Rose, New York, N. Y. Ratchet-drill	285,733	Sept. 25	1925	547	24	1261
Coleman, Charles C., Honolulu, Hawaiian Islands. Cane-planting machine	279,709	June 19	1361	379	23	2370
Coleman, Charles C., Honolulu, Oahu, Hawaiian Islands. Double mold-board plow	284,820	Sept. 11	816	227	24	1049
Coleman, Daniel J. (See McCloskey and Coleman.)						
Coleman, Hamilton D., New Orleans, La. Gage for dressing and truing millstones	275,024	Apr. 3	191	51	23	1258
Coleman, John A., Providence, R. I. Machine for making horseshoe-nails	286,390	Oct. 9	768	207 208	25	150
Coleman, John A., Providence, R. I. Machine for making horseshoe-nails	286,391	Oct. 9	770	208 209	25	150
Coleman, Michael S., New York, N. Y. Mine-shaft elevator	289,231	Nov. 27	1795	497	25	846
Coleman, Samuel T. J., <i>et al.</i> (See Clarke, John N., assignor.)						
Coleman, Theodore, New York, N. Y. Sofa-bedstead	283,210	Aug. 14	881	246	24	664
Coleman, William O., Memphis, Tenn. Seed-cotton separator and cleaner	278,401	May 29	2349	642	23	2059
Coleman, William O., Memphis, Tenn. Seed-cotton separator and cleaner	281,671	July 24	1673	456	24	310
Coleman, William O., Little Rock, Ark. Seed-cotton separator and cleaner	282,057	July 31	2166	594 595	24	401
Coleman, William O., Little Rock, Ark., assignor of one-half to S. Z. Hall Southern Cotton Gin Company. Cotton-gin feeder	278,402	May 29	2351	643	23	2059
Coles, Herbert Z., Lake City, Minn. Combined dropper and check-row attachment	271,793	Feb. 6	252	70	23	484
Colgan, Thomas, Brooklyn, N. Y. Lubricant for steam-cylinders	280,134	June 26	1871		23	2466
Colhoun, James. (See Metzler and Burrell, assignors.)						
Collamore, John H. (See Humans, William, assignor.)						
Collamore, Robert G. S., Boston, Mass. Door-check	272,531	Feb. 20	1196	333	23	664
Collard, John P., <i>et al.</i> (See Ruggles, Robert B., assignor.)						
Collard, Richard M., assignor to J. Reckendorfer, New York, N. Y. Combined pen and pencil	270,746	Jan. 16	1144	327	23	238
Collard, Richard M., assignor to L. W. Fairchild, New York, N. Y. Pencil-case	257,907	Nov. 6	146	43	25	533
Collard, Richard M., assignor to L. W. Fairchild, New York, N. Y. Cigar-perforator	258,210	Nov. 13	519	144	25	007
Collender, Hugh W., New York, N. Y. Billiard-table cushion	275,592	Apr. 10	942	256	23	1396

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Collender, Hugh W., New York, N. Y. Billiard-table cushion .....	275,593	Apr. 10	944	256	23	1396
Coller, Charles W., Hannibal, Mo. Car-door .....	274,107	Mar. 20	1111	306	23	1039
Coller, Charles W., Hannibal, Mo. Car-axle box .....	279,342	June 12	916	256	23	2289
Colliat Furnace Company. (See Colliat, Victor, assignor.)						
Colliat, Victor, assignor to Colliat Furnace Company, Detroit, Mich. Furnace for reducing ores .....	254,384	Sept. 4	276	77	24	951
Collier, James M., Atlanta, Ga. Grinding-mill .....	270,747	Jan. 16	1145	323	23	239
Collier, William G., Merced, Cal. Weighing-scale .....	281,753	July 24	1783	485 486	24	329
Collier, William H. (See Wiswall and Collier.)						
Collignon, Adam, Westwood, N. J. Folding chair .....	292,273	July 31	2452	675	24	448
Collin, Albert, Rouen, France. Extensible receptacle .....	273,030	Feb. 27	1835	513 514	23	783
Collin, John B., Altoona, Pa. Sanding device for locomotives .....	271,039	Jan. 23	1494	431	23	305
Collin, John B., Altoona, Pa. Stand-pipe .....	271,195	Jan. 23	1690	488	23	337
Collin, John B., Altoona, Pa. Sanding device for locomotives .....	272,414	Feb. 20	1049	294	23	638
Collin, John B., Altoona, Pa. Supplying locomotives with coal. (Reissue) .....	10,417	Dec. 4	523	144	25	977
Collin, Simon C., Braddock, Pa. Ingot-buggy .....	281,022	July 10	842	234	24	156
Collinge, Edward. (See Collinge, Richard S., E., and R.)						
Collinge, Richard S., E., and R., Oldham, county of Lancaster, England. Shedding mechanism for looms .....	256,783	Oct. 16	1262	342	25	244
Collinge, Robert. (See Collinge, Richard S., E., and R.)						
Collings, Edward Z., Camden, N. J., and C. F. Pike, Philadelphia, Pa. Sewer-inlet .....	274,465	Mar. 27	1577	433	23	1129
Collings, Edward Z., Camden, N. J., and C. F. Pike, Philadelphia, Pa. Sewer-inlet .....	274,466	Mar. 27	1578	433	23	1129
Collings, Edward Z., Camden, N. J., and C. F. Pike, Philadelphia, Pa. Sewer-inlet .....	275,802	Apr. 17	1231	337	23	1452
Collings, Edward Z., Camden, N. J., and C. F. Pike, Philadelphia, Pa. Sewer-flushing device .....	275,803	Apr. 17	1232	337	23	1452
Collings, Edward Z., assignor to National Anti-Sewer Gas Company, Camden, N. J. Deodorizing and disinfecting water-closets, &c. ....	276,357	Apr. 24	1914	531	23	1578
Collings, Edward Z., Camden, N. J., and C. F. Pike, Philadelphia, Pa. Refrigerator-car ..	285,894	Sept. 25	1516	427	24	1186
Collings, William, assignor of three-fourths to J. Yeager, J. W. McClellan, and J. Keating, Afton, Iowa. Apparatus for generating and carbureting hydrogen gas .....	282,169	July 31	2328	642	24	426
Collins, Alfred, et al. (See Wright, Charles A., assignor.)						
Collins, Bernard, Kennerdell, Pa. Automatic high and low water indicator for steam-boilers .....	271,794	Feb. 6	253	70	23	484
Collins, Charles, Chicago, Ill. Wire-coupling .....	278,097	May 22	1929	529	23	1977
Collins, Charles P., San Marcos, Tex. Cotton-picker's wagon .....	276,778	May 1	325	84	23	1682
Collins, Charles R., assignor of one-third to J. Schrack, Lafayette, Ind. Railway-signal ..	270,205	Jan. 9	449	131	23	99
Collins, Eli A. (See Bowman, John W., assignor.)						
Collins, Erasmus B., assignor to E. Mize, Chicago, Ill. Process of and compound for rendering cloth impervious to water .....	285,734	Sept. 25	1930	.....	24	1261
Collins, Eugene F., North Anson, Me. Wash-stand .....	273,710	Mar. 13	603	162	23	945
Collins, George, La Grange, Iowa. Hog-nose ring .....	273,960	Mar. 13	922	253	23	999
Collins, Henry H., et al. (See Wright, Charles A., assignor.)						
Collins, James, Crawfordsville, Ind. Two-wheeled vehicle .....	281,023	July 10	843	234	24	156
Collins, John, Gloucester, Mass. Towing-boat .....	283,373	Aug. 21	1336	373	24	753
Collins, John W., St. Louis, Mo. Cultivator .....	276,160	Apr. 24	1662	478 459	23	1535
Collins, John W., Chicago, Ill. Reduction-machine .....	290,208	Dec. 18	1033	291	25	1085
Collins, Joseph H., Jr. (See Granger and Collins.)						
Collins, Joseph H., Jr., and A. O. Granger, Philadelphia, Pa. Process of and apparatus for manufacturing gas .....	276,562	May 1	20	6	23	1630
Collins, M. Grier, assignor of one-half to J. W. Lilley and F. Siegel, Jr., Columbus, Ohio. Flameless lamp .....	277,682	May 15	1437	387	23	1884
Collins, Michael, Pittsfield, Mass. Fire-escape .....	282,703	Aug. 7	287	80	24	549
Collins, Morris A., Gainesville, Tex. Boot-scraper .....	287,242	Oct. 23	1859	508	25	355
Collins, Oliver D., Snow Hill, Md. Cartridge-pouch .....	287,804	Nov. 6	18	25	25	510
Collins, Robert M. (See Green, John, assignor.)						
Collins, Stephen, Huntsville, Ala. Churn .....	278,098	May 22	1930	529	23	1978
Collins, William, Syracuse, N. Y. Machine for finishing metallic pipes .....	273,258	Mar. 6	18	6	23	837
Collis, John, Des Moines, Iowa. Steam-trap and boiler-feeder .....	270,638	Jan. 16	1003	289	23	212
Collis, John, Des Moines, Iowa. Steam-radiator .....	290,665	Dec. 25	1641	452	25	1196
Collmann, C. O., et al. (See Held, August S., assignor.)						
Collmann, Claus O., et al. (See Tobias, Cyrus, assignor.)						
Collyer, William C., assignor of one-fourth to C. A. Chase, Lynn, Mass. Station-indicator ..	288,162	Nov. 6	453	127	25	587
Coloney, Myron. (See McLean and Coloney.)						
Coloney, Myron, New Haven, Conn., assignor to J. H. McLean, St. Louis, Mo. Magazine-gun .....	282,499	Aug. 7	27	8	24	505
Colony, Charles W., Sandy Creek, N. Y. Device for converting motion .....	289,622	Dec. 4	308	86	25	942
Colquhoun, Sutherland G., Edinburgh, Scotland. Brake for railways .....	276,358	Apr. 24	1915	531	23	1578
Colt, James B., assignor of one-half to S. C. Thompson, New York, N. Y. Device for focusing lenses .....	288,025	Nov. 6	299	84	25	558
Colton, Albert B., assignor of one-half to R. Hamilton, Franklin, Ind. Stub-axle for trucks ..	289,752	Dec. 4	478	135	25	970
Colton, William L., et al. (See Schermerhorn, Herschel A., assignor.)						
Colts Patent Fire-Arms Manufacturing Company. (See Brewer, Roland L., assignor.)						
Colvin, Charles W., Wilkes-Barré, Pa. Mining-machine .....	282,274	July 31	2452	675	24	448
Colvin, Frederick J., Hamden, Conn. Screw-driver .....	279,917	June 26	1610	452	23	2420
Colvin, Henry F., Philadelphia, Pa. Injector .....	284,614	Sept. 11	558	158	24	1005
Colvin, Orson, assignor to J. Bauer, Schoolcraft, Mich. Lubricating apparatus .....	277,410	May 8	1105	297	23	1822
Colvin, Orson, assignor to W. T. Smith and W. Fauckboner, Schoolcraft, Mich. Clothes-pouder .....	271,602	Feb. 6	24	6	23	444
Colwell, A. W. (See Clarke, John J., assignor.)						
Colwell, William S., Pittsburg, Pa. Method of and apparatus for obtaining a high pressure motor from low pressure of steam in street mains and branches .....	274,175	Mar. 20	1196	329	23	1055
Combs, Abraham F., Long Lane, Mo. Bee-hive .....	275,328	Apr. 3	567	154	23	1322
Combs, Charles R. (See Baggott, James E., assignor.)						
Comee, George W. and S. S., Waseca, Minn. Burial-casket .....	281,024	July 10	844	234	24	156
Comee, Samuel S. (See Comee, George W. and S. S.)						
Comings, William R. (See Jackson and Austin, assignors.)						
Comins, Charles S., Concord, N. H. Folding crib .....	274,467	Mar. 27	1580	433	23	1129
Comins, Charles S., Concord, N. H. Folding crib .....	279,134	June 12	667	183	23	2247
Comins, Charles S., Concord, N. H. Child's crib .....	286,686	Oct. 16	1144	308	25	223
Commander, Miles, Elizabeth City, N. C. Sash-holder .....	286,909	Oct. 16	1425	391	25	271
Commans, William, Lilly Chapel, Ohio. Combined pulverizer and grader .....	284,946	Sept. 11	963	270	24	1076



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Commercial Telegram Company. (See Field, Stephen D., assignor.)						
Compagnie Générale de Salubrité. (See Berlier, Jean B., assignor.)						
Compton, Charles W., Newark, N. J. Trimming for burial-caskets	285,114	Sept. 18	1183	331	24	1121
Compton, William A., Liberty Corner, N. J. Sleigh	286,784	Oct. 16	1263	342	25	244
Comstock, Charles, Racine, Wis. Platform-spring connection	274,277	Mar. 20	1338	366	23	1078
Comstock, Charles, Racine, Wis. Wagon-body. (Reissue.)	10,308	Apr. 10	1211	332	23	1441
Comstock, Charles, Racine, Wis. Vehicle-pole	279,710	June 19	1362	380	23	2370
Comstock, Charles, Racine, Wis. Fifth-wheel for vehicles	279,711	June 19	1363	380	23	2370
Comstock, Chester, New Canaan, Conn. Rotary pump	283,377	Aug. 21	1104	{ 311 312 }	24	711
Comstock, Edwin M. (See Comstock, Sabastian and E. M.)						
Comstock, Francis M., Keokuk, Iowa. Fence-making machine	284,385	Sept. 4	278	77, 78	24	951
Comstock, Francis M., and G. Q. Adams, Keokuk, Iowa. Fence-picket	286,392	Oct. 9	773	209	25	150
Comstock, Francis M., and G. Q. Adams, Keokuk, Iowa. Fence	286,785	Oct. 16	1265	342	25	244
Comstock, Frank A., Columbus, Ohio. Vehicle-seat	279,637	June 19	1278	355	23	2355
Comstock, Frank A., Columbus, Ohio. Vehicle-seat	286,178	Oct. 9	489	135	25	101
Comstock, Harry, Fulton, N. Y. Artificial bait	271,424	Jan. 30	1982	572	23	398
Comstock, Isaac D., Adrian, Mich. Chair-seat	270,748	Jan. 16	1147	325	23	239
Comstock, Isaac D., Adrian, Mich. Chair-seat	270,749	Jan. 16	1148	325	23	239
Comstock, Melvin, Los Angeles, Cal. Saddle	288,026	Nov. 6	299	84	25	558
Comstock, Oscar F. (See Blackmer, Walter M., assignor.)						
Comstock, Sabastian and E. M., Cascade Valley, N. Y. Oilier for carriage-axles	284,386	Sept. 4	250	78	24	951
Comstock, William P., Jr., Pawtucket, R. I. Railway-chair	290,209	Dec. 18	1035	291	25	1086
Conant, George P., Geneva Lake, Wis. Combined compasses and calipers	288,163	Nov. 6	455	127	25	587
Conant, George P., assignor of one-half to J. F. Conant, Geneva Lake, Wis. Spacing-instrument for drawing	290,210	Dec. 18	1036	292	25	1086
Conant, John F. (See Conant, George P., assignor.)						
Conant, King E., Spring City, Tenn. Saw-sawage	284,185	Sept. 4	33	8, 9	24	910
Conboy, Daniel, Uxbridge, Ontario, Canada. Carriage-top	277,116	May 8	765	201	23	1763
Concher, J. W. (See Burnett, John M., assignor.)						
Coude, James B., Spring City, and H. C. Marshall, Philadelphia, Pa. Stove-door hinge	282,170	July 31	2329	642	24	426
Condict, Nathan W., Jr., Jersey City, N. J. Stamping machinery	275,355	Apr. 10	638	{ 170 171 }	23	1343
Condict, Nathan W., Jr., Jersey City, N. J. Balanced slide-valve	275,356	Apr. 10	639	171	23	1344
Condict, Nathan W., Jr., Jersey City, N. J. Dumping-car	275,357	Apr. 10	640	171	23	1344
Condict, Nathan W., Jr., Jersey City, N. J. Steam stamp or hammer	275,358	Apr. 10	641	{ 171 172 }	23	1344
Condict, Nathan W., Jr., Jersey City, N. J. Steam stamp or hammer	275,359	Apr. 10	642	{ 172 173 }	23	1344
Condict, Nathan W., Jr., Jersey City, N. J. Steam stamp or hammer	275,360	Apr. 10	645	173	23	1344
Cordon, William F., East Saginaw, Mich. Safety car heater and ventilator	277,546	May 15	1276	342	23	1858
Cone, Norris H. (See Clark and Cone.)						
Cone, Thomas L., Brest, Mo. Riding-harrow	289,232	Nov. 27	1796	497	25	846
Congdon, Isaac H., Omaha, Nebr. Valve-seat for steam-engines	282,058	July 31	2168	595	24	401
Conger, Alfred, Elizabeth, N. J. Undershirt. (Reissue.)	10,378	Sept. 4	523	147	24	992
Conkey, Edward L., assignor to C. A. Shaw, Boston, Mass. Center-rest for lathes	285,115	Sept. 18	1184	332	24	1121
Conklin, Calvin W. et al. (See Thayer, Franklin P., assignor.)						
Conklin, Edward, Channahon, Ill. Double-acting outward-pulling weather-strip	277,887	May 22	1681	458	23	1934
Conklin, Elgin L., Corning, N. Y. Apparatus for feeding flour to bolting-reels	287,097	Oct. 23	1669	458	25	322
Conklin, Joseph I., Jr., New York, N. Y. Electric alarm-clock	270,639	Jan. 16	1004	290	23	213
Conklin, Theodore F., Fond du Lac, Wis. Road-cart	271,323	Jan. 30	1724	499	23	352
Conklin, Theodore F., assignor of one-half to F. A. Knapp, Fond du Lac, Wis. Box-fastener	284,615	Sept. 11	559	158	24	1005
Conkling, Theodore G., Logansport, Ind. Implement for shocking Indian-corn and other grain	285,395	Sept. 25	1518	{ 427 428 }	24	1185
Conlan, James B., Richburg, N. Y. Belt-tightener	282,500	Aug. 7	29	8	24	505
Conley, William R., Fairgrove, Mich. Hay-rack	279,343	June 12	917	256	23	2288
Conlon, John G., and S. R. Dyer, New Orleans, La. Machine for ejecting oil	290,861	Dec. 25	1894	523	25	1242
Conly, Mahlon S., assignor of one-half to W. M. Cronyn, Indianapolis, Ind. Magneto-electric generator	285,799	Oct. 2	21	7	25	6
Connely, Peter D., Horseheads, N. Y. Lid for pots and other vessels	276,359	Apr. 24	1916	531	23	1578
Connell, David, Wilmington, Del. Car-wheel	257,629	Oct. 30	2358	636	25	457
Connell, John, and V. Dengler, Rochester, N. Y. Segment-saw	279,344	June 12	918	256	23	2288
Connolly, Martin J. (See Thayer and Connolly.)						
Connolly, William E., Wedowee, Ala. Hillside-plow	275,594	Apr. 10	945	257	23	1396
Conner, Albert C., assignor to Hoosier Drill Company, Richmond, Ind. Grain-drill	282,847	Aug. 7	446	126	24	579
Conner, Andrew J., Louisville, Ky. Machine for preparing tin plates for roofing	270,022	Jan. 2	230	67	23	48
Conner, Charles, New York, N. Y. Wire wrapping or covering machine	278,099	May 22	1931	530	23	1978
Conner, Ezra F., assignor of one-half to O. P. Schriver, Greensburg, Ind. Two-wheeled vehicle	274,722	Mar. 27	1902	531	23	1186
Conner, Marcus W., et al. (See Shields, Francis M., assignor.)						
Conner, Ovid W., Wabash, Ind. Hose-exhibitor	275,887	Apr. 17	1333	367	23	1470
Conner, Sanford E., and J. P. Finch, Vinton, Iowa. Harvester-cutter	275,595	Apr. 10	946	257	23	1396
Conner, William, Missouri Valley, Iowa. Sash-holder	281,458	July 17	1403	385	24	259
Connett, Matthew F., Petersburg, Ill. Grain-drill	259,893	Dec. 11	654	182	25	1008
Connolly, Charles, Turner's Falls, Mass. Fire-escape	288,411	Nov. 13	792	215	25	653
Connolly, Julia. (See Connolly, Patrick, assignor.)						
Connolly, Julia. (See Connolly, Patrick, assignor.) (Reissue.)						
Connolly, Julia. (See Sullivan, John F., assignor.)						
Connolly, M. Daniel, Philadelphia, Pa. Protector for telegraphic and telephonic instruments	279,712	June 19	1364	380	23	2370
Connolly, M. Daniel, Philadelphia, Pa. Protector for telegraphic and telephonic instruments	279,714	June 19	1366	381	23	2371
Connolly, M. Daniel, Philadelphia, Pa. Protector for telegraphic and telephonic instruments	279,715	June 19	1367	381	23	2371
Connolly, M. Daniel, Philadelphia, Pa., and T. A. Connolly, Washington, D. C. Protector for electrical instruments	279,713	June 19	1365	381	23	2370
Connolly, Patrick, Brooklyn, N. Y. Locking valves	280,912	July 10	706	190	24	131
Connolly, Patrick, Brooklyn, N. Y. Stationary wash-stand	283,699	Aug. 21	1478	416	24	781
Connolly, Patrick, assignor, by mesne assignments, to J. Connolly, Brooklyn, N. Y. Water-closet pan	237,662	Mar. 6	548	146	23	927
Connolly, Patrick, assignor, by mesne assignments, to J. Connolly, Brooklyn, N. Y. Plumber's trap	277,888	May 22	1682	459	23	1935
Connolly, Patrick, assignor, by mesne assignments, to J. Connolly, Brooklyn, N. Y. Plumber's trap. (Reissue.)	10,333	May 22	2682	734	23	2117

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Connolly, Thomas A. (See Connolly, M. Daniel and T. A.)						
Connor, George H., Columbus, Kans. Gearing for operating washing-machines, churns, &c.	271,795	Feb. 6	254	71	23	485
Connor, John R., Franklin, Pa. Riveting-machine.	287,630	Oct. 30	2359	636	25	437
Connor, Laurence, Fox Lake, Wis. Corn-hoe.	274,108	Mar. 20	1111	306	23	1030
Connor, Simon P., St. Helena, Cal. Bung-hottle.	287,908	Nov. 6	147	43	25	534
Conover, Charles E., <i>et al.</i> (See Erlanger, Charles, assignor.)						
Conover, Gordon S., Freehold, N. J. Car-coupling.	273,818	Mar. 13	753	204	23	971
Conover, Jacob A., New York, N. Y., assignor to A. F. Childs, Washington, D. C. Former for table-frames.	289,623	Dec. 4	310	86, 87	25	949
Conover, Stephen B., New York, N. Y. Apparatus for drying or cleaning tobacco and other materials.	275,596	Apr. 10	947	257	23	1396
Conrad, Eugene T., Cadillac, Mich. Balanced slide-valve.	273,961	Mar. 13	922	253	23	999
Conrad, James B., Smith's Mills, Pa. Belt-fastener.	279,716	June 19	1368	382	23	2371
Conrad, Osborn, Philadelphia, Pa. Burglar-alarm.	289,624	Dec. 4	311	87	25	942
Conradson, Conrad M., assignor of one-half to J. A. Johnson, Madison, Wis. Wind-motor.	283,079	Aug. 14	721	202	24	635
Conroy, John M., and F. E. Youngs, Allegheny, Pa. Glass mirror.	290,744	Dec. 25	1754	484	25	1217
Conroy, John M., and F. E. Youngs, Allegheny, Pa. Coating the backs of silvered mirrors.	290,745	Dec. 25	1755		25	1217
Conroy, Thomas J., <i>et al.</i> (See Palmer, George H., assignor.)						
Consolidated Safety Valve Company. (See Richardson, George W., assignor.)						
Contanchin, Gustavus J., J. M. Scott, and J. Stumpf, Blue Mound, Ill. Cornstalk-cutter.	281,095	July 10	845	235	24	157
Continental Cash Car Company. (See Clark, Milton, assignor.)						
Continental Cash Car Company. (See Elliott, Gilbert R., assignor.)						
Continental Cash Car Company. (See Hinton, Joseph R. H., assignor.)						
Converse, Edmund, <i>et al.</i> (See Bennett, John H., assignor.)						
Converse, Edmund C. (See Russell and Gordon, assignors.)						
Converse, Edmund C., Pittsburg, Pa. Tube-coupling.	283,971	Aug. 28	1816	513	24	854
Converse, Edmund C., Pittsburg, Pa. Tube-coupling.	283,972	Aug. 28	1818	514	24	854
Converse, Edmund C., Pittsburg, Pa. Tube-coupling.	283,973	Aug. 28	1820	514	24	854
Converse, Edmund C., Pittsburg, Pa. Tube-coupling.	283,974	Aug. 28	1821	514	24	855
Converse, Edmund C., Pittsburg, Pa. Tube-coupling.	283,975	Aug. 28	1822	514	24	855
Converse, Edmund C., Pittsburg, Pa. Flange-joint for thin-metal tubing.	283,975	Aug. 28	1822	514	24	855
Converse, Elmer A., Monticello, Ohio. Fire-escape ladder.	271,796	Feb. 6	254	71	23	485
Converse, George W., Spokane Falls, Wash. Ter. Water-wheel.	281,459	July 17	1403	385	24	259
Converse, John H., <i>et al.</i> (See Wilder and Parry, assignors.)						
Converse, Morton E., Winchendon, Mass. Toy building.	271,603	Feb. 6	25	6	23	445
Conway, George M., Milwaukee, Wis. Pump.	273,962	Mar. 13	923	253	23	999
Conway, John, London, Ohio. Grain-drill.	284,186	Sept. 4	34	9	24	910
Conway, John C. (See Watson, John, assignor.)						
Conway, Michael L., assignor of two-eighths to J. Broderick and J. A. Hamilton, San Francisco, Cal. Lubricator.	285,465	Sept. 25	1601	449	24	1201
Conway, William M., Baltimore, Md. Sheet-metal vessel.	287,243	Oct. 23	1859	509	25	355
Conwell, Thomas E. (See Cooper and Conwell.)						
Cook, Alexander. (See Macann, Crowell S., assignor.)						
Cook, Augustine, Salisbury, Md. Dredging-machine.	287,631	Oct. 30	2360	637	25	457
Cook, Charles A., <i>et al.</i> (See Preston, James, assignor.)						
Cook, Charles E., <i>et al.</i> (See Hayes, William, Jr., assignor.)						
Cook, Charles R., <i>et al.</i> (See Olson, Peter J., assignor.)						
Cook, Christian. (See Pons, John, assignor.)						
Cook, Daniel. (See Parsons and Borchardt, assignors.)						
Cook, Emmanuel T., Chico, Tex. Stalk-cutter.	281,460	July 17	1404	386	24	260
Cook, Emmanuel T., assignor of one-half to D. R. Burroughs, Alexander, Tex. Boot and shoe box.	288,924	Nov. 20	1419	391	25	771
Cook, Frank, Clemmonsville, N. C. Vegetable and fruit drying apparatus.	281,838	July 24	1895	517	24	349
Cook, Frederic, New Orleans, La. Open evaporator and furnace for cane-juice.	276,161	Apr. 24	1663	459	23	1535
Cook, Frederic, New Orleans, La. Cane-juice evaporator.	280,293	June 26	2059	579	23	2499
Cook, George W. (See Gaffey and Cook.)						
Cook, George W., Chicago, Ill. Elevated railway.	271,425	Jan. 30	1983	572	23	398
Cook, George W., Chicago, Ill. Pipe-wrench.	283,378	Aug. 21	1106	312	24	711
Cook, George W., Chicago, Ill. Hammer.	283,379	Aug. 21	1107	312	24	712
Cook, George W., Chicago, Ill., assignor to J. M. McIntyre, Milwaukee, Wis. Paper-bag holder.	273,963	Mar. 13	924	254	23	1000
Cook, George W., assignor to J. H. Reese, Chicago, Ill. Razor-strop.	283,862	Aug. 28	1683	475	24	829
Cook, George W. F. (See Price and Cook.)						
Cook, Gideon G. (See Emerson and Cook.)						
Cook, Gideon G., Humboldt, Iowa. Automatic cord or twine elevator or holder.	272,211	Feb. 13	776	215	23	586
Cook, Henry, Leadville, Colo. Amalgamator.	277,889	May 22	1634	459	23	1935
Cook, Isaac N. (See McLane, Samuel B., assignor.)						
Cook, Isaac N., <i>et al.</i> (See Hall, Thomas G., assignor.)						
Cook, Jacob M., and J. S. Perkins, Lake Village, N. H.; said Cook assignor to said Perkins. Planing-machine.	274,886	Mar. 27	2103	585	23	1219
Cook, James H., Lone Pine, Cal. Animal-trap.	281,461	July 17	1405	386	24	260
Cook, James W., Moravia, N. Y., assignor of one-half to E. E. Brown, Lincoln, Nebr. Potato-digger.	277,461	May 15	1176	316	23	1841
Cook, James W., assignor of one-half to W. S. Parker, Moravia, N. Y. Combined planter and fertilizer-distributor.	290,538	Dec. 18	1477	408	25	1162
Cook, James W., assignor of one-half to W. S. Parker, Moravia, N. Y. Cultivator.	290,539	Dec. 18	1478	408	25	1162
Cook, John A. (See Curtis and Cook.)						
Cook, John E. (See Shrieves and Cook.)						
Cook, John J., East Springfield, N. Y. Wire-stretcher.	287,244	Oct. 23	1860	509	25	356
Cook, John W., <i>et al.</i> (See Payne, Newton W., assignor.)						
Cook, Joseph. (See Grinnett and Cook.)						
Cook, Joseph A., <i>et al.</i> (See Taber, Franklin P., assignor.)						
Cook, Joseph A., Auburn, N. Y. Apparatus for the manufacture of sugar, salt, &c.	277,833	May 15	1608	439	23	1916
Cook, Joseph A., Auburn, N. Y. Apparatus for obtaining brine from salt-beds.	287,909	Nov. 6	149	44	25	534
Cook, Levi G., Mapleville, R. I. Hydropneumatic engine.	271,040	Jan. 23	1495	431	23	305
Cook, Levi G., Mapleville, R. I. Hydropneumatic engine.	272,656	Feb. 29	1355	380	23	692
Cook, Lyman A. (See Crapon, William H., assignor.)						
Cook, Lyman A., <i>et al.</i> (See Sloper, Byron, assignor.)						
Cook, Mansfield J. and O. L. and F. R. Smith; said Smith assignor to said Mansfield J. and O. L. Cook, Syracuse, N. Y. Fire-escape.	287,365	Oct. 23	2004	546	25	382
Cook, Moses, Ashfield, Mass. Folding table.	283,211	Aug. 14	882	246	24	664
Cook, Orange L. (See Cook and Smith.)						
Cook, Sheldon P., Minneapolis, Minn. Grain cooler and drier.	271,604	Feb. 6	25	7	23	445



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Cook & Sons, William. (See McCulloch and Cook, assignors.)						
Cook, Stephen V., Toledo, Ohio. Coal-elevator	280,014	June 26	1731	485	23	2441
Cook, Thomas A. (See Millen, Mantion, Labelle, and Cook.)						
Cook, Thomas A., Ottawa, Ontario, and F. Labelle, Hull, Quebec, Canada. Match-dipping machine	277,462	May 15	1178	316	23	1842
Cook, Thomas G., assignor of one-half to J. W. Mann, Brockville, Ontario, Canada. Sulky-harrow	288,164	Nov. 6	456	127	25	587
Cook, Warren, Allegheny city, Pa. Pick	271,797	Feb. 6	255	71	23	485
Cook, William. (See McCulloch and Cook.)						
Cooke, Daniel S., Providence, R. I. Fan	275,804	Apr. 17	1233	337	23	1452
Cooke & Eddy. (See Spencer, Edward H., Jr., assignor.)						
Cooke, Frederic D., West Brookfield, Mass. Corset	279,345	June 12	919	256	23	2289
Cooke, Frederic D., assignor to C. L. Olmstead, West Brookfield, Mass. Corset	281,462	July 17	1406	386	24	260
Cooke, Henry D., et al. (See Wiard, Norman, assignor.)						
Cooke, Henry P., et al. (See Gearing, Charles, assignor.)						
Cooke, John T., Brooklyn, N. Y. Package for coffee and other materials	273,819	Mar. 13	754	205	23	971
Cooke, William A., Jr., New York, N. Y. Letter and invoice file	282,275	July 31	2453	675	24	448
Cooke, William P., Milford, Mass., assignor to New England Dental Manufacturing Company, Portland, Me. Abrasive disk-holding spindle for dental engines	290,401	Dec. 18	1279	359	25	1128
Cookson, Norman C., Newcastle upon Tyne, county of Northumberland, England. Electrode for secondary batteries	279,346	June 12	920	257	23	2289
Cool, Peter, Manhattan, Kans. Weather-strip	287,245	Oct. 23	1760	509	25	356
Cooley, Duane B., assignor of one-half to J. O. Bates, Yankton, Dak. Ter. Pad-screw	276,135	Apr. 17	1629	449	23	1521
Cooley, Earl K., San Francisco, Cal. Insole for boots and shoes	271,798	Feb. 6	256	71	23	485
Cooley, Joshua S. (See Chedister, Winfield S., assignor.)						
Cooley, Linus B., Middletown, Conn. Pump	285,015	Sept. 18	1061	297	24	1100
Cooley, Orville, assignor to Johnston Harvester Company, Brockport, N. Y. Harvester-rake	272,212	Feb. 13	777	215	23	586
Coolidge, Ellery C., assignor to American Bell Telephone Company, Boston, Mass. Binding-screw for electric wires	273,259	Mar. 6	19	6	23	838
Coomans, Felix A., Philadelphia, Pa. Marine velocipede	271,799	Feb. 6	257	72	23	485
Coomber, George F., Kansas City, Mo. Faucet	272,858	Feb. 27	1628	456	23	748
Coomber, George F., Kansas City, Mo. Sink	287,246	Oct. 23	1861	509	25	356
Coombes, Joseph A., New York, N. Y., assignor of one-half to J. Henderson, Baltimore, Md. Ore-separator	288,550	Nov. 13	957	263	25	682
Coombs, Henry F., Charlottetown, Prince Edward Island, Canada. Butter-tub	289,390	Dec. 4	20	6	25	891
Coombs, John M., Fort Wayne, Ind. Wagon-axle	288,029	Nov. 6	303	85	25	559
Coombs, Robert H., Belfast, Me. Roller-skate	284,187	Sept. 4	35	9	24	910
Coon, George C., Jersey City, N. J. Machine for wiring corks in bottles	273,964	Mar. 13	924	274	23	1000
Coon, James H., Des Moines, Iowa. Lightning-conductor	274,564	Mar. 27	1721	478	23	1152
Coon, James H., Des Moines, Iowa. Wire-barbing machine	285,016	Sept. 18	1062	297	24	1100
Cooney, Patrick H., San Francisco, Cal. Safety-fender for cars	290,746	Dec. 25	1755	485	25	1217
Coons, Nelson, Elizaville, N. Y. Adjustable ladder	281,977	July 24	2065	566	24	378
Cooper, Arthur, Middlesborough, county of York, England. Metal-working plant	274,911	Apr. 3	22	7	23	1230
Cooper, Charles A., Pittsburg, Pa. Railway pneumatic switch and electric indicator	281,839	July 24	1897	517	24	350
Cooper, Charles B., Nashville, Tenn. Sheet-metal roof-valley	287,632	Oct. 30	2362	637	25	458
Cooper, Daniel M., assignor of two-thirds to S. A. Cooper and S. A. Harris, New Castle, Ind. Pump	276,226	Apr. 24	1738	481	23	1548
Cooper, David T., Plainfield, Ind. Hog-cholera remedy	283,080	Aug. 14	722	227	24	636
Cooper, Earl H., Winters, Cal. Draft-equalizer	280,135	June 26	1872	527	23	2466
Cooper, Edward. (See Ulsmann, Hermann, assignor.)						
Cooper, Edward A., assignor of one-half to E. P. Sears, Buffalo, N. Y. Coach-pad plate	281,179	July 10	1040	288	24	191
Cooper, Edward A., assignor of one-fourth to O. P. Letchworth, Buffalo, N. Y. Halter	284,540	Sept. 4	463	131	24	983
Cooper, Edward A., assignor of one-fourth to O. P. Letchworth, Buffalo, N. Y. Halter-trimming	284,541	Sept. 4	464	132	24	983
Cooper, Edward F. (See Shaffer, Joseph, assignor.)						
Cooper, Ella G. H. (See Cooper, George L. and E. G. H.)						
Cooper, Francis R., and J. Lemmon, Colerain, Ohio. Plow. (Reissue)	10,411	Nov. 27	1970	548	25	878
Cooper, George, Greenwood Iron Works, N. Y. Knob	283,380	Aug. 21	1108	312	24	712
Cooper, George D., Shepardsville, Mich. Combined cider mill and press	286,265	Oct. 9	594	163	25	119
Cooper, George L. and E. G. H., Albany, N. Y. Moth-proof receptacle	286,179	Oct. 9	490	135	25	102
Cooper, Glen W. (See Maloney, James A., assignor.)						
Cooper, Harriet C. (See Cooper, Joseph C., assignor.)						
Cooper, Isaac W., Apollo, Pa. Sheet and plate roll	271,605	Feb. 6	26	7	23	445
Cooper, John W., Philadelphia, Pa., assignor to W. H. Miller, Boston, Mass. Lamp-top	284,616	Sept. 11	560	158	24	1005
Cooper, John W., Philadelphia, Pa., assignor to J. B. Loomis, Boston, Mass. Boat-propeller	284,821	Sept. 11	816	227	24	1049
Cooper, Jonas, Washington, D. C. Shutter and fastening therefor	276,563	May 1	23	7	23	1631
Cooper, Joseph C., assignor to H. C. Cooper, Brooklyn, N. Y. Fuel composition	279,479	June 12	1089	227	23	2315
Cooper, Minetta P. (See Willet, Nathaniel S., assignor.)						
Cooper, Montraville, Columbia, S. C. Tricycle	286,180	Oct. 9	492	136	25	102
Cooper, Newton, Maysville, Ky., and T. E. Conwell, Aberdeen, Ohio. Cooking-stove	277,009	May 8	622	163	23	1738
Cooper, Samuel A., et al. (See Cooper, Daniel M., assignor.)						
Cooper, Sherman, Westfield, N. J. Apparatus for administering ether	287,098	Oct. 23	1671	459	25	323
Cooper, Theodore, assignor to W. H. Haskell Company, Pawtucket, R. I. Bolt-heading machine	277,010	May 8	623	163	23	1739
Cooper, William, et al. (See Holden, Henry H., assignor.)						
Cooper, William, Chicago, Ill. Steam-generator	283,756	Aug. 28	1563	440	24	808
Cooper, William A. (See Bulkley, Rosalvo A., assignor.)						
Cooper, William F., Worcester, Mass. Pneumatic action for organs	271,606	Feb. 6	27	7	23	445
Cooper, William H., assignor to M. Seward & Son, New Haven, Conn. Carriage-clip	283,976	Aug. 28	1823	515	24	855
Cooper, William J., Westminster, county of Middlesex, England. Distillation of coal	282,440	July 31	2673	227	24	487
Cooper, William S. (See Goldberg, Max, assignor.)						
Cooper, William S., Philadelphia, Pa. Oil-cup	277,683	May 15	1438	387	23	1885
Cooper, William S., Philadelphia, Pa. Cock or faucet	280,136	June 26	1872	528	23	2467
Cooper, William S., Philadelphia, Pa. Faucet	280,137	June 26	1873	528	23	2467
Coover, Jacob, Chambersburg, Pa. Grave-vault	285,233	Sept. 18	1321	372	24	1145
Cope, Edward, et al. (See Wright, Charles A., assignor.)						
Cope, Ezra, Hamilton, Ohio. Letter-copying press	289,983	Dec. 11	760	214	25	1028
Cope, Mason L., Denton, Tex. Gate	281,026	July 10	847	235	24	137
Copeland, Charles F., Boston, Mass. Back-pressure valve	270,890	Jan. 23	1314	379	23	276
Copeland, Charles F., assignor to S. E. Copeland, Boston, Mass. Carburetor	274,176	Mar. 20	1198	330	23	1055

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Copeland, Charles F., Boston, Mass., assignor to Thermo Gas Carbonizer Company, of Maine. Carburetor.	288,622	Nov. 20	1050	289	25	706
Copeland, Charles W., Brooklyn, N. Y. Pumping system for surface-condensers	273,965	Mar. 13	928	254	23	1001
Copeland, David W., Lowville, N. Y. Plow-colt.	270,750	Jan. 16	1148	328	23	239
Copeland, Frederick A., La Crosse, Wis. Fire-alarm	286,393	Oct. 9	774	209	26	151
Copeland, Sophia E. (See Copeland, Charles F., assignor.)						
Copenhaver, H. E. (See Stommel, Julius, assignor.)						
Copleston, Edwin, Nyack, N. Y. Hat	283,863	Aug. 28	1684	475	24	829
Coppin, Daniel G., Newport, Ky. Apparatus for distilling	279,918	June 26	1611	453	23	2420
Coppock, Irvin, Barclay, Kans. Weather-strip	272,213	Feb. 13	777	215	23	586
Copron, Samuel. (See Kirkpatrick and Copron.)						
Coram, George B., et al. (See Coram, John C., assignor.)						
Coram, George B., et al. (See Dennis, John, assignor.)						
Coram, George B. and J. C., assignors to Dennis Cash Carrier Company, Lowell, Mass. Cash or parcel carrier and track for the same	286,592	Oct. 16	1019	{ 276 277 }	25	202
Coram, John C. (See Coram, George B. and J. C.)						
Coram, John C., et al. (See Dennis, John, assignor.)						
Coram, John C., Lowell, Mass. Drop-cradle and elevator for cash-carriers.	278,510	May 29	2484	678	23	2083
Coram, John C., assignor to himself, E. Lamson, J. A. Coram, E. A. Thibbissell, S. B. Puffer, G. P. Walker, G. B. Coram, J. Dennis, and C. H. Robbins, Lowell, Mass. Switch for store-tracks.	278,657	May 29	2660	728	23	2113
Coram, John C., assignor of one-half to G. B. Coram, Lowell, Mass. Vise	281,463	July 17	1407	{ 386 387 }	24	260
Coram, Joseph A., et al. (See Coram, John C., assignor.)						
Corbett, Edward. (See Clifford and Corbett.)						
Corbett, George, et al. (See Weiss, Charles W., assignor.)						
Corbett, George W., et al. (See Weiss, Charles W., assignor.)						
Corbett, William W., et al. (See Weiss, Charles W., assignor.)						
Corbin Cabinet Lock Company. (See Mix, Frank W., assignor.)						
Corbin, Elijah H., assignor to himself, J. T. France, M. M. and G. W. McConnell, J. W. Place, J. W. Hoagland, J. B. Meibers, L. H. Corbin, and I. C. King, Decatur, Ind. Rotary engine	282,171	July 31	2330	643	24	426
Corbin, Jay S., Gouverneur, N. Y. Disk-harrow	273,966	Mar. 13	929	255	23	1001
Corbin, Lewis H., et al. (See Corbin, Elijah H., assignor.)						
Corbin, P. & F. (See Arens, August, assignor.)						
Corbin, P. & F. (See Sparks, William E., assignor.)						
Corbion, George, Jr., et al. (See Evans, Harry N., assignor.)						
Corbion, George, Jr. (See Welch and Corbion.)						
Corbitt, Samuel T., Odessa, Mo. Combined table and desk	290,862	Dec. 25	1895	523	25	1242
Corby, Edward P., St. Louis, Mo. Vapor-burner	282,612	Aug. 7	163	50	24	529
Corby, Edward P., St. Louis, Mo. Vapor-burner	286,266	Oct. 9	596	163	25	119
Corby, Edward P., St. Louis, Mo. Vapor-burner	286,267	Oct. 9	596	163	25	119
Corby, Eumons B., Bloomfield, N. J. Refrigerator	270,393	Jan. 9	686	203	23	143
Cordell, John H. (See Odell and Cordell.)						
Cordes, August W., New York, N. Y. Fire-proof ceiling	272,657	Feb. 20	1338	381	23	692
Cordes, August W., New York, N. Y. Fire-proof ceiling	272,658	Feb. 20	1338	381	23	693
Cordes, August W., New York, N. Y. Fire-proof ceiling	275,151	Apr. 3	353	97	23	1287
Cordesman & Egan Company. (See Thomas, Cordesman, and Danner, assignors.)						
Cordesman, Henry J. (See Thomas, Cordesman, and Danner.)						
Cordesman, Henry J., Jr., and J. R. Thomas, Cincinnati, Ohio. Planing-machine	275,597	Apr. 10	948	257	23	1396
Corey, E. Willis. (See Hicks, Alonzo, assignor.)						
Corkill, William, Pittsfield, Mass. Automatic sanding-box	289,984	Dec. 11	761	214	25	1027
Corliss, George H., Providence, R. I. Pump	276,003	Apr. 17	1462	403	23	1494
Corliss, William, Providence, R. I. Safe-lock	271,312	Jan. 30	1831	532	23	371
Corliss, William, Providence, R. I. Burglar-proof safe	271,313	Jan. 30	1835	533	23	371
Corliss, William, Providence, R. I. Burglar-proof safe	271,314	Jan. 30	1838	534	23	372
Corliss, William, Providence, R. I. Fire-proof structure	280,294	June 26	2060	{ 579 580 }	23	2499
Cornack, George H., Rockford, Ill. Car-signal	290,540	Dec. 18	1480	409	25	1162
Cornchlsen, Christian. (See Taylor and Ellers, assignors.)						
Cornelius, Daniel, Lima, Ohio. Stump-extractor	287,002	Oct. 23	1546	426	25	298
Cornelius, Daniel, Lima, Ohio. Stump and grub puller	277,117	May 8	766	{ 201 202 }	23	1763
Cornelius, Nicholas. (See Stanley and Cornelius.)						
Cornelius, Oliver H. P., and G. H. Turner, Turner, Oreg. Apparatus for removing sand-bars, &c., from rivers and harbors	284,387	Sept. 4	281	78	24	951
Cornell, Denison H., Brooklyn, and A. Schincke, New York, N. Y. Cracker-machine	281,464	July 17	1408	387	24	261
Cornell, Harmon W., Owego, N. Y. Corn-sheller	284,388	Sept. 4	282	78	24	952
Cornell, John M., New York, N. Y. Expanding bolt	282,501	Aug. 7	30	9	24	505
Cornely, Emil, Paris, France. Embroidering-machine. (Reissue)	10,277	Jan. 23	1704	{ 492 493 }	23	340
Cornely, Emile, Paris, France. Spool-stand for sewing-machines	279,919	June 26	1612	473	23	2420
Cornford, William H., Jr., Phelps, N. Y. Phosphate-sower	279,135	June 12	1668	184	23	2247
Cornish, Benjamin F., Philadelphia, Pa. Harness saddle and trimming	290,402	Dec. 18	1280	360	25	1129
Cornish, Harry B., and S. E. Hall, Hampton, Iowa. Vehicle-spring	288,312	Nov. 13	346	177	25	628
Corman, Theodore. (See Germeyer, William S., assignor.)						
Cornwall, John B., assignor to Barnard & Leas Manufacturing Company, Moline, Ill. Cackle-screen	276,523	Apr. 24	2123	590	23	1613
Cornwell, William D., et al. (See Shields, Francis M., assignor.)						
Cornyn, William A., Pontiac, Mich. Fire-escape	277,935	May 22	1811	494	23	1957
Corr, Thomas J., Eureka Springs, Ark. Combined flour-chest and cupboard	285,577	Sept. 25	1728	488	24	1225
Corris, Thomas, Cleveland, Ohio. Flange-union	280,353	July 3	19	5	24	5
Corrugated Wire Fastening Company. (See Weeks, Horace, assignor.)						
Corthell, Fred H., Elgin, Ill. Muffle for tempering hair-springs	283,700	Aug. 21	1479	417	24	782
Corwin, Samuel W., Paterson, N. J. Signal-lamp guard	275,469	Apr. 10	800	216	23	1371
Corwio, William S., Newark, N. J. Hotel and burglar alarm electric annunciator	289,233	Nov. 27	1917	{ 497 498 }	25	846
Cory, Charles F., St. Louis, Mo. Rotary engine	276,360	Apr. 24	1797	532	23	1578
Cory, David P., Consecon, Ontario, Canada, assignor of one-half to C. H. Osborn, Chicago, Ill. Car-coupling	289,985	Dec. 11	762	215	25	1028
Cosbie, William, San Francisco, Cal. Horse-collar	277,463	May 15	1179	317	23	1842
Cosgrove, Lawrence, Baltimore, Md. Machine for cutting key-seats	280,582	July 3	296	82	24	53
Cosgrove, Lawrence, Baltimore, Md. Universal milling-machine	282,704	Aug. 7	288	81	24	549
Cosgrove, William F., Jersey City, N. J. Automatic stop-plug for gas-pipes	283,777	Nov. 20	1244	342	25	739



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Coskrey, David S., Troy, Ala. Ice-cream freezer .....	275,152	Apr. 3	354	97	23	1288
Cosley, Thomas B., New York, N. Y. Hand-stamp printing-press .....	276,779	May 1	325	85	23	1682
Cossel, Abijah, Wayne, Ind. Portable straw-stacker .....	284,280	Sept. 4	153	42	24	930
Costa Corrêa Leite, Henrique da, Paris, France. Manufacture of textile fabrics and the like .....	287,247	Oct. 23	1862	-----	25	356
Costello, John, Attleborough, Mass. Button .....	278,314	May 29	2235	613	23	2038
Costello, John, assignor to Watson & Newell, Attleborough, Mass. Button .....	290,321	Dec. 18	1180	330	25	1110
Costigan, Edward A., Boston, Mass. Fire-escape .....	284,281	Sept. 4	153	42	24	930
Costolo, George and M. J., and A. Johnson, Uniontown, Pa.; said Johnson assignor to said George Costolo. Car-coupling .....	288,925	Nov. 20	1419	391	25	772
Costolo, Mary J. (See Costolo and Johnson.)						
Coté, Louis, St. Hyacinthe, Quebec, Canada. Lasting-machine for boots or shoes .....	270,282	Jan. 9	541	159	23	116
Coté, Louis, St. Hyacinthe, Quebec, Canada. Machine for forming boot or shoe counters ..	279,717	June 10	1369	382	23	2371
Coté, N. Joseph, assignor of one-half to J. B. L. Rolland, Jr., Montreal, Quebec, Canada. Lock .....	276,004	Apr. 17	1463	403	23	1494
Cothren, Montgomery M. (See Wiebers, Marx C., assignor.)						
Cottier, Jean G. C., Jersey City, N. J., assignor to R. L. Moorhead. Mounting artificial stones .....	290,563	Dec. 25	1896	523	25	1242
Cottier, William T., Napa, assignor of one-half to J. F. Montgomery, Sacramento, Cal. Ventilation .....	281,027	July 10	847	{ 235 236 }	24	157
Cottingham, Gideon W., Little Rock, Ark. Ironing-machine .....	282,848	Aug. 7	448	126	24	579
Cottle, Shubael, New York, N. Y. Bracelet .....	283,574	Aug. 21	1337	373	24	754
Cottrell, George, San Francisco, Cal. Cut-off for screening devices for middlings, flour, &c .....	277,547	May 15	1278	{ 342 343 }	23	1858
Cottrell, Herbert, assignor to Automatic Gas Machine Company, Newark, N. J. Gas apparatus .....	270,181	Jan. 2	414	121	23	84
Cottrell, Joseph O., Fanwood, N. J. Electrical-wire protector .....	278,885	June 5	286	83	23	2172
Cottrell, Joseph O., Fanwood, N. J. Electric-wire protector .....	278,886	June 5	287	83	23	2172
Cotton, Charles, Olean, N. Y. Wagon-rack .....	289,234	Nov. 27	1799	498	25	847
Cotton, George F., Bushnell, Ill. Brick-kiln .....	287,633	Oct. 30	2363	637	25	458
Cotton, James B., et al. (See Lash, John S., assignor.)						
Cotton, John E., Fairfield, Me. Rocking-chair .....	284,822	Sept. 11	818	228	24	1049
Cottrell, Aaron L., Sidney, Ohio. Farm and flood fence .....	290,403	Dec. 18	1281	360	25	1129
Cottrell, Abraham, Lansing, Mich. Rein-holder .....	285,466	Sept. 25	1602	450	24	1201
Cottrell, Calvert B., Westerly, R. I. Tumbler-motion for grippers of printing-presses ..	280,583	July 3	298	82	24	53
Cottrell, Calvert B., Westerly, R. I. Delivery apparatus for printing-presses .....	280,584	July 3	299	83	24	53
Cottrell, Calvert B., Stonington, Conn. Printing-press .....	290,747	Dec. 25	1758	{ 485 486 }	25	1218
Cottrell, Calvert B., Stonington, Conn. Printing-press .....	290,748	Dec. 25	1761	486	25	1219
Cottrell, Herbert, Newark, N. J. Rotary cutter for fruit-paring machines .....	284,823	Sept. 11	810	228	24	1049
Cottrell, Herbert, Newark, N. J. Ice-creper .....	286,687	Oct. 16	1145	308	25	223
Conch, Albert C. (See Bowen, J. Howard, assignor.)						
Conch, Albert C., assignor, by mesne assignments, to Mica Tip and Lining Company, Boston, Mass. Hat or cap .....	282,441	July 31	2674	733	24	487
Conch, Albert C., assignor, by mesne assignments, to Mica Tip and Lining Company, Boston, Mass. Hat or cap .....	282,442	July 31	2675	733	24	487
Conch, Albert C., assignor, by mesne assignments, to Mica Tip and Lining Company, Boston, Mass. Hat or cap .....	282,443	July 31	2675	733	24	487
Conch, Albert C., assignor, by mesne assignments, to Mica Anti-Sunstroke Company, Boston, Mass. Hat, cap, &c .....	282,444	July 31	2676	734	24	487
Conch, James E., Clayton, N. Y. Center-board for boats .....	271,607	Feb. 6	29	7	23	445
Conch, James E., Clayton, N. Y. Center-board .....	275,361	Apr. 10	646	174	23	1345
Conch, Levi J. (See Whittemore and Conch.)						
Conghlin, John. (See Welch, Conghlin, and Mahoney.)						
Couillard, Leander A., Boston, Mass. Moisture and pressure pad for horses' feet .....	288,211	Nov. 13	520	145	25	607
Coultaus, Joseph A., Brooklyn, N. Y. Door-check .....	288,928	Nov. 6	302	85	25	559
Coulter, Andrew C. (See Coulter, Robert S., assignor.)						
Coulter, John C., Chesterton, Ind. Railway-crossing .....	290,541	Dec. 18	1481	409	25	1162
Coulter, Joseph F., Burlington, Iowa. School desk and seat .....	273,260	Mar. 6	20	6, 7	23	838
Coulter, Robert S., assignor of one-half to A. C. Coulter, Swissvale, Pa. Label-holder for cars .....	270,283	Jan. 9	542	159	23	116
Coulter, William B., Bristol, Conn. Relief-valve for steam-cylinders .....	289,071	Nov. 27	1607	445	25	811
Coulthard, Walter, and J. Larsen, Oshawa, Ontario, Canada. Combined seed-drill and broadcast scatterer .....	285,234	Sept. 18	1321	373	24	1146
Counselman, Lawrence W., Baltimore, Md. Can-soldering machine .....	277,011	May 8	625	{ 163 164 }	23	1739
Courtenay, William, et al. (See Chipman, William W., assignor.)						
Courtenay, William. (See Higgs and Courtenay.)						
Courtney, James W., et al. (See Deal, William M., assignor.)						
Courts, William J., Reidsville, N. C. Fertilizer .....	281,840	July 24	1898	-----	24	350
Coutant, Channcey M., and R. Benson, Crawfordsville, Ind. Wagon-body .....	273,967	Mar. 13	932	255	23	1001
Coutant, Stephen, Kingston, N. Y. Apparatus for finishing or dressing brick .....	275,888	Apr. 17	1334	367	23	1470
Cove, Joseph T. C., Amherst, Nova Scotia, Canada, assignor to J. N. Valley, Jersey City, N. J. Chair .....	281,617	July 17	1600	437	24	292
Covel, Joseph W., Rockland, Me. Tobacco-cutter .....	289,625	Dec. 4	312	87	25	942
Covel, Milo, Chicago, Ill. Saw-swage .....	278,684	June 5	10	3	23	2126
Covel, Milo, Chicago, Ill. Saw-swage .....	279,718	June 19	1371	{ 382 383 }	23	2371
Covell, Edward T., assignor of one-half to E. Dews, New Bedford, Mass. Book-cover protector .....	273,669	Mar. 6	548	146	23	928
Covell, William W., assignor to F. I. Marey, Providence, R. I. Button or stud .....	283,864	Aug. 28	1685	476	24	829
Covell, William W., assignor to F. I. Marey, Providence, R. I. Jewelers' burnishing-machine .....	283,865	Aug. 28	1686	476	24	829
Coventry, Charles B. (See Ford, Alvin, assignor.)						
Coventry, Charles B., Chicago, Ill. Locomotive-boiler .....	287,505	Oct. 30	2182	{ 592 593 }	25	423
Coventry, Charles B., Chicago, Ill. Locomotive-boiler .....	290,542	Dec. 18	1482	409	25	1162
Coventry Machinists Company. (See Stanley, John K., assignor.)						
Covert, H. C. (See Shaler, Ira W., assignor.)						
Covert, James C., West Troy, N. Y. Breast-chain for harness .....	274,723	Mar. 27	1903	531	23	1186
Covert, James C., West Troy, N. Y. Soldering-iron .....	283,575	Aug. 21	1338	373	24	754
Covert, William T., Indianapolis, Ind. Fire-escape ladder .....	281,342	July 17	1254	349	24	234
Covington, William H., et al. (See Simpson, Andrew J., assignor.)						
Cowan, Charles D., assignor of one-half to R. G. Shepard, Brockton, Mass. Compound boiler for generating steam .....	282,276	July 31	2455	676	24	449

*Alphabetical list of patentees—Continued.*

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Cowan, H. K., <i>et al.</i> (See Alfson, Andrew, assignor.)						
Cowdery, George, and E. R. Thomas, Sidney, New South Wales, Australia. Rail for railways and tramways.	289,626	Dec. 4	313	88	25	942
Cowdery, M. F., <i>et al.</i> (See Pelton, Richard W., assignor.)						
Cowdery, O. P., <i>et al.</i> (See Pelton, Richard W., assignor.)						
Cowdery, Warren H., <i>et al.</i> (See Sweet, George N., assignor.)						
Cowdrey, Charles H., Fitchburg, Mass. Wood-turning lathe	273,227	Feb. 27	2078	584	23	826
Cowell, Edward R. E., assignor to himself, L. Mann, E. C. Brown, and R. Miller, Detroit, Mich. Electric signal for railway-trains	286,268	Oct. 9	597	163	25	119
Cowell, Hiram, Zanesville, Ohio. Boiler-furnace	275,805	Apr. 17	1233	338	23	1452
Cowell, Newell P., assignor to Cowell Platform and Coupling Company, Cleveland, Ohio.						
Car-coupling	278,403	May 29	2353	643	23	2059
Cowell Platform and Coupling Company. (See Cowell, Newell P., assignor.)						
Cowie, William C., Colony of Labuan, Borneo. Vibrating propeller	271,041	Jan. 23	1496	{ 431 432 }	{ 23 23 }	306
Cowl, Joseph H., Wheeling, W. Va. Fruit-jar	282,849	Aug. 7	449	127	24	579
Cowles, Alfred A., New York, N. Y. Insulated electric conductor	272,659	Feb. 20	1359	381	23	693
Cowles, Alfred A., New York, N. Y. Insulated electric conductor	272,660	Feb. 20	1360	381	23	693
Cowles, Alfred A., New York, N. Y., assignor to Ansonia Brass and Copper Company, Ansonia, Conn. Insulated electric conductor	281,841	July 24	1898	518	24	350
Cowles, Eugene H. (See Nelson and Cowles.)						
Cowles, Frederick A., Plantsville, Conn. Hammer and box-scraper	275,025	Apr. 3	192	51	23	1258
Cowles, George B., New Britain, Conn. Machine for putting springs in lock-bolts	283,081	Aug. 14	723	{ 202 203 203 }	{ 24 24 24 }	636
Cowles, George B., New Britain, Conn. Machine for securing the key-post in lock-plates	283,326	Aug. 14	1023	{ 286 287 }	{ 24 24 }	690
Cowles, George B., New Britain, Conn. Machine for slotting and driving springs into lock-tumblers	286,269	Oct. 9	598	164	25	119
Cowles, Harley D., Brighton Park, Ill., assignor to F. W. Beale, Lynn, Mass. Die for cutting nails	288,165	Nov. 6	457	128	25	587
Cowles Hardware Company. (See Steele, Elbridge J., assignor.)						
Cox, James H., Plainfield, Ind. Portable fence	281,028	July 10	851	236	24	157
Cowles, John T., Chicago, Ill. Stand-pipe for buildings	273,031	Feb. 27	1837	514	23	783
Cowles, John T., Chicago, Ill. Stand-pipe and fire-escape	273,032	Feb. 27	1838	514	23	783
Cowles, John T., Chicago, Ill. Fire-proof shutter	288,212	Nov. 13	521	145	25	608
Cowles, Milan, Bradford Lake, assignor of one-half to C. L. Fuller, Otsego Lake, Mich. Saw setting and sharpening device	280,138	June 26	1874	528	23	2467
Cowles, William, Newburg, N. Y., assignor of one-half to N. T. Bacon, Norwich, Conn. Bottle-washing machine	286,394	Oct. 9	774	{ 209 210 }	{ 25 25 }	151
Cowley, Josiah B., and S. S. Morse, Boston, Mass. Paint-brush holder	288,692	Nov. 20	1141	314	25	721
Cowley, William W. (See Bradshaw and Cowley.)						
Cowman, Charles H., <i>et al.</i> (See Carrick, Thomas J., assignor.)						
Cox, Abner R. (See Taylor and Cox.)						
Cox, Allan, Chelsea, Mass. Sheet-metal pan	275,806	Apr. 17	1234	338	23	1453
Cox, Daniel O., Mannsville, N. Y. Horse checking and unchecking device	287,419	Oct. 30	2074	564	25	403
Cox, H. M., <i>et al.</i> (See Irish, Judah W., assignor.)						
Cox, Henry F., Altoona, Pa. Railway-crossing. (Reissue)	10,265	Jan. 2	434	126	23	89
Cox, Isaac H., Bridgeton, N. J. Can-soldering machine	278,100	May 22	1933	530	23	1978
Cox, J. D., Jr., <i>et al.</i> (See Richards, Francis H., assignor.)						
Cox, John, Albany, N. Y. Pump	273,261	Mar. 6	21	7	23	838
Cox, John, Albany, N. Y. Apparatus for drawing liquids from barrels	288,978	Nov. 27	1493	413	25	792
Cox, John A. M., Indianapolis, Ind. Steam-boiler	279,920	June 26	1613	453	23	2420
Cox, John J., Virden, Ill. Velocipede	271,600	Feb. 6	259	72	23	486
Cox, Joseph J., Lawrence, Kans. Straw-stacker	290,975	Dec. 25	2054	565	25	1267
Cox, Joseph L., Milwaukee, Wis. Skylight-frame	272,859	Feb. 27	1629	456	23	748
Cox, L. M., <i>et al.</i> (See Bedbury, George W., assignor.)						
Cox, Lorenzo D., Mason City, Ill. Velocipede	279,541	June 19	1168	{ 323 324 }	{ 23 23 }	2336
Cox, Robert M., Prairie City, Ill. Ruffling or gathering attachment for sewing-machines	270,751	Jan. 16	1149	329	23	239
Cox, Robert S., <i>et al.</i> (See Wagner and Seath, assignors.)						
Cox & Sedgwick. (See Cockshaw, Herbert, assignor.)						
Cox, Walter J., Wichita, Kans. Window-shade	282,277	July 21	2455	676	24	449
Cox, William F. (See Mayer, Ferdinand, assignor.)						
Cox, William H., Virden, Ill. Gate	287,805	Nov. 6	19	6, 7	25	510
Cox, William J. (See Ingram, William B., assignor.)						
Coxe, Edward D. (See Parker, Sidney, assignor.)						
Coxon, William H., Worcester, Mass. Stop mechanism for engine-lathes	286,786	Oct. 16	1266	343	25	244
Coy, Frederick W., assignor to G. H. P. Flagg, trustee, Boston, Mass. Abrading-machine	289,986	Dec. 11	764	215	25	1028
Coy, George W., Milford, Conn., assignor of two-thirds to J. G. Smith, Hackensack, N. J., and C. E. Buell, New Haven, Conn. Telephone-exchange switch	275,362	Apr. 10	648	174	23	1345
Coy, Henry E., Mansfield, Ohio. Machine for threading the points of lag-screws	276,671	May 1	163	42	23	1653
Coy, Oscar F., North Bennington, Vt. Driving-rein	289,072	Nov. 27	1609	445	25	812
Coyle, Edward, St. Louis, Mo. Compound for the manufacture of steel	288,979	Nov. 27	1494	510	25	792
Coyle, John J., Honey Creek, Iowa. Stalk-cutter	287,248	Oct. 23	1862	510	25	356
Coyle, Robert E. (See Duncan and Coyle.)						
Crabb, William, Newark, N. J. Tooth for gilling and hackling machines	287,506	Oct. 30	2183	593	25	424
Crabtree, Thomas A., East Surry, Me. Holdback	278,887	June 5	289	83	23	2172
Crabtree, Thomas A., East Surry, Me. Book-holder	283,576	Aug. 21	1340	374	24	754
Crabtree, Thomas A., East Surry, Me. Hub-attaching device	289,627	Dec. 4	314	88	25	943
Craft, Johnston S., Alliance, Ohio. Machine for making the eyes of hoes	275,363	Apr. 10	651	174	23	1346
Crafts, Samuel I. (See Bray, William H., assignor.)						
Cragin Bros. & Co. (See Beaman and Cragin, assignors.)						
Cragin, Patrick H., Franklin, N. H., assignor of one-half to Richards & Co., Gardiner, Me. Paper-pulp screen	277,239	May 8	910	244	23	1788
Cragin, William P. (See Beaman and Cragin.)						
Craig, Isaac E., Camden, Ohio. Manufacture of sheet-iron	280,799	July 10	580	.....	24	109
Craig, James A. (See Jelinek, Anton, assignor.)						
Craig, James D., Detroit, Mich. Wood-turning machine	280,453	July 3	143	39	24	27
Craig, James F., West Liberty, Ohio. Check-row planter	289,987	Dec. 11	765	215	25	1028
Craig, John, San Francisco, Cal. Guard for cars	285,975	Oct. 2	245	69, 70	25	47
Craig, John W. (See Ballard and Craig.)						
Craig, John W. (See Beers and Craig.)						
Craig, Joseph A. I., Montreal, Quebec, Canada. Dynamo-electric machine	277,237	May 8	907	243	23	1788



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Craig, Joseph A. I., Montreal, Quebec, Canada. Dynamo-electric machine	277,238	May 8	908	244	23	1788
Craig, Joseph K., Canton, Ohio. Rein-holder	285,976	Oct. 2	246	70	25	47
Craig, Lee D., San Francisco, Cal. Sewer or stench trap	270,876	Jan. 16	1291	373	23	267
Craig, Lee D., San Francisco, Cal. Plug stop-valve	274,724	Mar. 27	1904	532	23	1186
Craig, Lee D., San Francisco, Cal. Revolving water-closet stench-trap	274,725	Mar. 27	1905	532	23	1186
Craig, Warren H., Lawrence, Mass. Steam-engine governor	271,315	Jan. 30	1839	534	23	372
Craig, Warren H., Lawrence, Mass. Lubricator	277,464	May 15	1189	317	23	1842
Craig, Warren H., Lawrence, Mass. Lubricator	281,241	July 17	1128	310	24	213
Craig, William S., Courtney, Tex. Cotton-chopper	271,801	Feb. 6	259	72	23	486
Craig, Edward H., Brooklyn, N. Y., and F. Henry, Philadelphia, Pa. Binder attachment for sewing-machines	275,889	Apr. 17	1335	367	23	1471
Craighead & Elwell Manufacturing Company. (See Bennett, Dwight W., assignor.)						
Craighead & Elwell Manufacturing Company. (See Maschmeyer, Charles, assignor.)						
Craighead, Horace, New York, N. Y. Plaque	286,118	Oct. 2	415	113	25	76
Craigie, Hugh H., assignor to J. Craigie, Stamford, Conn. Fire-escape	271,802	Feb. 6	260	73	23	486
Craigie, Julia. (See Craigie, Hugh H., assignor.)						
Craik, Robert, Hawley, Minn. Conveyor for mill products	275,153	Apr. 3	354	97	23	1288
Crain, Charles S., et al. (See Murray, James W., assignor.)						
Cram, Roy J., Detroit, Mich. Pile-driver	284,282	Sept. 4	155	43	24	930
Cram, William H. H., and G. S. Tompkins, Detroit, Mich. Sham-holder	284,119	Aug. 28	2024	563	24	888
Cramer, Herman, Sonora, Cal. Treadle for sewing-machines, &c	271,426	Jan. 30	1984	573	23	399
Cramer, Joseph C., Leadville, Colo. Pick	272,661	Feb. 20	1361	382	23	693
Cramer, Philip, Montreal, Quebec, Canada. Hanger for shafting	281,343	July 17	1255	349	24	234
Crampton, B. F. (See Leach, William F., assignor.)						
Crandall, Edward M. (See Kay, William V., assignor.)						
Crandall, George L., Binghamton, N. Y. Locking the nuts of carriage-top props	281,344	July 17	1256	349	24	235
Crandall, George L., assignor of one-half to C. M. and W. H. Stone, Binghamton, N. Y. Carriage-curtain fastener. (Reissue.)	10,301	Apr. 3	615	165	23	1330
Crandall, Jesse A., Brooklyn, N. Y. Building-block	270,206	Jan. 9	450	131	23	99
Crandall, Jesse A., Brooklyn, N. Y. Rocking toy for children	270,891	Jan. 23	1314	380	23	276
Crandall, Jesse A., Brooklyn, N. Y. Child's carriage	280,454	July 3	146	39	24	27
Crandall, William E., New York, N. Y. Rocking horse and gig	270,023	Jan. 2	232	67	23	48
Crandall, William E., New York, N. Y. Toy	271,427	Jan. 30	1985	573	23	399
Crandall, William E., New York, N. Y. Combined desk and blackboard	275,598	Apr. 10	949	258	23	1397
Crandall, William E., New York, N. Y. Toy building-block	278,224	May 22	2095	577	23	2006
Crandall, William E., assignor of one-half to E. I. Horsman, New York, N. Y. Alphabet block and case	275,329	Apr. 3	568	155	23	1322
Crandell, Alfred, Pine Plains, N. Y. Rolling-mill	281,978	July 24	2066	566	24	378
Crandell, William, Westfield, N. Y. Car-coupling	271,685	Feb. 6	121	33	23	461
Crandell, William C., Jr., assignor of one-half to S. D. Strohm, Philadelphia, Pa. Apparatus for automatically stopping railway-trains	275,599	Apr. 10	950	258	23	1397
Crandle, John T., Savannah, N. Y. Screen	290,666	Dec. 25	1642	452	25	1197
Crane, Augustus S., Newark, N. J. Secondary electric clock	286,181	Oct. 9	493	136	25	102
Crane, Augustus S., Newark, N. J. Compensating pendulum	288,027	Nov. 6	301	85	25	558
Crane, Augustus S., Newark, N. J. Actuating device for secondary electric clocks	288,623	Nov. 20	1051	289	25	706
Crane Brothers Manufacturing Company. (See Roberts, Charles E., assignor.)						
Crane, Charles S., Chicago, Ill. Reversing-valve	279,921	June 26	1614	453	23	2420
Crane, Charles W., Batavia, Iowa. Slotting-shears	287,249	Oct. 23	1863	510	25	356
Crane, Clark R., Morrice, Mich. Tag	278,888	June 5	229	83	23	2173
Crane, Daniel, Seneca Falls, N. Y. Horseshoe	289,504	Dec. 4	167	46	25	915
Crane, George S. (See Wortham, John B., assignor.)						
Crane, Gerard, assignor to B. Willard, New York, N. Y. Horse-blanket	274,177	Mar. 20	1199	330	23	1056
Crane, Harold L., Brooklyn, N. Y., and J. Lines, said Lines assignor to Scovill Manufacturing Company, Waterbury, Conn. Epaulette	279,480	June 12	1090	301	23	2315
Crane, James B., assignor to himself, Z. M. and W. M. Crane, Dalton, Mass. Paper	283,701	Aug. 21	1450	417	24	782
Crane, Moses G., Newton, Mass. Indicator for fire-alarm purposes	273,033	Feb. 27	1839	514	23	783
Crane, Richard T., Chicago, Ill. Steam-radiator attachment	287,099	Oct. 23	1672	459	25	323
Crane, Theodore T., Hackensack, N. J., and J. G. Sanderson, Scranton, Pa. Walkmill roofing-cement	274,178	Mar. 20	1200	330	23	1056
Crane, Thomas, assignor of one-half to L. S. Kellogg, Fort Atkinson, Wis. Gate-latch	290,176	Dec. 11	985	278	25	1069
Crane, Thomas R., Mantua, Va. Combined seed-sower, fertilizer, harrow, and roller	276,361	Apr. 24	1918	532	23	1579
Crane, Thomas S. (See Adams, George B., assignor.)						
Crane, William, Castroville, Cal. Grain separator	282,705	Aug. 7	290	82	24	550
Crane, Winthrop M., et al. (See Crane, James B., assignor.)						
Crane, Zenas M., et al. (See Crane, James B., assignor.)						
Cranford, Frank H., Redding, Cal. Nut-lock	287,003	Oct. 23	1547	426	25	298
Cranford, James F., Oak Hill, Ala. Composition for tanning hides	271,804	Feb. 6	263	73	23	487
Crangle, Edward J. (See Elliott, George E., assignor.)						
Cranston, Giles S., Silver Creek, N. Y. Machine for hulling and granulating grain	283,212	Aug. 14	883	246	24	664
Cranston, John H., Norwich, Conn. Printing-machine	284,047	Sept. 11	964	271	24	1076
Crapon, George M., and R. H. Pickett, Wilmington, N. C. Draining-case for barrels	272,415	Feb. 20	1050	295	23	638
Crapon, William H., assignor, by mesne assignments, to himself and L. A. Cook, Woonsocket, R. I. Producing fleeced fabrics	279,922	June 26	1615	454	23	2421
Crary, Cushman W., Chicago, Ill. Gear-cutter	282,059	July 31	2170	593	24	402
Crate, Joseph G., Woodstown, and J. F. Morell, Camden, N. J. Car-starter	284,948	Sept. 11	966	271	24	1076
Craus, Henry S., Brooklyn, N. Y. Handle-cap for traveling-bags	271,803	Feb. 6	262	73	23	486
Craven, Thomas C. (See Purves and Craven.)						
Cravens, Vincent, Madison, Ind. Flexible ladder	279,542	June 19	1169	324	23	2336
Craver, Steele & Austin. (See Wheeler, James J., assignor.)						
Crawford, Adam, Sebastopol, Cal. Fruit-drier	279,719	June 19	1372	383	23	2372
Crawford, Angus, Boston, Mass. Express-signal	274,726	Mar. 27	1906	532	23	1186
Crawford, Burton, Cross Roads, Ohio. Post-hole-digging machine	280,565	July 3	301	83	24	54
Crawford, Charles H. (See Welch and Corbion, assignors.)						
Crawford, Frank L. (See Wagner, Gustavus G., assignor.)						
Crawford, James G., Boston, Mass. Centrifugal clothes-wringer	273,262	Mar. 6	23	7	23	838
Crawford, James M., Bentonville, and T. B. Kirkwood, Milton, Ind. Straw-stacker	273,470	Mar. 6	298	81	23	884
Crawford, John, Brooklyn, assignor to W. H. Warburton, New York, T. F. and D. Boyle, Brooklyn, N. Y. Fire-escape	274,278	Mar. 20	1328	366	23	1079
Crawford, John M., Philadelphia, Pa. Illuminating clocks	281,465	July 17	1410	387	24	261

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Crawford, John R. M., Booneville, Miss. Shingle-machine .....	280,354	July 3	19	5	24	5
Crawford, Martin B., Terre Haute, Ind. Screw-driver .....	274,912	Apr. 3	24	7	23	1231
Crawford, Martin B., and C. E. Temple, Terre Haute, Ind. Fan attachment .....	272,416	Feb. 20	1051	295	23	638
Crawford, Middleton, Wiarton, Ontario, Canada. Flour-dressing machine .....	287,250	Oct. 23	1864	510	25	356
Crawford, Middleton, assignor of one-half to H. Campbell, Wiarton, Ontario, Canada. Cockle-machine .....	285,344	Sept. 18	1447	408	24	1168
Crawford, William M. (See Butler, Earhart, and Crawford.)						
Crawford, Witsius A., San Antonio, Tex., assignor of one-half to E. Ellis, Terre Haute, Ind. Telephone-transmitter .....	270,752	Jan. 16	1150	{ 329 } { 330 }	{ 23 }	239
Crawley, Edwin, Newport, Ky., and C. H. Albrecht, Cincinnati, Ohio; said Crawley assignor to said Albrecht. Harness and vehicle loop .....	273,820	Mar. 13	755	205	23	971
Cray, William H., et al. (See Jewett, Nathan, assignor.)						
Cray, William H., et al. (See Shepler, Pius L., assignor.)						
Creagan, John, assignor of one-fourth to C. D. Tyler, Jr., Cleveland, Ohio. Spring-setting machine .....	285,235	Sept. 18	1325	373	24	1146
Creager, Jonathan, Cincinnati, Ohio. Brick-machine .....	284,949	Sept. 11	968	272	24	1077
Crecelius, Louis J. (See Bevis, Issacher L., assignor.)						
Crecelius, Louis J., assignor of one-half to A. Warren, St. Louis, Mo. Lifting-jack .....	270,394	Jan. 9	686	203	23	144
Creedy, Charles E., and A. B. Burns, Washington, D. C. Fire-escape .....	279,347	June 12	921	257	23	2289
Creedy, Charles E., and A. B. Burns, Washington, D. C. Fire-escape .....	279,348	June 12	922	257	23	2289
Creedy, Edward W., et al. (See Crowley, David, assignor.)						
Crehore, George, St. Louis, Mo. Endless train-conveyer .....	282,959	Aug. 14	574	162	24	609
Creighton, James P., assignor of one-half to W. Deering, Louisville, Ky. Friction gearing or pulley .....	286,533	Oct. 9	939	253	25	181
Creighton, Lawrence, Cincinnati, Ohio. Sleeping-car .....	288,926	Nov. 20	1420	391	25	772
Cremer, John H., Chicago, Ill. Tuyere for blast-furnaces .....	278,685	June 5	11	3	23	2126
Cremer, John H., Chicago, Ill. Method of and apparatus for heating the gaseous fuel of furnaces .....	278,859	June 5	290	84	23	2173
Cremer-Pirnay & Cie., A. (See Lemaire, Jean T., assignor.)						
Crepin, Emile A., and F. Rochat, Hollister, Cal. Gun for destroying animals .....	274,279	Mar. 20	1330	367	23	1079
Creque, Allen P., New York, N. Y. Planing-machine .....	274,565	Mar. 27	1722	478	23	1153
Creque, Allen P., New York, N. Y. Overflow-connection for bath-tubs .....	286,270	Oct. 9	600	165	25	120
Creque, Allen P., New York, N. Y. Boiler .....	290,667	Dec. 25	1643	452	25	1197
Cresse, George H., Cape May, N. J. Horse-detacher .....	282,900	Aug. 14	576	163	24	610
Cressman, George W., Barren Hill, Pa. Rag-engine .....	289,235	Nov. 27	1800	498	25	847
Creter, George. (See Beck and Creter.)						
Crich, Fredrick. (See Roberts and Crich.)						
Crich, Fredrick, assignor to H. Roberts, Pittsburg, Pa. Apparatus for wiping wire .....	275,364	Apr. 10	652	174	23	1346
Crich, Henry, Pittsburg, Pa. Wire-wiper .....	274,127	Mar. 27	1907	532	23	1186
Crikelair, Gustave J., New York, N. Y. Fire-extinguishing compound .....	278,315	May 29	2236		23	2038
Cripe, David C., North Manchester, Ind. Milk-can .....	276,780	May 1	326	85	23	1682
Crippen, Henry M., assignor of one-half to J. M. Crippen, Big Run, Ohio. Vehicle-brake	280,543	Dec. 18	1483	410	25	1163
Crippen, John M. (See Crippen, Henry M., assignor.)						
Crismon, Carrell W., and A. F. Whitaker, deceased, Vienna, Mo.; J. W. Rowden administrator of said Whitaker. Endless cable carrier .....	280,295	June 26	2063	580	23	2500
Crisp, James L., Bloomfield, N. J. Barrel-truck .....	289,753	Dec. 4	478	135	25	970
Crispin, Thomas, Detroit, Mich. Bench-clamp .....	282,961	Aug. 14	577	163	24	610
Crist, Peter, Brighton, Ill. Fracture apparatus .....	278,101	May 22	1934	531	23	1979
Critchett, Oliver G., Belfast, Me. Mechanism for preparing boot or shoe uppers for lasting .....	289,391	Dec. 4	21	7 8	25	891
Critchlow, Thomas, Pittsburg, Pa. Ingot-manipulator .....	278,511	May 29	2485	{ 678 } { 679 }	{ 23 }	2083
Critchlow, Thomas, Pittsburg, Pa. Soaking-furnace for ingots .....	278,512	May 29	2487	679	23	2083
Crittenden, Ralph, Hartford, and R. G. Henry, Waterbury, Conn. Calipers .....	278,225	May 22	2096	577	23	2006
Crocker, Benjamin F., Hyannis, Mass. Screw or nut fastening for railway-bar joints .....	287,806	Nov. 6	20	7	25	511
Crocker, Benjamin S., assignor of one-half to W. H. Hill, Topeka, Kans. Lock-nut .....	281,180	July 10	1041	289	24	191
Crocker, Francis B. (See Curtis and Crocker.)						
Crocker, Francis B. (See Wheeler, Curtis, and Crocker.)						
Crocker, Francis B., C. G. Curtis, and S. S. Wheeler, New York, N. Y. Electric railway .....	281,672	July 24	1675	456	24	310
Crocker, James A., assignor to H. N. Smith, Boston, Mass. Filter .....	279,226	June 12	762	211	23	2263
Crocker, John B., St. Louis, Mo. Mechanical movement .....	282,962	Aug. 14	577	163	24	610
Crockett, Charles H., Boston, Mass. Electric gas-lighting burner .....	271,805	Feb. 6	263	73	23	487
Crockett, Charles H., assignor to Boston Electric Company, Boston, Mass. Electric gas-lighter .....	281,345	July 17	1257	350	24	235
Crockett, Finley M. (See Elson and Crockett.)						
Crockett, James D., Ripley, Miss. Muzzle .....	272,214	Feb. 13	778	{ 215 } { 216 }	{ 23 }	586
Crockford, Alfred H., Newark, N. J. Steam-generator .....	282,172	July 31	2331	643	24	427
Crofoot, George W., assignor to H. L. Crofoot, Tully, and G. H. Smith, Baldwinsville, N. Y. Two-wheeled vehicle .....	290,976	Dec. 25	2055	565	25	1267
Crofoot, Harriet L., et al. (See Crofoot, George W., assignor.)						
Croft, David L., Springfield, Ohio. Blackboard-eraser .....	274,566	Mar. 27	1793	479	23	1153
Croft, David L., Springfield, Ohio. Motor .....	283,757	Aug. 28	1565	441	24	808
Croft, Edward, assignor to Waterbury Horse Nail Company, Waterbury, Conn. Machine for rolling horseshoe-nails .....	285,800	Oct. 2	22	7 8	25	6
Croft, Henry, Jr., Springfield, Ohio. Power-converter .....	287,634	Oct. 30	2364	638	25	458
Croft, Silas C. (See Peterson, Adolphus, assignor.)						
Crompton, George. (See Wyman, Horace, assignor.)						
Crompton, George, Worcester, Mass. Loom .....	274,913	Apr. 3	27	8	23	1231
Crompton, George, Worcester, Mass. Mechanical movement .....	274,114	Apr. 3	32	9	23	1231
Crompton, George, Worcester, Mass. Loom .....	282,502	Aug. 7	31	9, 10	24	506
Crompton, George, and H. Wyman, Worcester, Mass., assignors to said Crompton. Mechanical movement .....	281,842	July 24	1899	518	24	350
Crompton, George, and H. Wyman, Worcester, Mass.; said Wyman assignor to said Crompton. Loom-temple .....	284,120	Aug. 28	2025	563	24	889
Crongeyer, Charles A., assignor to himself and G. W. Busch, Detroit, Mich. Mechanical toy .....	271,686	Feb. 6	123	34	23	461
Cronk, William, Havana, N. Y. Barn-door hanger and rail-bracket .....	272,031	Feb. 13	556	150	23	549
Cronk, William, Havana, N. Y. Stay-roller for sliding doors .....	288,980	Nov. 27	1494	414	25	792
Cronk, William, Havana, N. Y. Stay-roller for sliding doors .....	288,981	Nov. 27	1495	414	25	792
Cronyn, William M. (See Conly, Mahlon S., assignor.)						
Crooke, Henry S. and L., New York, N. Y. Combined foil and paper fabric .....	289,505	Dec. 4	168	46	25	916
Crooke, Lewis. (See Crooke, Henry S. and L.)						
Crooke, Thomas, Newark, N. J. Mouse-trap .....	270,753	Jan. 16	1154	330	23	240



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Cropper, John, New York, N. Y. Water-closet bowl	270,754	Jan. 16	1154	330	23	240
Crosby, George H., Somerville, Mass. Steam-pressure gage	272,800	Feb. 27	1629	456	23	748
Crosby, George H., Somerville, Mass. Hydraulic trap	280,355	July 3	20	5	24	6
Crosby, George H., Somerville, Mass. Trap for steam-pressure gages	288,693	Nov. 20	1142	314	25	721
Crosby, George S., Bridgeport, Conn. Toy	276,524	Apr. 24	2124	591	23	1614
Crosby, George S., assignor of one-half to J. Watson, Jr., Bridgeport, Conn. Toy vehicle.	276,237	Apr. 24	1739	482	23	1549
Crosby Steam Gage and Valve Company. (See Meady, Albert C., assignor.)						
Crosier, Thomas, Columbus, Ohio. Tool for expanding and beading flues	281,346	July 17	1259	350	24	235
Cross, Abraham V., Williamsport, Pa. Cutter-head	275,890	Apr. 17	1335	368	23	1471
Cross, Abraham V., Williamsport, Pa. Feed-roller for planing-machines	280,720	July 3	457	131	24	82
Cross, Albert L. (See Cross, John L., assignor.)						
Cross, Benjamin C., Dewsbury, county of York, England. Water-closet	270,934	Jan. 23	1369	395	23	286
Cross, Edwin M., Syracuse, N. Y. Belting	274,280	Mar. 20	1331	367	23	1079
Cross, Frank W., Lyun, Mass. Button-hole sewing-machine	279,349	June 12	923	257 258	23	2290
Cross, Freeman H., Pulaski, assignor of one-half to R. D. Gardner, Adams, N. Y. Mechanism for converting motion	281,347	July 17	1260	350	24	236
Cross, George W., Gardiner, Me., assignor to E. Ingram, Philadelphia, Pa. Car-coupling	286,271	Oct. 9	601	165	25	120
Cross, Jerome A., Fultonville, N. Y. Truck for conveying material on an elevated track	270,755	Jan. 16	1155	331	23	240
Cross, Jerome A., Fultonville, N. Y. Bucket for conveying ensilage, coal, plaster, &c	270,756	Jan. 16	1156	331	23	241
Cross, John C. (See Mors and Cross.)						
Cross, John L., Philadelphia, Pa. Heel-burnishing machine	278,102	May 22	1935	531	23	1979
Cross, John L., assignor to A. L. Cross, Philadelphia, Pa. Buffing-pad	290,631	Dec. 18	1598	439	25	1182
Cross, William C., Boston, Mass. Machinery for folding paper, &c	275,154	Apr. 3	356	98	23	1288
Cross, William C., Boston, Mass. Necktie	288,192	Nov. 6	491	137	25	593
Cross, William C., Boston, Mass. Necktie	288,561	Nov. 13	971	267	25	685
Crosser, Simon, et al. (See Secor, William H., assignor.)						
Crossette, Charles H., Chicago, Ill. Necktie or scarf fastener	277,465	May 15	1181	317	23	1842
Crossette, Charles H., Chicago, Ill. Neck-scarf	278,361	May 29	2236	613	23	2039
Crossley, Harry A., Cleveland, Ohio. Knife for stove-jointing machines	269,831	Jan. 2	16	6	23	5
Crossley, Harry A., Cleveland, Ohio. Balancing knives for wood-working machines	285,236	Sept. 18	1326	374	24	1146
Crossley, Louis J., Halifax, county of York, England. Telephone-receiver	280,800	July 10	581	162	24	109
Crossman, Amory W., West Warren, Mass. Drawing-knife and attachment therefor	286,787	Oct. 16	1267	343	25	245
Crosthwaite, James D., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. File	273,821	Mar. 13	757	205	23	972
Crotts, George S., Philadelphia, Pa. Glass-batch mixer	284,121	Aug. 28	2026	564	24	889
Crouch, George, New York, N. Y. Clasp for pocket-books, &c	276,362	Apr. 24	1920	532	23	1579
Crouch, George, New York, N. Y. Frame for hand-bags	282,850	Aug. 7	450	127	24	580
Crouch, George, New York, N. Y., assignor to J. H. Sessions, Bristol, Conn. Trunk-catch	290,977	Dec. 25	2056	566	25	1267
Crowe, Alexander F., Emporia, Kans. Brick-mold	283,758	Aug. 28	1566	441	24	809
Crowe, Thomas, South Chicago, Ill. Bessemer converter	283,757	Aug. 21	1341	374	24	754
Crowell, Hilen C., Erie, Pa. Shaft-hanger	272,861	Feb. 27	1630	456	23	748
Crowell, Hilen C., Erie, Pa. Machine for sawing segment-blocks	275,807	Apr. 17	1235	338 339 340	23	1453
Crowell, Hilen C., Erie, Pa. Shaft-hanger	278,404	May 29	2354	643	23	2060
Crowell, Hilen C., Erie, Pa. Friction-clutch	281,242	July 17	1130	311	24	213
Crowell, Hilen C., Erie, Pa. Taper-sleeve fastening for pulleys, &c	281,618	July 17	1600	437 438 439	24	292
Crowell, Hilen C., Erie, Pa. Dead-pulley rig	285,467	Sept. 25	1602	450	24	1201
Crowell, Hilen C., Erie, Pa. Dead-pulley rig	289,073	Nov. 27	1609	446	25	812
Crowell, Horace S., et al. (See Pattyson, William D. C., assignor.)						
Crowell, John, Jr. (See Brainard, Curtis B., assignor.)						
Crowell, John, Jr. (See Whitney, Ruel W., assignor.)						
Crowell, John H., Providence, R. I. Dividers	285,017	Sept. 18	1066	298 42 43 44 45	24	1101
Crowell, Luther C., Brooklyn, N. Y. Sheet-delivery apparatus for printing-machines	276,672	May 1	165	44	23	1654
Crowell, Luther C., Brooklyn, assignor to R. Hoe & Co., New York, N. Y. Air-cushioning apparatus for printing-machines	274,084	Mar. 13	1074	296	23	1026
Crowell, Luther C., Boston, Mass., assignor to R. Hoe & Co., New York, N. Y. Paper-folding machine. (Reissue)	10,300	Apr. 3	608	163 164 165 343 344 345	23	1328
Crowell, Luther C., Brooklyn, assignor to R. Hoe & Co., New York, N. Y. Sheet-delivery apparatus	277,548	May 15	1280	343 344 345	23	1858
Crowell, Luther C., Brooklyn, assignor to R. Hoe & Co., New York, N. Y. Folding-machine	277,549	May 15	1283	345	23	1858
Crowell, Luther C., Brooklyn, assignor to R. Hoe & Co., New York, N. Y. Air-cushioning apparatus for printing-machines	277,550	May 15	1285	345 36 37 38 39 40 41 42	23	1858
Crowell, Luther C., Brooklyn, assignor to R. Hoe & Co., New York, N. Y. Sheet feeding and registering apparatus	278,777	June 5	125	38 39 40 41 42	23	2145
Crowell, Luther C., Brooklyn, assignor to R. Hoe & Co., New York, N. Y. Sheet feeding and registering apparatus	278,778	June 5	136	42 43 44 45	23	2146
Crowell, Luther C., Brooklyn, assignor to R. Hoe & Co., New York, N. Y. Folding-machine	281,619	July 17	1601	438 439 440 441 442	24	292
Crowell, Luther C., Brooklyn, assignor to R. Hoe & Co., New York, N. Y. Sheet-delivery apparatus	281,754	July 24	1785	486 487	24	329
Crowley, David, assignor of three-fourths to E. W. Creecy and R. Walsh, Washington, D. C. Fire-escape	276,363	Apr. 24	1920	532	23	1579
Crowley, Fredrick G., Sedalia, Mo. Vehicle-pole	275,470	Apr. 10	801	216	23	1371
Crowley, John H., Philadelphia, Pa. Loom-temple	276,959	May 1	558	145	23	1721
Crowley, John H., and B. M. Temple, Galveston, Tex. Split switch	277,664	May 15	1439	388	23	1885
Crowley, Peter J. (See Starke and Crowley.)						
Crowley, Thomas L., Rew, Pa. Tubing, packing, and operating oil-wells	290,139	June 26	1875	528	23	2467
Crowson, William L., Memphis, Tenn. Combined cleaner and feeder for cotton-gins	289,730	June 19	1374	383 384	23	2372
Crowther, Henry, assignor of one-fourth to W. L. Chaffee, Providence, R. I. Wrench	288,927	Nov. 20	1422	392	25	772
Crozier, George W. (See Ellis, Ralph E., assignor.)						
Crozier, William C., Knoxville, Tenn. Fruit-drier	277,685	May 15	1440	388 389	23	1885

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Crull, Emily B. (See Crull, Peter D., assignor.)						
Crull, Peter D., assignor to E. B. Crull, Roodhouse, Ill. Boot and shoe jack	287,100	Oct. 23	1673	459	25	323
Crum, Charles L., Winchester, Va. Cask	276,364	Apr. 24	1922	533	23	1579
Crumble, Alexander, Brooklyn, N. Y. Baker's oven	271,806	Feb. 6	265	73	23	487
Crusius, Ludwig, Kaiserslautern, Bavaria, Germany. Steam and water heat radiating apparatus	279,721	June 19	1375	384	23	2372
Crutchfield, William T., Henry Station, Tenn. Pea-huller	273,968	Mar. 13	933	256	23	1001
Crutsinger, Charles W., St. Louis, Mo. Apparatus for casting printers' rollers	274,728	Mar. 27	1907	533	23	1187
Cruttenden, George E. (See Smith, Henry V., assignor.)						
Cubberley, Henry S., and D. Mann, Bloomington, Ill. Water-crane	280,140	June 26	1879	529	23	2467
Cubbins, Thomas, Memphis, Tenn. Cistern-cover	285,801	Oct. 2	24	8	25	6
Cubley, Edwin J., Ravenswood, Ill. Banjo	274,915	Apr. 3	35	9	23	1232
Culbertson, James C., and W. A. Endaly, Cincinnati, Ohio. Kiln and furnace for burning brick, tile, &c.	281,029	July 10	852	236	24	158
Culbertson, John W., Indianapolis, Ind. Artificial ear-drum	270,284	Jan. 9	543	160	23	116
Cullen, Curtis, Knoxville, Tenn. Fruit-drier	285,018	Sept. 18	1067	298	24	1101
Cullen, Israel, Pittsburg, Pa. Brick-machine	276,228	Apr. 24	1740	482	23	1549
Cullen, William F., Logansport, Ind. Fire-escape	279,638	June 19	1279	355	23	2356
Cullinan, Paul J., New York, N. Y. Comb	279,227	June 12	765	211	23	2264
Cullingworth, George R., New York, N. Y. Inlet-valve for air-compressors	287,004	Oct. 23	1548	426	25	298
Cullingworth, George R., New York, N. Y. Outlet-valve for air-compressors	287,005	Oct. 23	1548	427	25	298
Cullingworth, George R., New York, N. Y. Journal-box	287,006	Oct. 23	1549	427	25	299
Cullingworth, George R., New York, N. Y. Safety-governor for air-compressors	287,101	Oct. 23	1674	459	25	323
Cullingworth, George R., New York, N. Y. Rock drill support	287,102	Oct. 23	1675	460	25	324
Cullingworth, George R., New York, N. Y. Tripod for rock-drills	287,103	Oct. 23	1676	460	25	324
Cullingworth, George R., New York, N. Y. Air-compressor	287,104	Oct. 23	1677	460	25	324
Cullingworth, George R., and C. W. Potter, assignors to Sergeant & Cullingworth Company, New York, N. Y. Pressure-regulator for air-compressors	287,105	Oct. 23	1681	461	25	325
Cullingworth, George R., and C. W. Potter, assignors to Sergeant & Cullingworth Company, New York, N. Y. Inlet-valve for air-compressors	287,007	Oct. 23	1550	427	25	299
Culmer, George I., et al. (See Weiss, Charles W., assignor.)						
Culver, George M. (See Frazee and Culver.)						
Culver, Ira, Cleveland, Ohio. Screw-cutting head	274,281	Mar. 20	1332	367	23	1079
Culver, John M. (See Hoyt, Lewis S., assignor.)						
Culver, John P., Tucson, Ariz. Ter. Water, gas, or drain pipe	271,667	Feb. 6	123	34	23	461
Culver, Joseph E., Jersey City, N. J. Steam-generator	289,969	Dec. 11	766	216	25	1029
Culver, Lucius L., St. Louis, Mo. Range and stove	289,988	Dec. 11	765	215	25	1029
Culver, Willard B., Pittston, Pa. Boiler-feed	280,721	July 3	458	131	24	82
Cumberland Hydraulic Cement and Manufacturing Company. (See De Smedt, Edward J., assignor.)						
Cumberbatch, Isaac, Newark, N. J. Damper-regulator	283,578	Aug. 21	1341	374	24	754
Cuning, Mari A., Brooklyn, N. Y. Revolving hat-blocking table	271,807	Feb. 6	266	74	23	487
Cummer Engine Company. (See Cummer, Franklin D., assignor.)						
Cummer, Franklin D., Detroit, Mich., assignor to Cummer Engine Company, Cleveland, Ohio. Steam-engine	281,843	July 24	1901	518	24	351
Cunning, James B., and B. F. Van Amringe, Oakland, Cal. Carpenter's bevel	278,405	May 29	2355	643	23	2060
Cunning, James P. (See McCarthy and Cunningham.)						
Cummings, Albert G., Harrisburg, assignor to Pennsylvania Steel Company, Steelton, Pa. Interlocking apparatus	270,024	Jan. 2	233	68	23	48
Cummings, Albert G., Harrisburg, assignor to Pennsylvania Steel Company, Steelton, Pa. Deflection-stand for switch and signal connections	271,608	Feb. 6	30	8	23	446
Cummings, Albert G., Harrisburg, assignor to Pennsylvania Steel Company, Steelton, Pa. Apparatus for operating railway switches and signals	271,808	Feb. 6	267	74, 75	23	487
Cummings, Albert G., Harrisburg, assignor to Pennsylvania Steel Company, Steelton, Pa. Signal apparatus	272,122	Feb. 13	674	184	23	568
Cummings, Albert G., Harrisburg, assignor to Pennsylvania Steel Company, Steelton, Pa. Safety appliance for railways	276,564	May 1	26	7	23	1631
Cummings, Albert G., Harrisburg, assignor to Pennsylvania Steel Company, Steelton, Pa. Apparatus for operating railway-signals	277,118	May 8	768	202	23	1763
Cummings, Allan, New York, N. Y. Ventilating-damper for stove pipes and flues	274,567	Mar. 27	1724	479	23	1153
Cummings, Charles, Virginia City, assignor of one-half to E. F. Verrill and A. Fraser, Reno, Nev. Electric signaling apparatus	275,600	Apr. 10	955	259	23	1398
Cummings, Charles C. (See Birch, John S., assignor.)						
Cummings, Curtis S., and C. A. Shank, Gloversville, N. Y.; said Shank assignor to said Cummings. Manufacture of paper or pasteboard	279,350	June 12	926	263	23	2290
Cummings, Eustace, Woburn, Mass. Leather-splitting machine	288,551	Nov. 13	958	264	25	682
Cummings, George W., Cohoes, N. Y. Burr for knitting-machines and means for supporting the same	284,283	Sept. 4	155	43	24	930
Cummings, H. J. B., et al. (See Schwaner, Christian C., assignor.)						
Cummings, John, Jr. (See Dodge and Cummings.)						
Cummings, Robert F. (See Barrows and Cummings.)						
Cummings, Uriah, Buffalo, N. Y. Furnace	289,990	Dec. 11	772	217	25	1029
Cummings, John E., Arlington, Ky. Grain-cleaner	274,468	Mar. 27	1580	434	23	1130
Cummskey, Michael N., Paterson, N. J. Valve-gear	270,395	Jan. 9	638	204	23	144
Cummskey, Michael N., Paterson, N. J. Cut-off valve	270,396	Jan. 9	639	204	23	144
Cundy, William H., Boston, Mass. Clarinet-case	270,640	Jan. 16	1005	290	23	213
Cunningham, Albert, assignor to J. M. Stowell, Milwaukee, Wis. Steam feed-works for saw-mills	274,568	Mar. 27	1725	479	23	1153
Cunningham, Andrew, Troy, and H. Bickford, assignors to Bickford & Huffman, Macedon, N. Y. Fertilizer-distributor	286,910	Oct. 16	1425	391	25	271
Cunningham, Fieldon B., assignor of one-half to C. O. Brown, Burlington, Kans. Car-coupling	288,928	Nov. 20	1422	392	25	772
Cunningham, Herman E., et al. (See Stameur, John B., assignor.)						
Cunningham, James H., and N. M. Dickerson, Cross Timbers, Mo. Fence	286,182	Oct. 9	495	137	25	102
Cunningham, John. (See Burling, Benjamin H., assignor.)						
Cunningham, John E. (See Cobbett and Cunningham.)						
Cunningham, John M., assignor of one-third to T. Blanchard, Flora, Ill. Fire-escape	290,177	Dec. 11	986	278	25	1069
Cunningham, Peter B., assignor of one-half to A. Barnes, Allentown, Pa. Platform-gear for vehicles	277,834	May 15	1610	440	23	1916
Cunningham, Robert S., London, C. V. Honsart, 72 Lichfield Road, Bow, county of Middlesex, and W. May, 20 Broughton Street, Battersea, county of Surrey, England. Tramway	275,808	Apr. 17	1237	340	23	1453



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Cunningham, Seymour, Troy, N. Y. Metal lawn-tennis net.....	277,551	May 15	1287	346	23	1858
Cunningham, Thomas, <i>et al.</i> (See Stanour, John B., assignor.)						
Cunningham, W. P., <i>et al.</i> (See Duncan and Evens, assignors.)						
Cunningham, William J., Philadelphia, Pa. Carbonating apparatus .....	290,749	Dec. 25	1763	486	25	1219
Cupit, Alfred, Philadelphia, Pa. Clock-winding device.....	273,471	Mar. 6	299	81	23	884
Curl, Reuben O., <i>et al.</i> (See Reynolds, David R., assignor.)						
Curley, Terence F., Brooklyn, N. Y. Fork-guard.....	275,155	Apr. 3	359	98	23	1288
Curley, Thomas. (See Mansfield, Eben B., assignor.)						
Curpen, Ferdinand A., Upper Sandusky, Ohio. Hair-spring protector for watches .....	273,034	Feb. 27	1842	515	23	784
Curran, Charles A., Albany, Oreg. Fruit-pitter.....	276,365	Apr. 24	1923	533	23	1580
Curran, Charles A., Albany, Oreg. Fruit-drier.....	278,890	June 5	293	84.85	23	2173
Curran, John J., Chicago, Ill. Lumber-drier.....	274,282	Mar. 20	1333	368	23	1079
Curriden, Samuel W. (See Baker, Edgar, assignor.)						
Currier, Alfred. (See Klaiber and Currier.)						
Currier, Frank T. (See Currier, Timothy J. and F. T.)						
Currier, Jacob B., Lowell, Mass., assignor to Currier Telephone Bell Company, of Massachusetts. Electric call.....	272,862	Feb. 27	1631	457	23	748
Currier, Jacob B., and D. H. Rice, Lowell, Mass. Electric call.....	276,960	May 1	559	146	23	1722
Currier, Timothy J. and F. T., Worcester, Mass. Drilling-machine.....	287,366	Oct. 23	2006	546	25	383
Currier Telephone Bell Company. (See Currier, Jacob B., assignor.)						
Currier, Walter W., Haverhill, Mass. Leather-skiving machine.....	281,979	July 24	2067	566	24	379
Curry, B. J. (See Hobbs, James W., assignor.)						
Curry, Burwell J., Huntsville, Ala. Machine for gathering cotton.....	273,035	Feb. 27	1842	515	23	784
Curry, Burwell J., Huntsville, Ala. Cotton chopper and cultivator.....	284,389	Sept. 4	283	79	24	952
Curry, Joseph E., Lawrence, Kans. Wind-gage for thrashing and cleaning machines.....	276,781	May 1	327	85	23	1682
Curry, Joseph P., assignor of one-half to W. Tomlinson, Vincennes, Ind. Carpet-stretcher.....	286,788	Oct. 16	1268	343	25	245
Curtice, Grovenor A., Hopkinton, N. H. Mixture for preserving eggs.....	274,283	Mar. 20	1335		23	1079
Curtice, John M., Lowell, Mass. Bobbin-holder for spooling-machines.....	278,406	May 29	2356	644	23	2060
Curtin, David, Jamestown, Dak. Ter. Lantern.....	270,397	Jan. 9	690	204	23	144
Curtin, John, Marion, Va. Hub-attaching device.....	278,513	May 29	2489	680	23	2084
Curtis, Albert B. (See Curtis, Francis and A. B.)						
Curtis, Alice A., Byron Centre, Mich. Baking-dish cover.....	287,635	Oct. 30	2366	638	25	459
Curtis, Andrew J., Monroe, Me. Button-hole cutter and tracer.....	278,103	May 22	1936	531	23	1979
Curtis, Benjamin S., and J. A. Cook, Cape May, N. J. Portable elevated railway.....	285,116	Sept 18	1185	332	24	1121
Curtis, Charles. (See Wallace and Griffin, assignors.)						
Curtis, Charles A., Kirtland, Ohio. Thill-coupling bolt.....	270,935	Jan. 23	1370	395	23	286
Curtis, Charles C., and H. G. Lewis, North Lansing, Mich. Toy gun.....	287,507	Oct. 30	2184	593	25	424
Curtis, Charles G. (See Crocker, Curtis, and Wheeler.)						
Curtis, Charles G. (See Dickerson and Curtis.)						
Curtis, Charles G. (See Wheeler, Curtis, and Crocker.)						
Curtis, Charles G., and F. B. Crocker, New York, N. Y. Electric locomotive.....	271,042	Jan. 23	1498	433	23	306
Curtis, Charles P., <i>et al.</i> (See Harris, Charles A., assignor.)						
Curtis & Co., William B. (See Curtiss, William B., assignor.)						
Curtis, Dexter. (See Lynch, Matthew W., assignor.)						
Curtis, Dudley W., assignor of one-half to S. Davis, Pomeroy, Ohio. Ice-cream freezer.....	289,336	Nov. 27	1924	535	25	871
Curtis, Francis. (See Russell and Curtis.)						
Curtis, Francis. (See Russell and Curtis.) (Reissue.)						
Curtis, Francis and A. B., Chicopee, Mass. Metal-screw machine.....	280,296	June 26	2064	580 581	23	2500
Curtis, George H. (See Gifford, George S., assignor.)						
Curtis, George S., assignor of one-half to S. D. Kimbark, Chicago, Ill. Metallic fence-post.....	278,779	June 5	143	42	23	2146
Curtis, Isaac R., Newark, N. J. Attachment for pairs.....	289,894	Dec. 11	655	183	25	1008
Curtis, Israel B. (See Hutchins, William J., assignor.)						
Curtis, Israel B., Joliet, Ill. Anchor for check-row cords.....	273,263	Mar. 6	23	8	23	838
Curtis, James A. (See Renick and Curtis.)						
Curtis, John D., Worcester, Mass. Fencing-clasp.....	284,390	Sept. 4	284	79	24	952
Curtis, John S. (See Curtis, Wallace B. and J. S.)						
Curtis, Leonard E. (See Weston and Curtis.)						
Curtis, Martin M., assignor of one-half to C. E. Seely, St. Cloud, Minn. Hedge-trimmer.....	229,074	Nov. 27	1611	446	25	812
Curtis, Paul A., New York, N. Y. Metallic seal.....	271,224	Jan. 30	1725	500	23	352
Curtis, Roderick P. (See Forbes, William D., assignor.)						
Curtis, Wallace B. and J. S., Pomeroy, Ohio. Corn-planter.....	283,213	Aug. 14	885	247	24	665
Curtis, William E., Cincinnati, Ohio. Carriage-curtain fastener.....	289,991	Dec. 11	773	217	25	1029
Curtis, William R., assignor to Sigwalt Sewing Machine Company, Chicago, Ill. Sewing-machine stand.....	285,019	Sept. 18	1068	298	24	1101
Curtiss, Ammi H. (See Rockfellow, Andrews, assignor.)						
Curtiss, Enos, Findlay, Ohio. Journal-box attachment.....	270,757	Jan. 16	1157	331	23	241
Curtiss, Samuel, Brooklyn, N. Y. Strip for repelling and destroying vermin.....	274,284	Mar. 20	1336	368	23	1079
Curtiss, William B., Danbury, Conn. Wire frame for hat-brims.....	288,313	Nov. 13	647	177	25	628
Curtiss, William B., assignor to W. B. Curtis & Co., Danbury, Conn. Machine for bending and forming wire.....	283,327	Aug. 14	1025	287 288 289	24	691
Curtiss, Marshall S., Pullman, Ill. Reclining-chair.....	280,356	July 3	21	6	24	6
Cushman, Henry S., Milford, Mass. Nail.....	280,801	July 10	582	162	24	109
Cushman, Henry S., assignor of one-half to H. S. Bacon, Milford, Mass. Boot or shoe.....	279,859	June 19	1536	429	23	2400
Cushman, Horatio L. (See Pierce, Zenas B., assignor.)						
Cuskley, Philip L., Portland, Me. Envelope.....	279,543	June 19	1170	324	23	2336
Cassons, John, Glen Allen, Va. Calendar.....	277,411	May 8	1106	297	23	1823
Caster, George, Lima, Ohio. Caster.....	270,758	Jan. 16	1158	331	23	241
Cuthbertson, James W., Bothwell, Ontario, Canada. Metallic coal-oil barrel.....	284,950	Sept. 11	970	272	24	1077
Cutlan, Frederick, Leicester, county of Leicester, England. Heel-paring machine.....	274,169	Mar. 20	1113	307	23	1040
Cutler, Abner, assignor to A. Cutler & Son, Buffalo, N. Y. Inkstand.....	283,467	Aug. 21	1209	340	24	730
Cutler, Abner, assignor to A. Cutler & Son, Buffalo, N. Y. Drawer-clamp.....	283,468	Aug. 21	1210	340	24	730
Cutler, Clarence B., Schodack, N. Y. Car-coupling.....	274,569	Mar. 27	1727	420	23	1153
Cutler, Clarence B., Schodack, N. Y. Hot-air furnace.....	280,455	July 3	147	39.40	24	28
Cutler, Henry, North Willbraham, Mass. Grain drying and cooling shelf.....	277,686	May 15	1142	389	23	1885
Cutler, Henry, North Willbraham, Mass. Vertical-disk grinding-mill.....	282,328	Aug. 14	1032	290	24	692
Cutler, Horace D., Rochester, N. Y. Fire-escape.....	283,702	Aug. 21	1461	417	24	782
Cutler, James G., Rochester, N. Y. Letter-box connection.....	284,951	Sept. 11	971	273	24	1077
Cutler & Son, A. (See Cutler, Abner, assignor.)						
Cutler, Thomas O., Jersey City, N. J. Machine for grinding minerals, &c.....	278,407	May 29	2358	644	23	2060
Cutler, Thomas O., Jersey City, N. J. Grinding-mill.....	281,030	July 10	855	237	24	158
Cutten, James H., Boston, Mass., assignor to National Waterproof Shoe Company, Portland, Me. Attachment for boot and shoe sewing machines.....	275,365	Apr. 10	654	175	23	1346

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Cutter, Francis L., Brooklyn, N. Y. Card and sample holder.	275,601	Apr. 10	958	260	23	1398
Cutter, Norman W. (See Worswick and Cutter.)						
Cutter, William P., assignor of one-half to M. B. Hinds, Everett, Mass. Hatchet.	274,085	Mar. 13	1076	297	23	1096
Cutter, William T., Hastings-upon-Hudson, N. Y., assignor to International Pavement Company, of Connecticut. Paving-block.	283,329	Aug. 14	1033		24	692
Cutting, Leonard M. (See Stelle and Cutting.)						
Cutting, Robert S., Providence, R. I., and H. A. Spencer, New York, N. Y. Pen-holder.	285,578	Sept. 25	1728	489	24	1225
Cuyler, Nathan J., Oswego, N. Y. Excavator and wrecker combined.	281,844	July 24	1906	520 521	24	351
Cwerdinski, Alphonse T., St. Louis, Mo. Pencil-holder.	289,392	Dec. 4	24	8	25	891
Cypert, Jesse B., Waynesborough, Tenn. Tire-tightener.	274,179	Mar. 20	1201	330	23	1056
Cyphers, Paul. (See Johannes and Cyphers.)						
Cyr, Oliver, assignor of one-half to W. L. Charon, Haverhill, Mass. Heel-burnishing machine.						
Da Cunha, George W., Montclair, N. J. Projecting corner-piece for plastered walls.	283,381	Aug. 21	1108	313	24	712
Dable, John, Chicago, Ill. Apparatus for coating lamp-shades with silver.	280,750	Dec. 25	1764	487	25	1219
Daft, Leo, Greenville, N. J. Electric-arc lamp.	267,036	Oct. 30	2366	638	25	459
Daft, Leo, Greenville, N. J. Electric-arc lamp.	276,565	May 1	28	7	23	1632
Daft, Leo, Greenville, N. J. Electric-arc lamp.	276,566	May 1	29	8	23	1632
Daft, Leo, Greenville, N. J. Electric-arc lamp.	276,567	May 1	30	8	23	1632
Daft, Leo, Greenville, N. J. Armature for dynamo-electric machines.	276,568	May 1	31	8	23	1632
Daft, Leo, Greenville, N. J. Electric railway.	276,569	May 1	32	9	23	1633
Daft, Leo, Greenville, N. J. Armature for dynamo-electric machines.	277,119	May 8	769	202	23	1768
Daft, Leo, Greenville, N. J. Electric locomotive.	283,759	Aug. 28	1567	442	24	809
Daft, Leo, Greenville, N. J. Rail for electric railways.	283,760	Aug. 28	1568	443	24	809
Daft, Leo, Greenville, N. J. Electric locomotive.	283,761	Aug. 28	1568	443	24	809
Daft, Leo, Greenville, N. J. Electric locomotive-engine.	289,895	Dec. 11	656	183	25	1008
Daft, Leo, Greenville, N. J. Electro-magnetic brake.	289,896	Dec. 11	657	183	25	1008
Daft, Leo, Greenville, N. J. Conductor for electric railways.	289,897	Dec. 11	658	184	25	1008
Dagger, Madison, Newtown, Ind. Fence.	275,891	Apr. 17	1336	368	23	1471
Daggett, Christopher, London, England. Button and fastener.	272,123	Feb. 13	676	184	23	569
Daggett, Homer M., Jr., Attleborough, Mass. Jewelry.	279,351	June 12	927	258	23	2290
Daggett, John C., assignor to Colburn, Fuller & Co., Boston, Mass. Shoe.	289,812	Dec. 11	550	154	25	989
Dahlman, Charles. (See Dahlman, Isaac H. and C.)						
Dahlman, Isaac H. and C., New York, N. Y. Stock-car.	282,706	Aug. 7	291	82	24	550
Dagneau, Jeremiah, St. Hyacinthe, Quebec, Canada. Bark-cutter.	278,686	June 5	13	4	23	2127
Dailey, George J. (See Marin, Charles, assignor.)						
Daily, Josiah, Madison, Ind. Flavoring-extract for sirup and sugar. (Reissue)	10,285	Feb. 13	1019		23	628
Dain, Joseph, Jr., Kansas City, Mo. Horse hay-rake.	288,314	Nov. 13	647	178	25	629
Dainard, Milton, West Exeter, N. Y. Machine-table.	284,391	Sept. 4	285	79, 80	24	952
Daisley, Howard, assignor to Ray, Daisley & Co., Brooklyn, N. Y. Coal-oil stove.	270,892	Jan. 23	1315	380	23	277
Daisy Sewing Machine Company. (See Tully, T. De Quincy, assignor.)						
Dalby, George S., North Scituate, Mass. Jack for holding hoots and shoes.	282,278	July 31	2456	676	24	449
Dale, John. (See Simar and Dale.)						
Dale, Lorenzo H. (See Blood, Hiram, assignor.)						
Dale, Oliver S., and A. Barnes, Michigan City, Ind. Car-coupling.	276,005	Apr. 17	1464	404	23	1494
Dale, Samuel, Boonesborough, Iowa. Builder's scaffold or mortar-board.	283,214	Aug. 14	886	247	24	665
Dale, Samuel, Boonesborough, Iowa. Hod-elevator.	286,119	Oct. 2	416	114	25	77
Daley, Michael, Waterman, Ill. Horse hay-rake.	290,864	Dec. 25	1896	523	25	1242
Dalie, John G., Springfield, Ohio. Screw-cutting tool.	275,156	Apr. 3	360	99	23	1288
Dallas, William, et al. (See Swartout, William H., assignor.)						
Dalton, Clarence L., West Elkton, Ohio. Thill-coupling.	286,911	Oct. 16	1427	392	25	272
Dalton, James T., Central Falls, R. I. Car-coupling.	289,898	Dec. 11	659	184	25	1009
Dalton, Richard, Wilmette, Ill. Wagon.	278,408	May 29	2359	645	23	2060
Daly, Michael J., New York, N. Y., assignor to J. G. Pennyquick, Boston, Mass. Lens for vault-lights.	274,086	Mar. 13	1077	297	23	1026
Daly, Thomas J., San Francisco, Cal. Railway-switch.	277,552	May 15	1288	346	23	1859
Daly, William H. (See Oram, George C., assignor.)						
Dalzell, J. Allan, New York, N. Y. Electric-arc lamp.	274,916	Apr. 3	35	9	23	1232
Dalzell, James, Pittsburg, Pa. Manufacture of peg-lamps.	274,917	Apr. 3	37	10	23	1232
Dalzell, John H., et al. (See Haskin, Uri, assignor.)						
Dame, Charles S., Lanark, Ill. Combined hay rake and loader.	270,398	Jan. 9	691	204 205	23	144
Damon, Isaac T., et al. (See Ellis, Joseph L., assignor.)						
Damon, John A. (See Ellis, Joseph L., assignor.)						
Damp, John, Ashland, Ohio. Machine for separating grain, meal, &c.	282,707	Aug. 7	292	82, 83	24	550
Dana, Charles H., West Lebanon, N. H. Shepherd's crook.	281,243	July 17	1132	311	24	213
Dana, Charles H., Jr., West Lebanon, N. H. Calendar.	283,215	Aug. 14	887	247	24	665
Dancel, Christian, New York, N. Y. Machine for gaging and marking leather.	276,782	May 1	327	85	23	1683
Dancel, Christian, New York, assignor to Harris Button Hole Company, (limited,) Brooklyn, N. Y. Machine for making leather button-hole linings.	272,376	Feb. 13	979	273 274	23	622
Danden, Louis. (See Chertemps and Danden.)						
Dane, Joseph C., and W. L. Card, La Crosse, Wis. Amalgamator.	284,392	Sept. 4	286	80	24	952
Dantorth, Simeon C. (See Van Trump, Daniel, assignor.)						
Dantorth, Simeon C., Watson, Mo. Washing-machine.	288,552	Nov. 13	960	264	25	683
Dangler, D. A. (See Kells and Adams, assignors.)						
Dangler, David A. (See Kells, Edward, assignor.)						
Daniel, Charles, Butler, Mo. Gate-hanger.	286,912	Oct. 16	1428	392	25	272
Daniel, Ellison A., Bluff Mills, Tex. Combined chopper and cultivator.	287,251	Oct. 23	1865	510	25	357
Daniel, John W., Augusta, Ky. Aging leaf-tobacco.	269,832	Jan. 2	17	6	23	6
Daniels, Ebenezer B., East Point, Pa., and E. A. De Witt, Odessa, N. Y. Plow-sulky.	280,015	June 26	1732	486	23	2441
Daniels, Fred H., Worcester, Mass. Rolling metal rods and bars.	271,225	Jan. 30	1726	500	23	352
Daniels, Fred H., Worcester, Mass. Making wire rods.	283,469	Aug. 21	1211	340	24	731
Daniels, Fred H., Worcester, Mass. Wire-rod rolling-mill.	283,470	Aug. 21	1212	340 341	24	731
Daniels, Fred H., Worcester, Mass. Continuous rolling-mill.	287,008	Oct. 23	1551	427 428	25	299
Daniels, Fred H., Worcester, Mass. Apparatus for reeling wire rods.	290,216	Dec. 18	1046	294	25	1058
Daniels, George D., et al. (See Runsey, Charles B., assignor.)						
Daniels, George W. (See Underwood and Daniels.)						
Daniels, Henry C., et al. (See Fickett, William S., assignor.)						
Daniels, J. Edward, Holbrook, Mass. R-in-holder.	285,468	Sept. 25	1604	450	24	1201
Daniels, Thomas, Toledo, Ohio. Confectionery and pill coating and pill-rounding machine.	278,780	June 5	143	42, 43 581	23	2147
Danlies, George E., Byron, Ill. Motor.	280,297	June 26	2068	582	23	2501



*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Dann, Jesse W., Columbus, Ohio. Shaft-bending device.....	283,382	Aug. 21	1109	313	24	712
Dann, Marcus C., Minneapolis, Minn. Barrel-beater.....	288,213	Nov. 13	522	145	25	608
Dann, Marcus C., Minneapolis, Minn. Process of and apparatus for setting up double-stave barrels.....	289,393	Dec. 4	25	8	25	891
Danner, Abraham J., Bolecourt Springs, Va. Nut-lock.....	274,285	Mar. 20	1339	368	23	1080
Danner, Frederick. (See Thomas, Cordesman, and Danner.)						
Danner, John, Canton, Ohio. Show-stand.....	274,087	Mar. 13	1078	297	23	1027
Danner, John, Canton, Ohio. Book-support.....	289,394	Dec. 4	26	9	25	892
Dannhauser, Louis. (See Loewenthal, Moses, assignor.)						
Dannhorn, Max, Nuremberg, Bavaria, Germany. Musical top.....	271,428	Jan. 30	1986	573	23	399
Danz, Jacob, Jr., St. Paul, Minn. Decoy.....	282,851	Aug. 7	451	127	24	580
Danziger, Adolph, New York, N. Y., assignor of one-half to F. Siebert, Hoboken, N. J. Composing-stick.....	270,352	June 12	927	259	23	2290
Danziger, Harris, New York, N. Y. Finger-ring.....	289,511	Dec. 4	178	49	25	917
D'Aragon, Joseph M. J. A. P., Tours, France. Car-ventilator.....	280,722	July 3	459	{ 131 132 }	24	82
Darby, Thomas C., Pleshey Lodge, near Chelmsford, county of Essex, England. Digging-machine.....	276,783	May 1	329	86, 87	23	1683
Dark, Thomas, Buffalo, N. Y. Combined portable railway and working-car.....	280,802	July 10	582	162	24	109
Dark, Thomas, Buffalo, N. Y. Metal shield for tunnel-working.....	286,789	Oct. 16	1369	343	25	245
Darker, William. (See Veerkamp, Leopold, and Darker.)						
Darkin, Frank, New York, N. Y. Compound disk-engine.....	270,759	Jan. 16	1159	332	23	241
Darling, Edmund R., Woonsocket, R. I. Cartridge implement.....	272,215	Feb. 13	779	216	23	556
Darling, Edmund R., Woonsocket, R. I. Cartridge implement. (Reissue).....	10,431	Dec. 11	1009	254	25	1073
Darling, Edwin A., Hartford, Conn. Surface-gage.....	275,892	Apr. 17	1337	368	23	1471
Darling, Henry M., and A. Kitzmiller, assignors to Queen City Sewing Machine Company, Cincinnati, Ohio. Sewing-machine.....	278,687	June 5	14	4	23	2127
Darling, Horace E., Brainerd, Minn. Cigar-holder.....	270,025	Jan. 2	235	68	23	48
Darling, James, Killingly, assignor to L. Briggs, Grosvener Dale, Conn. Razor-strop.....	282,173	July 31	2333	643	24	427
Darling, James D., assignor of fifty-five one-hundredths to A. Sims, A. Pyle, W. Lindsay, and G. F. Betts, New York, N. Y. Producing alumina.....	285,579	Sept. 25	1729	.....	24	1225
Darling, John, Glasgow, county of Lanark, Scotland. Needle-threading device.....	275,157	Apr. 3	361	99	23	1289
Darling, John, and J. J. Long, Glasgow, Scotland. Match-box.....	283,579	Aug. 21	1342	374	24	755
Darling, Samuel, Providence, R. I. Micrometer.....	287,420	Oct. 30	2075	564	25	403
Darling, Samuel, Providence, R. I. Graduated measure of length.....	289,512	Dec. 4	178	49	25	917
Darling, Samuel, Providence, R. I. Micrometer-gage.....	289,513	Dec. 4	179	50	25	918
D'Arman, John A., Gadsden, Ala. Bedstead.....	284,617	Sept. 11	561	159	24	1005
Darr, Henry S. (See Mitchell, William F., assignor.)						
Darrach, Julia, Newark, N. J. Bouquet-holder.....	278,514	May 29	2489	680	23	2084
Darrach, Mattison and S. H., Bridgewater, Pa. Metal crucible.....	282,279	July 31	2457	676	24	449
Darragh, Scudder H. (See Darragh, Mattison and S. H.)						
Darrow, Charles, assignor of one-half to W. R. Boots, Marion, Ind. Drive-wheel.....	289,992	Dec. 11	774	217	25	1029
Darton, Nelson H., and D. D. Williamson, New York, N. Y. Bleaching, defecating, and preserving sugar, sirups, molasses, cane and beet-root juices, &c.....	278,104	May 22	1937	.....	23	1979
Daso, Levi, Pioneer, Ohio. Elevator.....	276,784	May 1	331	88	23	1683
Daso, Levi, Pioneer, Ohio. Elevator.....	276,785	May 1	333	88	23	1684
Dassau, Edward, Brooklyn, N. Y., assignor to W. M. Clarke, Newark, N. J. Combined stop and draw cock.....	270,399	Jan. 9	693	205	23	145
D'Aubigné, Bartolo L., Boston, Mass. Tubular rivet.....	275,158	Apr. 3	362	99	23	1289
Dauché, Charles, and P. Deniaud, La Ville en Bois, France. Machine for manufacturing metal boxes.....	281,980	July 24	2068	567	24	379
Dauchy, L. Otis. (See Ross, C. Hansen, assignor.)						
Dauchy, L. Otis. (See Ross, Christian H., assignor.)						
Daugler, David A. (See Billings, George W., assignor.)						
Davenport, Frank W., Providence, R. I. Puzzle or toy.....	277,120	May 8	770	203	23	1764
Davenport, Frank W., Providence, R. I. Ornamenting-tool.....	282,613	Aug. 7	165	50	24	529
Davenport, George W., Philadelphia, Pa. Wrench.....	279,722	June 19	1377	384	23	2372
Davenport, William H., Providence, R. I. Breech-loading gun.....	290,751	Dec. 25	1765	487	25	1219
Davey, John F., assignor to himself, M. J. Mahoney, and M. Burke, Jr., Marlborough, Mass. Device for tapping beer and other barrels.....	289,075	Nov. 27	1612	446	25	812
Davey, Martin R. (See Hancock, Albert R., assignor.)						
David, Henri. (See Suilliot and David.)						
David, Jacob, assignor of one-half to E. A. Deveau, Brooklyn, N. Y. Automatic car-brake.....	279,136	June 12	668	184	23	2248
David, Jacob, assignor of one-half to E. A. Deveau, Brooklyn, N. Y. Wantage or nillage rod.....	280,586	July 3	302	84	24	54
David, Jacob, Brooklyn, N. Y., assignor of one-half to E. A. Deveau. Hydrometer cup and thief.....	284,393	Sept. 4	288	80	24	952
David, Jacob, assignor of one-half to E. A. Deveau, Brooklyn, N. Y. Propeller for ships, &c.....	289,994	Dec. 11	776	218	25	1030
David, Marcus J., Rochester, N. Y. Bill-file.....	274,729	Mar. 27	1908	533	23	1187
David, Marcus J., Rochester, N. Y. Bill-file.....	275,602	Apr. 10	959	260	23	1399
Dauids, Charles H. (See Carlock and Dauids.)						
Dauids, Charles H., Brooklyn, assignor to himself, D. F. and M. D. Dauids, New Rochelle, N. Y. Machine for making stereotype-matrices.....	274,918	Apr. 3	38	10	23	1232
Dauids, David F., et al. (See Dauids, Charles H., assignor.)						
Dauids, May D., et al. (See Dauids, Charles H., assignor.)						
Davidson, Albert G. (See Short and Roe, assignors.)						
Davidson, George, assignor of two-thirds to D. Sheppard and A. Snow, Paris, Ontario, Canada. Trimming attachment for sewing-machines.....	284,394	Sept. 4	289	81	24	953
Davidson, Henry A., Buffalo, N. Y. Manufacture of linseed-oil.....	279,860	June 19	1537	429	23	2400
Davidson, James, Central City, Colo. Wrench.....	289,506	Dec. 4	169	46	25	916
Davidson, Salomon, New York, N. Y. Ornamental chain.....	282,280	July 31	2457	677	24	449
Davidson, William J., Big Spring, Va. Cultivator.....	282,852	Aug. 7	452	127	24	580
Davies, Edward, London, England. Apparatus for treating spent hops.....	288,553	Nov. 13	961	{ 264 265 }	25	683
Davies, Evan, Cleveland, Ohio. Double-acting steam-pump.....	287,252	Oct. 23	1866	511	25	357
Davies, Evan T., Manistee, Mich. Device for supplying steam to the cylinders of steam-engines.....	274,286	Mar. 20	1339	369	23	1050
Davies, Henry J., Brooklyn, N. Y. Alarm-clock.....	270,400	Jan. 9	693	205	23	145
Davies, Robert H., Milwaukee, Wis., assignor of three-twentieths to L. Rees, Emporia, Kans., and S. J. Davis, Newark, Ohio. Distributing printing-type.....	283,762	Aug. 28	1569	444	24	809
Davies, Thomas A., New York, N. Y. Velocipede.....	276,766	May 1	334	88, 89	23	1684
Davies, Walter D., Brooklyn, N. Y. Repeating-clock.....	278,105	May 22	1938	532	23	1979
Davis, A. B., et al. (See Davis, Nathan H., assignor.)						
Davis, Addie, Rutland, Vt. Manufacture of tufted rugs.....	285,735	Sept. 25	1931	547	24	1261

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Davis, Adolphus, Montreal, Quebec, Canada. Sleeping-car berth.....	279,137	June 12	670	184	23	2348
Davis, Albert A., Lowell, Mass. Speeder .....	272,216	Feb. 13	779	216	23	587
Davis, Alexis B., St. Louis, Mo. Top-brace for buggies.....	286,272	Oct. 9	601	165	25	120
Davis, Alfred. (See Nelson and Davis.)						
Davis, Alva. (See Bayley, John C., assignor.)						
Davis, Arthur W., Elmira, N. Y. Clamp .....	286,688	Oct. 16	1146	308	25	223
Davis, Augustus, Franklin, Ind. Straw-stacker .....	278,891	June 5	294	85	23	2173
Davis, Augustus B. and N. H., assignors of one-third to L. C. Gratz, Philadelphia, Pa. Car- axle lubricator .....	280,587	July 3	303	84	24	54
Davis, Benjamin A., Chesterfield County, Va. Telegraph-pole.....	290,752	Dec. 25	1767	487	25	1220
Davis, Benjamin F., Dallas, Tex. Straining-beam .....	284,824	Sept. 11	820	225	24	1050
Davis, Charles A., Rochester, N. Y. Paper-file .....	281,466	July 17	1412	388	24	261
Davis, Charles H., assignor to D. F. Beatty, Washington, N. J. Swell for reed-organs .....	278,515	May 29	2490	680	23	2064
Davis, Clayton N., assignor to R. C. Davis and H. D. Northup, Fort Edward, N. Y. Shirt .....	274,919	Apr. 3	44	11	23	1233
Davis, Clayton N., assignor to R. C. Davis and H. D. Northup, Fort Edward, N. Y. Shirt .....	277,553	May 15	1290	346	23	1859
Davis, Daniel, Elmira, N. Y. Vise .....	271,316	Jan. 30	1840	534	23	372
Davis, Daniel L., Harveysburg, assignor of one-half to B. Butterworth, Cincinnati, Ohio. Cane-mill .....	273,472	Mar. 6	301	82	23	885
Davis, Daniel S., Van's Valley, Ohio. Corn-planter .....	281,981	July 24	2068	567	24	379
Davis, David. (See Morgan, Ruf, and Davis.)						
Davis, David W. (See Davis, Jordan G., E. P., and D. W.)						
Davis, David W., Detroit, Mich. Refrigerator-car .....	272,124	Feb. 13	677	184	23	569
Davis, Duane T. (See Woodward, T. Trask, assignor.)						
Davis, Eber P., Witcherville, Ark. Cultivator .....	275,159	Apr. 3	362	99	23	1299
Davis, Edward G., St. Louis, Mo. Slide-valve for compound engines .....	274,571	Mar. 27	1729	480	23	1154
Davis, Edward G., St. Louis, Mo. Slide-valve for compound engines .....	279,544	June 19	1170	324	23	2336
Davis, Edward O., Youngstown, Ohio. Hoof-cleaner .....	274,570	Mar. 27	1728	480	23	1153
Davis, Epaminondas P. (See Davis, Jordan G., E. P., and D. W.)						
Davis, Eugene H. (See Wilson, Thomas L., assignor.)						
Davis, Ferdinand E., Chicago, Ill., assignor to S. Oppenheimer, New York, N. Y. Machine for cleaning intestines .....	287,253	Oct. 23	1867	511	25	357
Davis, Francis G., Worcester, Mass. Two-wheeled vehicle .....	270,285	Jan. 9	543	160	23	116
Davis, Frank P., et al. (See Simpson, Andrew J., assignor.)						
Davis, Fredric C., Auburn, Ind. Damper .....	287,637	Oct. 30	2367	638	25	459
Davis, George, Ottawa, Minn. Curing cereals .....	284,284	Sept. 4	156	.....	24	931
Davis, George, Richmond, Va. Foot-power .....	288,778	Nov. 20	1245	342	25	739
Davis, George B. (See Kirkland, William P., assignor.)						
Davis, George R. (See McCarthy and Davis.)						
Davis, Gould & Co. (See Thomas, Francis, assignor.)						
Davis, Henry A., Lowell, Mass. Work-holding device .....	281,244	July 17	1133	312	24	214
Davis, Henry T., St. Louis, Mo. Quilting-frame .....	271,688	Feb. 6	124	34	23	461
Davis, Henry T., St. Louis, Mo. Quilting-frame for sewing-machines .....	271,689	Feb. 6	124	34	23	461
Davis, Henry T., St. Louis, Mo. Quilting attachment for sewing-machines .....	271,690	Feb. 6	125	35	23	461
Davis, Henry T., St. Louis, Mo., assignor to Davis Quilting Frame Company, New York, N. Y. Quilting attachment for sewing-machines .....	289,395	Dec. 4	27	9	25	892
Davis, Isaac B., Hartford, Conn. Direct-acting engine .....	282,503	Aug. 7	32	10	24	506
Davis, James B., Washington, D. C. Car-coupling .....	280,016	June 26	1734	466	23	2441
Davis, James I. (See Hawley and Davis.)						
Davis, James Q., Wimsborough, and N. O. Pyles, Coronoco, S. C. Blotter .....	290,668	Dec. 25	1645	453	25	1197
Davis, Jarvis E., Union, Ore. Fire-escape .....	271,429	Jan. 30	1988	574	23	399
Davis, Jeffrey M., Youngstown, Ohio. Fire-escape .....	287,910	Nov. 6	150	44	25	534
Davis, John, New Bedford, Mass. Machine-wrench .....	289,396	Dec. 4	28	9	25	892
Davis, John H., assignor of one-half to H. Adams, Covington, Ky. Cast-jointed tool .....	271,043	Jan. 23	1502	433	23	306
Davis, John M. (See Folmer, John, assignor.)						
Davis, John M., and D. H. Brown, Lincoln, Va. Mechanical power .....	280,357	July 3	23	6	24	6
Davis, John O., Hartford, Conn. Pump-piston .....	272,662	Feb. 20	1361	362	23	693
Davis, John R., C. M. Wyrick, and S. Parker, Moundsville, W. Va. Composition for walls .....	288,694	Nov. 20	1142	.....	25	721
Davis, John S., Frankfort, Ky. Baling-press .....	285,237	Sept. 18	1327	374	24	1146
Davis, John S., Toledo, Ohio. Grain-carrier for harvesters .....	285,580	Sept. 25	1731	489 490	24	1225
Davis, John S., Toledo, assignor to Toledo Mower and Reaper Company, Lucas County, Ohio. Harvester .....	272,217	Feb. 13	780	216 217	23	587
Davis, John S., Toledo, assignor to Toledo Mower and Reaper Company, Lucas County, Ohio. Harvester .....	272,377	Feb. 13	982	275 276	23	623
Davis, John S., assignor to Toledo Mower and Reaper Company, Toledo, Ohio. Harvester .....	271,430	Jan. 30	1989	574 575	23	399
Davis, John S., assignor to Toledo Mower and Reaper Company, Toledo, Ohio. Grain- binder .....	274,441	Mar. 20	1537	423 424	23	1114
Davis, John S., assignor to Toledo Mower and Reaper Company, Toledo, Ohio. Grain-bind- ing harvester .....	275,330	Apr. 3	569	155 156 157 158	23	1322
Davis, John S., assignor to Toledo Mower and Reaper Company, Toledo, Ohio. Harvester- reel .....	277,996	May 22	1812	495	23	1957
Davis, John S., assignor to Toledo Mower and Reaper Company, Toledo, Ohio. Band-se- curing mechanism for grain-binders .....	279,082	June 5.	573	158	23	2222
Davis, John S., assignor to Toledo Mower and Reaper Company, Toledo, Ohio. Band-se- curing mechanism for grain-binders .....	282,445	July 31	2676	734	24	488
Davis, John S., assignor to Toledo Mower and Reaper Company, Toledo, Ohio. Gaveling mechanism for grain-binders .....	283,866	Aug. 28	1687	476	24	829
Davis, John T., Rahway, N. J., and I. Stead, Philadelphia, Pa.; said Davis assignor to said Stead. Amalgamator .....	281,982	July 24	2070	567	24	379
Davis, John T., assignor to L. J. Pouvert, New York, N. Y. Refrigerating and ice machine .....	287,912	Nov. 6	153	45	25	535
Davis, Jordan G., E. P., and D. W., Mount Calm, Tex. Washing compound .....	278,409	May 29	2360	.....	23	2061
Davis, Joseph, Brooklyn, N. Y. Bottle-case .....	281,845	July 24	1908	521	24	351
Davis, Joseph, Brooklyn, N. Y., assignor to Davis Oil Company, of New York. Refining fat-oils .....	273,636	Feb. 27	1844	.....	23	784
Davis, Joseph W., Port Jefferson, N. Y. Road-scraper .....	285,581	Sept. 25	1735	490	24	1226
Davis, Joshua E. (See Fisher, Edward F., assignor.)						
Davis, Leonard L., Springfield, Mass. Spirit level and plumb .....	288,624	Nov. 20	1053	290	25	706
Davis, Levi, Jr., Alton, Ill. Car-coupling .....	271,609	Feb. 6	32	8	23	446
Davis, Levi, Jr., Alton, Ill. Car-coupling .....	277,466	May 15	1182	317	23	1843
Davis, Lowellyn D., Salt Lake City, Utah Ter. Hoisting-car .....	290,404	Dec. 18	1281	366	25	1129
Davis, Lewis, Jackson, Ohio. Saw-clamp .....	275,603	Apr. 10	960	260	23	1399



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Davis, Marks C., Indianapolis, Ind. Device for adjusting clock-pendulums .....	278,781	June 5	145	43	23	2147
Davis, Michael F., Portland, Me. Row-boat .....	282,853	Ang. 7	452	128	24	580
Davis, Michael F., Portland, Me. Rowlock .....	282,854	Ang. 7	454	128	24	580
Davis, Michael F., Portland, Me. Row-boat seat .....	282,855	Ang. 7	456	129	24	581
Davis, Michael F., Portland, Me. Orr .....	282,856	Ang. 7	457	130	24	581
Davis, Milton G. (See Wilson and Davis.)						
Davis, Moses M. (See Fitch, Lauren M., assignor.)						
Davis, Nathan H. (See Davis, Augustus B. and N. H.)						
Davis, Nathan H., assignor of two-thirds to A. B. Davis and L. C. Gratz, Philadelphia, Pa. Car-axle box .....	273,473	Mar. 6	302	82	23	885
Davis, Nathan H., assignor of one-third to L. C. Gratz, Philadelphia, Pa. Car-spring .....	287,638	Oct. 30	2368	639	25	459
Davis, Nathan H., assignor of one-third to L. C. Gratz, Philadelphia, Pa. Car-spring .....	287,639	Oct. 30	2369	639	25	459
Davis, Nathan H., assignor of one-third to L. C. Gratz, Philadelphia, Pa. Car-spring .....	287,640	Oct. 30	2369	639	25	460
Davis, Nicholas H., Brooklyn, N. Y. Clutch and reversible pawl for sewing-machines, &c. Davis Oil Company. (See Davis, Joseph, assignor.)	270,893	Jan. 23	1317	380	23	277
Davis, Oscar. (See Phipps, Azor J., assignor.)						
Davis, Philip Z. (See Barton and Davis.)						
Davis Quilting Frame Company. (See Davis, Henry T., assignor.)						
Davis, Rees O., Milan, Mo. Hay-riking device .....	276,673	May 1	176	45	23	1654
Davis, Robert W., assignor to Carbonate Mining Company, Elmira, N. Y. Commercial putty .....	271,973	Feb. 6	471		23	523
Davis, Robert W., assignor to Davis Wrench Company, Elmira, N. Y. Wrench .....	286,913	Oct. 16	1429	393	25	272
Davis, Russell C., et al. (See Davis, Clayton N., assignor.)						
Davis, Samuel. (See Curtis, Dudley W., assignor.)						
Davis, Samuel. (See Wilson, Thomas L., assignor.)						
Davis, Samuel J., et al. (See Davies, Robert H., assignor.)						
Davis Sewing Machine Company. (See Carlisle, William S., assignor.)						
Davis Sewing Machine Company. (See Fellows, Edgar D., assignor.)						
Davis, Stephen A., and R. Blake, Newark, N. J., assignors to Superior Drive Screw Com- pany, New York, N. Y. Machine for swaging screw-threads .....	279,353	June 12	928	259 260	23	2290
Davis, Stephen A., and R. Blake, Newark, N. J. Screw-swaging machine .....	280,723	July 3	461	132	24	82
Davis, Thomas E. (See Martin, Watts, assignor.)						
Davis, Webster, Atlanta, Ga. Apparatus for packing and transporting melons .....	287,106	Oct. 23	1682	461	25	325
Davis, Webster, Atlanta, Ga. Packing and transporting melons .....	289,993	Dec. 11	775	218	25	1030
Davis, Wilbur H., Lynn, Mass., and A. A. Hawley, Baltimore, Md., assignors to Merino Shoe Company, Boston, Mass. Stocking, sock, and slipper .....	287,807	Nov. 6	21	7	25	511
Davis, Wilbur H., Lynn, and A. A. Hawley, Merrimac, assignors to Merino Shoe Company, Boston, Mass. Felted woolen sock or stocking .....	287,808	Nov. 6	21	7	25	511
Davis, William E., Meadville, Pa. Pillow-sham holder and mosquito-bar .....	270,578	Jan. 16	926	268	23	198
Davis, William E., Jersey City, N. J. Telegraph-sounder .....	273,264	Mar. 6	24	8	23	838
Davis, William H., Verona, Miss. Driving machinery for cotton-gins, mills, &c. ....	277,240	May 8	912	244	23	1789
Davis, William J. (See Callahan, Amos, assignor.)						
Davis, William J., et al. (See Harvey, John, assignor.)						
Davis, William P., North Bloomfield, N. Y. Key-seat-cutting machine .....	274,287	Mar. 20	1340	369	23	1080
Davis, William T., Battle Creek, Mich. Three-barreled gun .....	278,688	June 5	17	5	23	2127
Davis, Willsire M., Remington, Ind. Bed-spring .....	277,121	May 8	771	203	23	1764
Davis Wrench Company. (See Davis, Robert W., assignor.)						
Davis, Zebulon, Canton, Ohio. Vapor-burner .....	269,833	Jan. 2	18	6	23	6
Davis, Zebulon, Canton, Ohio. Vapor-burner .....	269,834	Jan. 2	19	6	23	6
Davis, Zebulon, Canton, Ohio. Vapor-burner .....	287,911	Nov. 6	151	44	25	534
Davis, Zebulon, Canton, assignor to G. E. Herrick, Cleveland, Ohio. Vapor-stove. (Reis- sue) .....	10,355	July 10	1103	304	24	202
Davison, Charles E., London, England. Car brake and starter .....	270,286	Jan. 9	544	160 161	23	116
Davison, Christopher S., et al. (See Miller, David W., assignor.)						
Davison, Henry J. (See Harrison, John F., assignor.)						
Davison, William. (See Arthur, Spaulding, and Davison.)						
Davison, George W., St. Louis, Mo. Smoke-consuming furnace .....	288,554	Nov. 13	962	265	25	683
Davison, William J., Farmland, assignor of one-half to J. A. Botkin, Swain's Bill, Ind. Machine for making wire fabrics .....	289,507	Dec. 4	170	46 47 48	25	916
Daval, Joseph. (See Turner, William A., assignor.)						
Davy, Peter B., et al. (See Howland, George H., assignor.)						
Daw, George O., New York, N. Y. Mechanism for raising lines to the upper parts of build- ings .....	283,580	Aug. 21	1343	375	24	755
Dawson, Artemas L., assignor of one-half to C. H. Freeman, Elk Point, Dak. Ter. Fish- hook .....	289,508	Dec. 4	172	48	25	916
Dawson, Artemas L., assignor of one-half to C. H. Freeman, Elk Point, Dak. Ter. Ma- chine for attaching metal collars to lamps .....	289,509	Dec. 4	174	48, 49	25	916
Dawson, Artemas L., assignor of one-half to C. H. Freeman, Elk Point, Dak. Ter. Lamp .....	289,510	Dec. 4	177	49	25	917
Dawson, Edward. (See Read and Dawson.)						
Dawson, Edward, Auburn, Ill., assignor to J. W. Penfield, Willoughby, Ohio. Brick-fork .....	276,366	Apr. 24	1924	533	23	1580
Dawson, Eugene C., Maquoketa, Iowa. Snow-plow .....	281,031	July 10	856	238	24	158
Dawson, Ezekiel W., Smyrna, Del. Hedge-trimming machine .....	290,865	Dec. 25	1898	524	25	1243
Dawson, George, Cardington, Ohio. Overall .....	278,106	May 22	1939	532	23	1979
Dawson, James. (See Rowe, Holmes, and Dawson.)						
Dawson, James, San Francisco, Cal. Lifting-jack .....	278,317	May 29	2237	613	23	2039
Dawson, John B. (See Smith, John T., assignor.)						
Dawson, William M., and R. A. Simpson, Belvidere, Ill. Whiffletree-plate .....	281,032	July 10	857	238	24	159
Dawson, William M., R. A. Simpson, and L. S. Longcor, Belvidere, Ill. Billiard-table lev- eler .....	287,913	Nov. 6	155	45	25	535
Day, George W., Haverhill, Mass. Manufacture of boots and shoes .....	284,188	Sept. 4	36	9	24	911
Day, George W., Haverhill, Mass. Machine for flattening and smoothing channel-flaps .....	286,790	Oct. 16	1270	344	25	245
Day, Jennie W. (See Slocumb and Day.)						
Day, John, Brooklyn, N. Y. Curtain-pin .....	275,160	Apr. 3	363	100	23	1289
Day, John, Brooklyn, N. Y. Support for cornice-poles .....	278,892	June 5	295	85	23	2174
Day, John B., and T. J. Gregory, Cornell, Ill. Cultivator .....	285,469	Sept. 25	1605	451	24	1202
Day, John Q., Red Cliff, Colo. Railway snow-plow .....	282,281	July 31	2458	677	24	449
Day, Reason. (See Day, Samuel and R.)						
Day, Robert E. (See Lord and Day.)						
Day, Samuel and R., Delavan, Ill. Cultivator .....	274,920	Apr. 3	44	11	23	1232
Day, Samuel and R., Delavan, Ill. Vehicle-wheel .....	284,724	Sept. 11	701	196	24	1029
Day, Thomas, Boston, Mass. Roller-skate .....	279,138	June 12	671	184	23	2248

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Day, Thomas, assignor of one-half to E. Brimhall, Chicago Ill. Galley-rest.....	270,207	Jan. 9	451	132	23	99
Day, Thomas H., San Francisco, Cal. Machine for making ice and producing cold.....	285,879	Oct. 2	127	36	25	25
Day, Willard G., Baltimore, Md. Thermostat.....	277,241	May 8	912	244	23	1789
Dayton, Aaron O., Williamsport, Pa. Seal-lock.....	275,026	Apr. 3	193	51	23	1258
Dayton, Charles L., Meriden, Conn. Mitering-machine.....	270,026	Jan. 2	236	68	23	49
Dayton, William M., assignor to himself and W. S. Bemis, Waupaca, Wis. Railway-rail.....	289,628	Dec. 4	315	88	25	943
D'Ewart, W. John. (See Hall, Whitcomb, and D'Ewart.)						
De Abreu, Manuel T., St. Helena, Cal. Apparatus for maturing sherry-wine.....	277,554	May 15	1291	{ 346 347 }	{ 23 }	1859
De Barbeyrac, Marie G. (See Roussan and De Barbeyrac.)						
De Beaumont, Alexandre, assignor of one-half to S. Sherburne, Philadelphia, Pa. Device for ripping the seams of garments.....	288,031	Nov. 6	305	86	25	559
De Bevoise, Abram. (See Lumbye and De Bevoise.)						
De Bevoise, Alfred. (See Bonn and De Bevoise.)						
De Bolt, Washington. (See Sawyer, James, assignor.)						
De Bondini, Cher P., Constantinople, Turkey. Oven.....	281,620	July 17	1605	439	24	292
De Bow, Charles E., Albion, Mich. Laryngoscope.....	281,033	July 10	857	238	24	159
De Castro, Hector, New York, N. Y., assignor to J. W. Mackay, Virginia City, Nev. Manufacture of soap.....	288,412	Nov. 13	793	215	25	654
De Castro, Jules. (See Bang and De Castro.)						
De Caunes, Armand, Orpilleres, France. Pruning-shears.....	289,995	Dec. 11	777	218	25	1030
De Cew, William, Buffalo, N. Y. Car-coupling.....	274,180	Mar. 20	1202	331	23	1056
De Chaligny, Frédéric S. (See Chaine, Durand, and De Chaligny.)						
De Clercq, Augustus M. (See Shone, George, assignor.)						
De Codozo, Thomas, New York, N. Y. Combined eye-rest and screen for photographers.....	270,401	Jan. 9	695	205	23	145
De Courtenay, Henry W., Boston, Mass. Shoe-calk.....	285,582	Sept. 25	1736	490	24	1226
De Courtenay, Henry W., Boston, Mass. Miter-box and jack-board.....	285,583	Sept. 25	1737	490	24	1227
De Ferranti, Sebastian Z., Richmond Gardens, Shepherd's Bush, and A. Thompson, Guildford Place, Russell Square, county of Middlesex, England. Dynamo-electric machine.....	282,446	July 31	2682	735	24	488
De Ferranti, Sebastian Z., Richmond Gardens, Shepherd's Bush, and A. Thompson, Guildford Place, Russell Square, county of Middlesex, England. Apparatus for measuring electric currents.....	282,447	July 31	2684	736	24	488
De Ferranti, Sebastian Z., Richmond Gardens, Shepherd's Bush, and A. Thompson, Guildford Place, Russell Square, county of Middlesex, England. Apparatus for regulating electric currents.....	288,315	Nov. 13	648	{ 178 179 }	{ 25 }	629
De Ferranti, Sebastian Z., Richmond Gardens, Shepherd's Bush, and A. Thompson, Guildford Place, Russell Square, county of Middlesex, England. Dynamo-electric machine.....	288,316	Nov. 13	651	{ 179 180 181 }	{ 25 }	629
De Forest, David W., Brooklyn, assignor to De Forest Manufacturing Company, New York, N. Y. Press.....	270,936	Jan. 23	1371	396	23	286
De Forest Manufacturing Company. (See De Forest, David W., assignor.)						
De Forest, O. Lansing, Janesville, Wis. Road.....	282,283	July 31	2460	677	24	450
De Funiak, F., et al. (See Le Grande, William W., assignor.)						
De Gaetano, Stephen, New York, N. Y., assignor, by mesne assignments, to United States Standard Billiard Table Company, of New York. Billiard-cushion. (Reissue).....	10,322	May 8	1142	307	23	1829
De Garis, John J., and T. L. Paine, Milwaukee, Wis. Bill-journal.....	289,514	Dec. 4	180	50	25	918
De Good, Alexander K., Millsborough, Pa. Washing-machine.....	271,317	Jan. 30	1841	535	23	372
De Groff, William E., Philadelphia, Pa. Necktie-retainer.....	288,695	Nov. 20	1143	314	25	721
De Kay, William H., Parksville, N. Y. Axle-lubricator.....	279,355	June 12	930	260	23	2291
De La Bar, George. (See Fletter, Henry, assignor.)						
De La Granja, E., et al. (See Chase, Milton, assignor.)						
De La Vergne, John C. and W. M. Mixer, assignors to De La Vergne & Mixer Refrigerating Company, New York, N. Y. Apparatus for condensing gases or vapors.....	275,367	Apr. 10	655	175	23	1346
De La Vergne & Mixer Refrigerating Company. (See De La Vergne and Mixer, assignors.)						
De Lalande, Felix, Paris, France, and G. Chaperon, Mines d'Aiosno, Spain. Galvanic battery.....	274,110	Mar. 20	1114	308	23	1040
De Lamater, J. B. (See Stilson, Edward B., assignor.)						
De Lamater, William, assignor of two-thirds to A. Erwin, Burlingame, and W. C. Edwards, Topeka, Kans. Explosion-protector for safes.....	269,920	Jan. 2	113	33	23	23
De Lancey, John J., Binghamton, N. Y. Balanced slide-valve.....	284,395	Sept. 4	291	81	24	953
De Laski, Albert, and E. Shaw, Lynn, Mass., assignors to said Shaw, trustee. Hat-iron- ing machine.....	273,670	Mar. 6	550	{ 140 147 }	{ 23 }	928
De Laval, Gustaf, Stockholm, Sweden. Reducing friction of vessels in water.....	280,913	July 10	707	199	24	131
De Laval, Gustaf, Stockholm, Sweden. Turbine for steam and other motive power.....	285,584	Sept. 25	1738	491	24	1227
De Luze, Louis P., New Rochelle, N. Y., assignor of one-half to G. W. Hunt, Philadelphia, Pa. Device for catching insects.....	289,997	Dec. 11	779	219	25	1030
De Meza, Wilson, assignor to Donaldson Brothers, New York, N. Y. Advertising device.....	272,533	Feb. 20	1197	334	23	664
De Melzer, Camille, Santa Clara, Cal. Motor.....	289,899	Dec. 11	661	185	25	1009
De Motos, James S., New York, N. Y., assignor to American Gas Saving Company, of New York. Gas-regulator.....	274,733	Mar. 27	1912	534	23	1188
De Pew, Henry H., Maquoketa, Iowa. Apparatus for the treatment of uterine displacement and bernia.....	275,368	Apr. 10	657	{ 175 176 }	{ 23 }	1347
De Puy, Clarence, and E. H. Burghardt, Rochester, N. Y. Machine for slicing apples.....	269,835	Jan. 2	20	7	23	6
De Puydt, Paul, Brussels, Belgium. Machinery for decorticating fibrous substances.....	289,999	Dec. 11	780	{ 219 220 }	{ 25 }	1031
De Quillfeldt, Charles, New York, N. Y. Spring curtain-roller.....	271,691	Feb. 6	126	35	23	462
De Quillfeldt, Charles, New York, N. Y. Curtain-pole angle-piece.....	274,572	Mar. 27	1730	481	23	1154
De Quillfeldt, Charles, New York, N. Y. Fork attachment for pickle-jars.....	277,407	May 15	1184	318	23	1843
De Quillfeldt, Charles, New York, N. Y. Advertising-fan.....	278,410	May 29	2361	645	23	2061
De Quillfeldt, Charles, assignor to T. H. Hall, New York, N. Y. Paper box.....	271,975	Feb. 6	473	129	23	523
De Quillfeldt, Charles, assignor to Donaldson Brothers, New York, N. Y. Reticule.....	271,974	Feb. 6	472	{ 128 129 }	{ 23 }	523
De Quillfeldt, Charles, assignor to Donaldson Brothers, New York, N. Y. Paper pocket-book.....	276,961	May 1	561	146	23	1722
De Quillfeldt, Charles, assignor to Donaldson Brothers, New York, N. Y. Paper card-case.....	276,962	May 1	562	146	23	1722
De Quillfeldt, Charles, assignor to Wemple & Co., New York, N. Y. Paper pocket-book.....	289,515	Dec. 4	181	50	25	918
De Rache, P. J. Leonard, New York, N. Y. Fire-proof ceiling.....	281,467	July 17	1413	388	24	261
De Redon, Constant P., assignor to C. Moreau, Paris, France. Electric bell.....	274,573	Mar. 27	1731	481	23	1154
De Rycke, J. Joseph, New York, N. Y. Adjustable elevator-platform for vessels for carrying railway-cars.....	283,218	Aug. 14	889	248	24	666
De Saisset, Pédre, San José, Cal. Mast for illuminators.....	283,581	Aug. 21	1344	375	24	755
De Silveira, Herbert A., assignor of one-half to P. Bigelow, New York, N. Y. Indexing books.....	283,383	Aug. 21	1110	313	24	712



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De Smedt, Edward J., Washington, D. C. Manufacturing Portland cement	274,288	Mar. 20	1342	.....	23	1080
De Smedt, Edward J., Washington, D. C. Manufacture of Portland cement	274,734	Mar. 27	1913	.....	23	1188
De Smedt, Edward J., Washington, D. C. Manufacture of Portland cement	274,735	Mar. 27	1915	.....	23	1188
De Smedt, Edward J., Washington, D. C. Refining asphaltum	286,396	Oct. 9	778	210	25	152
De Smedt, Edward J., Washington, D. C., assignor to Cumberland Hydraulic Cement and Manufacturing Company, Cumberland, Md. Hydraulic-cement compound	275,369	Apr. 10	658	.....	23	1347
De Smedt, Edward J., Washington, D. C., assignor of one-fourth to J. M. Wilcox, Philadelphia, Pa. Manufacturing Portland cement	279,357	June 12	932	.....	23	2291
Do Soldenboff, Richard, Merthyr-Tydvil, county of Glamorgan, England. Coke-oven	273,822	Mar. 13	758	206	23	972
Do Souza, Julio C. R., Para, Brazil. Apparatus for aerial navigation	280,914	July 10	708	199	24	131
De Steiger, Joseph L., La Salle, Ill. Fruit-jar	278,803	June 5	296	86	23	2174
De Steiger, Joseph L., La Salle, Ill. Fruit-jar	288,933	Nov. 27	1497	414	25	792
De Tamber Martin, assignor to Roth, McMahon & Co., Chicago, Ill. Cake, jumble, and snap machine	278,318	May 29	2238	{ 614 615 }	{ 23 23 }	2039
De Tray, Frederick H., and R. D. Vermilya, McClure, Ohio. Knockdown table	270,579	Jan. 16	927	268	23	199
De Voursney, Abraham P., Montclair, N. J. Form or mold for bending glass	280,143	June 26	1882	529	23	2468
De Vries, Jelle A., assignor of two-thirds to L. and D. Krindenier, Pella, Iowa. Dropping attachment for corn-planters	290,322	Dec. 18	1181	331	25	1110
De Vry, John V. (See McCall and De Vry.)						
Do Windt, Heyliger A., Chicago, Ill. Game apparatus for playing parlor-quoits	285,396	Sept. 25	1519	428	24	1186
De Witt, Edward A. (See Daniels and De Witt.)						
De Witt, Emil F., assignor to S. Palmer, Lansingburg, N. Y. Curtain-guide	275,163	Apr. 3	365	100	23	1289
De Witt, James M., assignor to himself, J. W. and S. F. McCreery, Greeley, Colo. Car-brake	274,738	Mar. 27	1918	535	23	1188
Deal, William M., assignor to himself, J. W. Courtney, and R. F. Frankenfield, Philadelphia, Pa. Balanced slide-valve	283,216	Aug. 14	888	247	24	665
Dean, Albert H., and S. H. Whiting, assignors of one-third to C. A. Gerdenier, Bridgeport, Conn. Railway time-recorder	279,723	June 19	1378	385	23	2373
Dean, Benajah L., Brockton, Mass. Machine for trimming shoe-soles	282,857	Aug. 7	459	130	24	561
Dean, Charles W., assignor of one-half to E. Robinson, South Wareham, Mass. Manufacture of plumbers' hooks	279,228	June 12	765	211	23	2264
Dean, Cyrus S., Fort Erie, assignor to E. Morris, Cowland, Ontario, Canada. Pump	288,030	Nov. 6	303	86	25	559
Dean, Edward C., Washington, D. C., assignor to National Secret Telephone Company, New York, N. Y. Circuit-closer for telephone-receivers	271,610	Feb. 6	33	8	23	446
Dean, George, St. Louis, Mo. Machine for amalgamating and concentrating ores	273,969	Mar. 13	933	{ 256 257 }	{ 23 23 }	1002
Dean, George, St. Louis, Mo. Amalgamator	286,791	Oct. 16	1270	344	25	245
Dean, George S., Independence, Iowa, assignor of one-half to R. H. Wiles, Freeport, Ill. Wire-stretcher	281,673	July 24	1677	457	24	310
Dean, J. E. (See Furman, Alonzo B., assignor.)						
Dean, Porcius F., Watsonville, Cal. Sully	285,238	Sept. 18	1338	374	24	1147
Dean, Richard, assignor to J. B. Meriam, Cleveland, Ohio. Apparatus for distillation	290,866	Dec. 25	1900	524	25	1243
Dean, Samuel S., Mingo Junction, Ohio. Feeding attachment for nail-plate feeders	288,982	Nov. 27	1495	414	25	792
Dean, William B., New York, N. Y. Label for bottles	289,813	Dec. 11	551	154	25	989
Dean, William B., New York, N. Y. Combined stopper, cap, and label for bottles	289,814	Dec. 11	551	154	25	989
Deane, Charles P., Springfield, Mass. Steam pumping-engine	288,214	Nov. 13	523	145	25	608
Dearborn, Charles A., assignor to Empress Sewing Machine Company, Chicago, Ill. Bobbin-winder for sewing-machines	274,088	Mar. 13	1079	297	23	1027
Dearborn, George W., East Boston, Mass. Window-jack	280,893	July 10	584	163	24	110
Dearborn, George W., Boston, Mass. Sleigh	282,963	Aug. 14	578	163	24	610
Dearborn, Huldah A., Austin, Minn. Combined ironing and cutting table	282,708	Aug. 7	294	83	24	551
Dearborn, Richard J., Boston, Mass. Fire-escape	271,899	Feb. 6	271	75	23	488
Debaveaux, Auguste, Paris, France. Balloon or aerial machine	282,060	July 31	2171	596	24	402
Debolt, Levi, Jr., Kingston Centre, Ohio. Sleigh	272,532	Feb. 20	1196	334	23	664
Debottleville, Edouard F. D., Rouen, France. Machine for shaping, drilling, boring, and facing metals	275,604	Apr. 10	960	261	23	1399
Decastro, Jacob W. (See Müller and Decastro.)						
Decastro, Jacob W., Mahwah, N. J. Making condensed milk	274,469	Mar. 27	1581	.....	23	1130
Decastro, Jacob W., Mahwah, N. J. Converting starch into glucose	279,354	June 12	930	.....	23	2291
Decastro, Jacob W., and T. H. Müller, New York, N. Y. Apparatus for separating bodies of different specific gravities	273,037	Feb. 27	1844	516	23	784
Decastro, Jacob W., and T. H. Müller, New York, N. Y. Apparatus for separating bodies of different specific gravities	273,038	Feb. 27	1845	{ 516 517 }	{ 23 23 }	785
Decker, Alexander C., assignor of one-half to J. and P. Ayres, Bushnell, Ill. Wire-stretcher	288,166	Nov. 6	458	128	25	587
Decker, James, Surrency, Ga. Rice-beater	271,810	Feb. 6	273	75	23	488
Decker, John C. (See Blackall and Decker.)						
Decker, William J., New York, N. Y. Mechanical puzzle	286,395	Oct. 9	778	210	25	152
Decker, William J., assignor to himself and J. J. Lydecker, New York, N. Y. Folding chair	274,730	Mar. 27	1909	533	23	1187
Decker, William N., Columbus, Ohio. Automatic valve for water-closets	288,167	Nov. 6	459	129	25	588
Dederick, Levi, Albany, N. Y., assignor of one-half to E. H. Reynolds, Newark, N. J. Machine for stretching and drying hides	287,009	Oct. 23	1553	428	25	299
Dedrick, Peter K., Albany, N. Y. Baling-press	270,760	Jan. 16	1160	332	23	242
Dederick, Peter K., Albany, N. Y. Baling-press	271,811	Feb. 6	273	75	23	489
Dederick, Peter K., Albany, N. Y. Baling-press	271,812	Feb. 6	275	76	23	489
Dederick, Peter K., Londonderry, N. Y. Binding bales of pressed hay, cotton, &c	275,366	Apr. 10	654	175	23	1346
Dederick, Peter K., Londonderry, N. Y. Baling-press	280,456	July 3	150	40	24	28
Dederick, Peter K., Londonderry, N. Y. Baling-press	287,107	Oct. 23	1684	461	25	325
Dedman, Thomas M., Des Moines, Iowa. Weather-boarding gage, clamp, and saw-guide	277,890	May 22	1686	460	23	1935
Deeds, John B., assignor of one-half to A. Grimes, Terre Haute, Ind. Lamp-burner and chimney-holder	273,039	Feb. 27	1846	517	23	785
Deeds, John B., assignor of one-half to W. Mack, Terre Haute, Ind. Lamp or torch	274,731	Mar. 27	1910	533	23	1187
Deeds, John B., assignor of one-half to W. Mack, Terre Haute, Ind. Wick-raiser for lamps	282,282	July 31	2459	677	24	450
Deeds, John B., assignor of one-half to W. Mack, Terre Haute, Ind. Wick adjuster and trimmer for lamps	283,217	Aug. 14	889	248	24	666
Deeds, John B., and W. Mack, Terre Haute, Ind. Wick-raiser	276,525	Apr. 24	2124	591	23	1614
Deeds, John B., and W. Mack, Terre Haute, Ind. Lid for miners' lamps	281,846	July 24	1910	521	24	351
Deeds, John B., and W. Mack, Terre Haute, Ind. Slate and window cleaner	287,254	Oct. 23	1869	511	25	358
Deeg, Martin, Owatonna, Minn. Wagon-reach	275,331	Apr. 3	588	158	23	1326
Deegan, John, et al. (See O'Malley, Thomas M., assignor.)						
Deegan, Mathew F., assignor of one-half to H. Hooper, Chicago, Ill. Construction and ventilation of sanitary devices, &c	270,761	Jan. 16	1161	332	23	242
Deeley, John, Jr., Birmingham, county of Warwick, and J. S. Edge, Jr., Yardley, county of Worcester, England. Breech-loading fire-arm	275,605	Apr. 10	964	262	23	1399

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Deems, Gilbert C. (See Lambert and Deems.)						
Deere & Mansur Company. (See Phelps, Byron, assignor.)						
Deering, James, South Paris, Me., and D. R. Symonds, Plano, Ill. Grain-binder.....	274,111	Mar. 20	1116	308	23	1040
Deering, William. (See Carver, George H., assignor.)						
Deering, William. (See Creighton, James P., assignor.)						
Deering, William. (See Olin, William F., assignor.)						
Deering, William. (See Spaulding, George H., assignor.)						
Deering, William. (See Webster, John W., assignor.)						
Deering, William, Louisville, Ky. Cotton-gin rib.....	289,996	Dec. 11	778	219	25	1030
Dees, Mark A., Moss Point, Miss. Locomotive.....	272,218	Feb. 13	784	<sup>217</sup> 218	23	588
Deeves, Richard. (See Bandman, Charles J., assignor.)						
Degaris, Albert. (See Welling, John E., assignor.)						
Degenhart, Charles, Covington, Ky. Ferrule for canes, &c.....	281,245	July 17	1134	312	24	214
Dégrange, Claude, Lyons, France. Cart-wheel.....	283,867	Aug. 28	1690	477	24	830
Dehney, William H., Rochester, N. Y. Combined plumb, square, and level.....	280,358	July 3	23	6, 7	24	6
Deidrick, William H., Selma, Cal. Dirt-scraper.....	275,893	Apr. 17	1338	368	23	1471
Deimel, Gustave, Hancock, Mich. Trunk.....	284,825	Sept. 11	821	229	24	1050
Deitzler, George W., San Francisco, Cal. Evaporative cooler.....	271,813	Feb. 6	277	76	23	489
Dejonge, Louis, Jr., Stapleton, N. Y. Machine for winding paper.....	281,034	July 10	858	239	24	159
Del Bondio, Emile F., New Orleans, La. Butter-worker.....	276,006	Apr. 17	1465	404	23	1494
Del Valle, Eliseo, Ponce, Porto Rico. Boiler-feeder.....	285,585	Sept. 25	1739	494	24	1227
Delaboue, Louis A., Lille, Nord, France. Bleaching threads and fabrics.....	280,141	June 26	1880	.....	23	2468
Delafield, A. Floyd, Noroton, Conn. Dynamo-electric machine.....	278,516	May 29	2491	680	23	2084
Delafield, A. Floyd, Noroton, Conn. Electric battery.....	287,641	Oct. 30	2371	639	25	460
Delamater, Cornelius H., et al. (See Miller, James, assignor.)						
Delamater, Cornelius H., et al. (See Reynolds, George H., assignor.)						
Delamater, William, et al. (See Reynolds, George H., assignor.)						
Deland, Edward E., Brady, Tex. Shepherd's crook.....	275,161	Apr. 3	364	100	23	1289
Delano, Clarence C., Musson, La. Car-coupling.....	277,242	May 8	913	245	23	1789
Delany, Patrick B. (See Calahan and Delany.)						
Delany, Patrick B., New York, N. Y. Electric cable.....	283,763	Aug. 28	1570	444	24	810
Delany, Patrick B., New York, N. Y. Electrical conductor.....	283,764	Aug. 28	1571	444	24	810
Delany, Patrick B., New York, N. Y. Electrical conductor.....	290,753	Dec. 25	1767	488	25	1220
Delany, Patrick B., New York, assignor to himself and E. A. Calahan, Brooklyn, N. Y. Apparatus for substituting gas for electric lights.....	274,181	Mar. 20	1203	331	23	1056
Delany, Patrick B., assignor to Standard Electric Manufacturing Company, New York, N. Y. Electrical synchronous movement.....	286,273	Oct. 9	602	165	25	120
Delany, Patrick B., assignor to Standard Electric Manufacturing Company, New York, N. Y. Electrical synchronous movement.....	286,274	Oct. 9	605	166	25	121
Delany, Patrick B., assignor to Standard Electric Manufacturing Company, New York, N. Y. Electrical synchronous movement.....	286,275	Oct. 9	610	166	25	122
Delany, Patrick B., assignor to Standard Electric Manufacturing Company, New York, N. Y. Electrical synchronous movement.....	286,276	Oct. 9	615	167	25	123
Delany, Patrick B., assignor to Standard Electric Manufacturing Company, New York, N. Y. Electrical synchronous movement.....	286,277	Oct. 9	619	<sup>167</sup> 168	25	123
Delany, Patrick B., assignor to Standard Electric Manufacturing Company, New York, N. Y. Electrical synchronous movement.....	286,278	Oct. 9	623	168	25	124
Delany, Patrick B., assignor to Standard Electric Manufacturing Company, New York, N. Y. Duplex telegraphy.....	286,279	Oct. 9	629	169	25	125
Delany, Patrick B., assignor to Standard Electric Manufacturing Company, New York, N. Y. Telegraphic apparatus.....	286,280	Oct. 9	633	170	25	125
Delany, Patrick B., assignor to Standard Electric Manufacturing Company, New York, N. Y. Electrical synchronous mechanism.....	286,281	Oct. 9	635	170	25	125
Delany, Patrick B., assignor to Standard Electric Manufacturing Company, New York, N. Y. Telegraphy.....	286,282	Oct. 9	638	170	25	126
Delany, Peter, Owasso, N. Y. Siding-hook square.....	280,588	July 3	304	84	24	54
Delany, Thomas J., and W. W. Jameson, Kansas City, Mo. Preparing yeast.....	287,367	Oct. 23	2008	.....	25	383
Delapaine, James L., J. G. Hendrickson, and F. J. Clamer, Philadelphia, Pa. Removing tin from tin-scrap by electricity.....	282,964	Aug. 14	579	164	24	610
Delaware Steam Appliance Company. (See Dimelow, James, assignor.)						
Delfs, Arnold, Bedford, Tenn. Earthen fence.....	277,687	May 15	1443	389	23	1886
Deline, Jeremiah, Akron, Ohio. Milk-cooler.....	280,359	July 3	24	7	24	6
Delker, George. (See Mart, George W., assignor.)						
Delker, George, et al. (See Bippus, Ferdinand G., assignor.)						
Delker Phaeton Company, et al. (See Bippus, Ferdinand G., assignor.)						
Dell, John, St. Louis, Mo. Device for fastening mouth-pieces to gas-retorts.....	275,162	Apr. 3	365	100	23	1289
Delmage, Christopher L., Woonsocket, assignor to F. Grinnell, Providence, R. I. Automatic fire-extinguisher.....	281,181	July 10	1042	289	24	191
Delnow, Charles H., et al. (See Matzeliger, Jan E., assignor.)						
Delp, Abram J. (See Witsil, George L., assignor.)						
Delp, Peter. (See Patzern and Wagner, assignors.)						
Delue, George V., assignor of one-fourth to B. A. Marks, Boston, Mass. Automatic gate for elevators.....	274,887	Mar. 27	2105	586	23	1219
Demain, William C., Cambridgeport, Mass. Machine for cutting and forming ruling-pens.....	274,732	Mar. 27	1911	534	23	1187
Demain, William C., Medford, Mass. Packing-box for ruling-machines.....	275,606	Apr. 10	966	<sup>262</sup> 263	23	1399
Demarest, C. W. (See Farnham, Frank G., assignor.)						
Demarest, John, New York, N. Y. Cistern for water-closets.....	269,921	Jan. 2	114	34	23	24
Demarest, John, assignor to J. L. Mott Iron Works, New York, N. Y. Pull-cup for water-closets.....	274,182	Mar. 20	1204	331	23	1056
Dement, Merritt H., Chicago, Ill. Type writing and printing machine.....	282,174	July 31	2333	644	24	427
Dement, Merritt H., New York, N. Y. Type writing and printing machine.....	282,175	July 31	2336	644	24	427
Dement, Merritt H., Chicago, Ill. Apparatus for justifying stereotyped line-strips and putting and securing them in column or page form.....	282,176	July 31	2338	<sup>644</sup> 645	24	427
Dement, Merritt H., Chicago, Ill. Preparing matrix-forms for stereotyping. (Reissue).....	10,385	Sept. 25	1994	564	24	1270
Dement, Merritt H., Chicago, Ill. Telegraphic transmitter.....	287,914	Nov. 6	1, 6	45	25	535
Dement, Merritt H., and A. W. Granville, Chicago, Ill. Apparatus for stereotyping matrix-strips.....	285,470	Sept. 25	1606	451	24	1902
Dement, Samuel, S. D. and J. A. Palmer, East Lynn, Ill. Seed-dropper.....	288,317	Nov. 13	655	181	25	629
Dempster, John, Knoxville, Tenn. Millstone-driver.....	277,688	May 15	1444	389	23	1886
Dempster, James, and W. J. Horton, Halifax, Nova Scotia, Canada. Combined firemen's ladder and fire-escape.....	279,545	June 19	1172	325	23	2336



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Dénéchaud, Edward F., and J. H. Reynolds, New Orleans, La. Mechanical fan .....	281,035	July 10	859	239	24	159
Dengler, Valentine. (See Connell and Dengler.)						
Deniaud Patrice. (See Dauché and Deniaud.)						
Denis, Arthur. (See Quinet and Denis.)						
Denison, Elias B. (See Brown, Denison, and Brown.)						
Denison, W. O., <i>et al.</i> (See Magruder, George C. W., assignor.)						
Denn, Clayton, Philadelphia, Pa. Warp-linking machine .....	288,032	Nov. 6	306	87	25	560
Dennett Harvesting Machine Company. (See Bullock, Joseph P., assignor.)						
Dennett Harvesting Machine Company. (See Young, Charles M., assignor.)						
Dennett, Herbert E., Somerville, Mass. Self-setting tamp for blasting .....	282,061	July 31	2172	596	24	402
Denny, Harmer, Brooklyn, assignor to himself and A. Webster, New York, N. Y. Gas-engine .....	290,632	Dec. 18	1599	439	25	1182
Denny, Samuel L., Strasburg, assignor of one-fourth to I. L. Landis, Lancaster, Pa. Car-door fastener .....	281,246	July 17	1135	312	24	214
Denney, William H., Lancaster, Pa. Machine for milling links for engines .....	271,431	Jan. 30	1995	{ 575 576 }	23	400
Dennie, Benjamin. (See Barrett, James, assignor.)						
Dennie, Charles H. (See Kauffer and Serson, assignors.)						
Dennis Cash Carrier Company. (See Coram, George B. and J. C., assignors.)						
Dennis Cash Carrier Company. (See Thussell, Earl A., assignor.)						
Dennis, Charles A. (See Dennis, Theodore A., assignor.)						
Dennis, Clara E. (See Dennis, James W., assignor.)						
Dennis, Henry J., Hastings, Minn. Step-ladder .....	273,474	Mar. 6	304	82	23	885
Dennis, J. Nelson, <i>et al.</i> (See Dennis, John, assignor.)						
Dennis, James W., assignor to C. E. Dennis, Cincinnati, Ohio. Electro-medical appliance .....	285,977	Oct. 2	247	70	25	47
Dennis, John, <i>et al.</i> (See Coram, John C., assignor.)						
Dennis, John, assignor to himself, J. C. and G. B. Coram and J. N. Dennis, Lowell, Mass. Parcel-carrier and elevated track for same .....	278,226	May 22	2007	{ 577 578 }	23	2007
Dennis, Theodore A., assignor to himself and C. A. Dennis, Newark, N. J. Box-fastener .....	280,142	June 26	1881	529	23	2468
Dennis, Thomas H. P., Chelmsford, county of Essex, England. Knob attachment .....	284,396	Sept. 4	291	81	24	953
Dennis, Thomas J. (See Murray, Peter, Jr., assignor.)						
Dennison, Lemuel M. (See Williams, Gurdon H., assignor.)						
Denny, John R., Piasa, Ill. Farm-gate .....	289,998	Dec. 11	779	219	25	1030
Denny, John T., Reidsville, N. C. Bee-hive .....	282,284	July 31	2460	678	24	450
Denny, John W., assignor to J. A. Banister, Newark, N. J. Last .....	280,724	July 3	463	133	24	83
Dennys, Nicolas B., Singapore, Straits Settlements. Composition for preventing fouling of ships' bottoms .....	274,888	Mar. 27	2107		23	1219
Densmore, Jay, Niles, Mich. Machine for retouching photographic negatives .....	290,217	Dec. 18	1048	{ 294 295 }	25	1088
Denton, Whitlev, Little Falls, N. Y. Bobbin-holder for knitting-machines .....	270,208	Jan. 9	451	132	23	99
Denton, William B., Wichita, Kans. Velocipede .....	279,356	June 12	931	260	23	2291
Depew, James, <i>et al.</i> (See Depew, John H., assignor.)						
Depew, John H., assignor to himself and W. H. Depew, Peekskill, N. Y. Sprue for foundry use .....	275,332	Apr. 3	589	158	23	1326
Depew, John H., assignor to himself, J. Depew, and J. C. Acker, Peekskill, N. Y. Car-coupling .....	279,229	June 12	766	212	23	2264
Depew, William H. (See Depew, John H., assignor.)						
Depp, Hezekiah E., Sedalia, Mo. Valve-gear .....	278,689	June 5	18	5	23	2128
Depp, Hezekiah E., Sedalia, Mo. Steam and air engine .....	290,405	Dec. 18	1282	360	25	1129
Deputy, Jesse J., Philadelphia, Pa. Velocipede .....	286,593	Oct. 16	1021	277	25	202
Derby Bit Company. (See Parmelee, William L., assignor.)						
Derby, George M., New York, N. Y. Rock-drilling apparatus .....	278,517	May 29	2492	681	23	2085
Derby Silver-Company. (See Berry, Henry, assignor.)						
Déri, Maximilian. (See Zipernowsky and Déri.)						
Deschamps, Francis O., Philadelphia, Pa. Shaft-coupler .....	269,836	Jan. 2	21	7	23	7
Deschamps, Francis O., Philadelphia, Pa. Shaft-coupler .....	270,287	Jan. 9	546	161	23	117
Desgoiffe, Auguste, Paris, France, and L. A. di Giorgio, Odessa, Russia. Apparatus for extracting juices from animal and vegetable substances .....	287,010	Oct. 23	1554	{ 428 429 }	25	300
Desmond, John, assignor of two-thirds to W. A. and T. G. Bennett, Jackson, Mich. Steam-injector .....	270,937	Jan. 23	1373	396	23	286
Desper, Rogers & Co. (See Coddins, Frederick W., assignor.)						
Dessart, Charles H., New York, N. Y. Mask-fastener .....	289,285	July 31	2461	678	24	450
Dessauer, David, Martinsville, Ind. Attachment for holding tips on billiard-cues .....	270,402	Jan. 9	696	206	23	145
Detrick, Calvin, New York, N. Y. Tube-lined cement conduit and making the same .....	288,033	Nov. 6	308	87	25	560
Detrick, Calvin, New York, N. Y. Machine for making lined conduits of plastic or semi-plastic material .....	288,034	Nov. 6	309	87	25	560
Detrick, Edington, San Francisco, Cal. Seam for grain-bags .....	274,736	Mar. 27	1916	534	23	1188
Detrick, Jacob S., Baltimore, Md. Metal-planer .....	278,518	May 29	2493	681	23	2085
Detrick, Jacob S., Baltimore, Md. Filter .....	290,000	Dec. 11	783	221	25	1031
Detrick, William, Indianapolis, Ind. Compound for roofing buildings .....	284,725	Sept. 11	701		24	1029
Detroit Iron and Brass Manufacturing Company. (See Newman, Charles H., assignor.)						
Detroit Lubricator Company. (See Hodges, Charles C., assignor.)						
Dette, Wilhelm, Berlin, Germany, assignor to B. B. Schneider, Orange, N. J. Fountain-lamp .....	290,001	Dec. 11	784	221	25	1031
Detter, William H., Kenton, Ohio. Convertible plow .....	276,674	May 1	177	45, 46	23	1654
Detter, William H., Kenton, Ohio. Convertible plow .....	276,675	May 1	179	46, 47	23	1655
Dettcrer, John T., Willshire, Ohio. Hub-boring machine .....	274,470	Mar. 27	1582	434	23	1130
Dettcrer, John T., Willshire, Ohio. Bedstead .....	275,894	Apr. 17	1339	369	23	1471
Dettmar, John F., Brooklyn, assignor to R. Dudgeon, New York, N. Y. Tool for expanding the ends of boiler-tubes .....	284,618	Sept. 11	562	159	24	1006
Detwiller, Jacob J., Jersey City, N. J. Rocket .....	276,007	Apr. 17	1467	404	23	1494
Dendi, Torello. (See Meucci and Dendi.)						
Denscher, Henry P. (See Farmer, Henry, assignor.)						
Deuscher, Henry P. (See Felt, Hannibal, assignor.)						
Denther, Lorenz A., Buffalo, N. Y. Back for picture and other frames .....	270,563	Jan. 9	905	261	23	186
Denther, Lorenz A., Buffalo, N. Y., assignor of one-half to Duncan & Johnston, Chicago, Ill. Back for picture and other frames .....	274,737	Mar. 27	1917	534	23	1188
Deutscher, Mathew. (See Zehnder, Henry F., assignor.)						
Devean, Edward A. (See David, Jacob, assignor.)						
Devendorf, Henry A., Port Jackson, N. Y. Barbed fence-wire .....	272,534	Feb. 20	1198	334	23	664
Devening, Philip, Ray's Crossing, Ind. Seed-planter .....	284,397	Sept. 4	292	82	24	953
Deveny, Paul P. (See Parker and Deveny.)						
Deverall, Edwin R., New York, N. Y. Oil-can .....	272,535	Feb. 20	1199	334	23	664
Devereux, Washington, Bloomsburg, Pa. Screw-driver .....	287,809	Nov. 6	22	8	25	511

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Devers, William J., assignor of one-half to W. T. O'Malley, Providence, Pa. Extension-table	283,582	Aug. 21	1346	376	24	755
Devino, James, assignor of one-half to F. Krein, St. Louis, Mo. Ventilator for blast-pipes.	270,182	Jan. 2	416	121	23	85
Devlin, J. Allen, Philadelphia, Pa. Post for electric conductors	286,397	Oct. 9	780	211	25	152
Devoe, Benjamin G., Kenton, assignor to Lima Iron Fence Company, Lima, Ohio. Iron fence	271,196	Jan. 23	1692	489	23	337
Devor, James R., Goshen, Ind., assignor of one-half to E. S. Norton, St. Paul, Minn. Press.	269,922	Jan. 2	116	34	23	24
Devore, Levi M., et al. (See Kochsmeier, Henry P., assignor.)						
Devore, Levi M., Freeport, Ill. Spring-hinge	288,984	Nov. 27	1497	415	25	793
Devore, Levi M., assignor to himself and I. F. Kleckner, Freeport, Ill. Spring-hinge	282,858	Aug. 7	459	130	24	581
Devore, Levi M., and D. C. Stover, assignors to said Devore and E. B. Winger, Freeport, Ill. Grinding mill	269,923	Jan. 2	117	35, 36	23	24
Dew, Joseph R., Knoxville, Tenn. Fruit-drier	284,726	Sept. 11	702	196	24	1029
Dewell, Samuel, River Sioux, Iowa. Geodometer	281,468	July 17	1414	388	24	261
Dewey, Hosea B., Whitewater, Wis. Top for sheet-metal vessels	278,319	May 29	2241	615	23	2040
Dewey, Washington, Chicago, Ill. Key-fastener	281,247	July 17	1136	312	24	214
Dews, Edwin. (See Covell, Edward T., assignor.)						
Dews, Edwin, Ansonia, Conn. Die for drawing angular tubing	282,859	Aug. 7	461	130	24	582
Dexter, Carlisle J., Folger, Ill. Device for checking runaway teams	282,860	Aug. 7	462	131	24	582
Dexter, Frederick H., Wardsborough, Vt. Mechanical movement	273,040	Feb. 27	1848	517	23	785
Dexter, George B., Boston, Mass. Imitation of metal castings or carvings	270,580	Jan. 16	928	268	23	199
Dexter, George N., Jr., Madison, Ga. Plow	290,669	Dec. 25	1645	453	25	1197
Dexter, Talbot C., Des Moines, Iowa. Paper-folding machine	279,083	June 5	578	158	23	2222
Dexter, Talbot C., Des Moines, Iowa. Sheet carrying and adjusting device for paper-folding machines	2-7,421	Oct. 30	2077	564	25	403
Dexter, Talbot C., Des Moines, Iowa. Paper folding, pasting, and trimming attachment for printing-presses	287,422	Oct. 30	2078	565	25	403
Dey, David F., Brooklyn, and G. M. Hathaway, assignors of one-third to E. C. White, New York, N. Y. Hydraulic steering-engine for ships	286,534	Oct. 9	939	253	25	181
Deyo, Jeremiah, Denton, Mich. Safety attachment for gun-locks	290,867	Dec. 25	1901	525	25	1243
D'Humy, Paul R. de F., Carlton Mansions, Clapham Rise, county of Surrey, England. Incandescent electric lamp	282,861	Aug. 7	463	131	24	582
Di Giorgio, Leonidas A. (See Desgoffe and Di Giorgio.)						
Diamond Match Company. (See Beecher and Elliott, assignors.)						
Diamond Match Company. (See Millen, George H., assignor.)						
Diamond Match Company. (See Wright, Jacob P., assignor.)						
Diamond Match Company. (See Young, McClintock, assignor.)						
Dibble, Frank H., Ansonia, Conn. Horse-canopy	279,139	June 12	672	185	23	2248
Dibble, John L., Brooklyn, N. Y. Game-board	283,868	Aug. 28	1691	477	24	830
Dibble, John L., Brooklyn, N. Y. Game board or table and appurtenances thereto	283,869	Aug. 28	1692	477	24	830
Dibrell, J. W. (See Grainger, Charles J., assignor.)						
Dice, Andrew F., assignor of one-half to A. H. Shreffler, Joliet, Ill. Check-rower attachment for corn-planters	281,469	July 17	1415	388	24	262
Dick, George, et al. (See Buie, Duncan M., assignor.) (Reissue.)						
Dickerman, Amos, New Haven, Conn. Machine for setting primers in cartridge-shells	270,288	Jan. 9	547	161	23	117
Dickerman, Amos, New Haven, Conn. Breech-loading ordnance	270,289	Jan. 9	548	161	23	117
Dickerman, Amos, New Haven, Conn. Breech-loading cannon	279,639	June 19	1279	355	23	2356
Dickerson, Edward N., Jr., and C. G. Curtis, New York, N. Y. Automatic electric railway	270,209	Jan. 9	452	132, 133	23	100
Dickerson, John E., Iberia, Mo. Car-coupling	276,229	Apr. 24	1743	483	23	1549
Dickerson, Norvel M. (See Cunningham and Dickerson.)						
Dickerson, William E., North Bend, Nebr. Device for raising and lining railway-tracks	271,611	Feb. 6	34	9	23	446
Dickey, Alexander H., Connerville, Ind. Two-wheeled vehicle	274,739	Mar. 27	1918	535	23	1189
Dickey, James H., Sparta, Ill., assignor of one-half to C. Colahan, Cleveland, Ohio. Harvester chain-rake	276,008	Apr. 17	1468	404	23	1494
Dickey, Wallace C., Peoria, Ill. Oatmeal-machine	289,516	Dec. 4	182	50	25	918
Dickey, William H., assignor of one-half to G. S. Bennett, Jackson, Mich. Chain	282,177	July 31	2343	645	24	428
Dickie, George W., San Francisco, Cal. Steam-boiler	275,471	Apr. 10	802	216	23	1371
Dickinson, Arthur S., Springfield, Mass. Car brake and starter	283,219	Aug. 14	891	248, 249	24	666
Dickinson, C. B. (See Kennish, William, assignor.)						
Dickinson, De Alton. (See Gore, Henry A., assignor.)						
Dickinson, Dwight L., et al. (See Galentine, Elias C., assignor.)						
Dickinson, Fannie, Chicago, Ill. Bed-pan	280,360	July 3	25	7	24	7
Dickinson Hard Rubber Company. (See Nickerson, Fred. A., assignor.)						
Dickinson, William, Rockford, Ill. Combined seeding and cultivating machine	282,614	Aug. 7	166	50	24	530
Dickman, Peter, Defiance, Ohio. Rub-iron for wagons	273,041	Feb. 27	1849	517	23	785
Dickson, Charles T., Cincinnati, Ohio. System and apparatus for communicating telephonically	278,411	May 29	2362	645, 646	23	2061
Dickson, Frank. (See Martin, William, assignor.)						
Dickson, Gilbert J., Albany, N. Y. Vehicle	280,361	July 3	26	7, 8	24	7
Dickson, Gilbert J., Albany, N. Y. Ice-tongs	287,423	Oct. 30	2081	565	25	404
Dickson, Henry, Pittsburg, Pa. Apparatus for drying green brick	290,323	Dec. 18	1183	331	25	1111
Dickson, L. Taylor, Philadelphia, Pa. Fall-block hook	271,226	Jan. 30	1727	500	23	353
Dickson, L. Taylor, Philadelphia, Pa. Anchor	279,230	June 12	768	212	23	2264
Dickson, Robert F., Atoka, Tenn. Composition for cleaning marble surfaces	290,754	Dec. 25	1768		25	1220
Didot, Nicholas, Bakersfield, Cal. Centrifugal pump	287,508	Oct. 30	2185	593	25	424
Dibel, William, assignor to S. A. Gunn, Philadelphia, Pa. Stop-motion mechanism for knitting-machines	278,894	June 5	297	86	23	2174
Dibold, Charles, Lebanon, Pa. Preparing slag for railways and roadways	281,248	July 17	1137		24	214
Dibold, Charles, Lebanon, Pa. Machine for making paving and building blocks	287,011	Oct. 23	1556	429	25	300
Dieckmann, Diedrich, and C. Schmiedtzensky, New York, N. Y. Pump	289,517	Dec. 4	182	51	25	918
Diedrich, Nicholas. (See Mersowsky, August E., assignor.)						
Dieffendorf, Amenzio W., and P. H. Merrill, Wyocena, Wis. Cultivator	271,432	Jan. 30	1998	576	23	401
Diehl, Justus, New York, N. Y. Piano sounding-board	280,362	July 3	29	8	24	7
Diehl, Philip. (See Miller and Diehl.)						
Diehl, Philip, Elizabeth, N. J. Electric incandescent lamp	272,125	Feb. 13	678	185	23	569
Diehl, Philip, Elizabeth, N. J. Incandescent electric lamp	276,571	May 1	37	10	23	1633
Diehl, Philip, Elizabeth, N. J., assignor to Singer Manufacturing Company, of New Jersey. Button-hole attachment for sewing-machines	270,290	Jan. 9	548	162	23	117
Diehl, Philip, Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Button-hole sewing-machine	272,126	Feb. 13	680	185, 186	23	569
Diehl, William H., Hyde Park, Pa. Car-coupling	273,475	Mar. 6	304	82	23	885
Dietrich, Carl A., Shawneetown, Mo. Sawing-machine	280,144	June 26	1883	529	23	2468



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Dietrich, Henry, Pittsburg, assignor to G. A. Macbeth, Allegheny, Pa. Tool for finishing hollow glassware	285,345	Sept. 18	1448	408	24	1168
Dietsch, Frank E., Woodbury Falls, N. Y. Tawing skins	287,255	Oct. 23	1869		25	358
Dietterlin, Charles. (See Rehstock, Christian, assignor.)						
Dietz, Alfred C., San Francisco, Cal. Harness check-hook	288,696	Nov. 20	1144	315	25	721
Dietz, Augustus, Philadelphia, Pa. Machine for the manufacture of blocks, &c., out of asphalt, &c.	289,397	Dec. 4	29	9, 10	25	892
Dietz, Frederick. (See Krummenauer, John, assignor.)						
Dietz, Frederick, New York, N. Y. Lantern	273,711	Mar. 13	604	162	23	945
Dietz, Frederick, New York, N. Y. Lantern	273,712	Mar. 13	605	163	23	945
Dietz, Frederick, New York, N. Y. Lantern	285,880	Oct. 2	129	37	25	25
Dietzel, George, and S. Green, New York, N. Y. Chenille ornament	282,709	Aug. 7	295	83	24	551
Dight, W. M. (See Sykes, Thomas B., assignor.)						
Dighton Furnace Company. (See Arnold, Noah S., assignor.)						
Dikeman, Charles S., Waterbury, Conn. Napkin-holder	282,286	July 31	2462	678	24	450
Dill, A. H. (See Bingaman, Samuel H., assignor.)						
Dill, Charles H. (See Smock and Dill.)						
Dill, Thomas B., Medford, Mass. Channeling-machine for boots and shoes	271,227	Jan. 30	1728	500	23	353
Dillard, John J., Eureka Springs, Ark. Medicated soap	287,642	Oct. 30	2371		25	460
Dillehay, Anthony R., Clyde, Kans. Churn	269,837	Jan. 2	23	7	23	7
Dillohay, John T., Beech Grove, Ky. Vehicle-brake	290,868	Dec. 25	1902	525	25	1243
Diller, Henry, Yale, Kans. Combined corn-planter and grain-drill	290,670	Dec. 25	1646	453 454	25	1197
Dillig, George, Millvale, Pa. Wagon-spring	272,219	Feb. 13	785	218	23	588
Dillman, Andrew, et al. (See Nadellhofer, John W., assignor.)						
Dillon, Benjamin F., and A. Gärtner, Savannah, Ga. Railway cattle-guard	275,333	Apr. 3	590	158	23	1326
Dillon, Daniel, Nashville, Tenn. Fertilizer-distributer	284,189	Sept. 4	37	10	24	911
Dillon, Michael, New Haven, Conn. Shoe	283,082	Aug. 14	724	203	24	636
Dimelow, James, assignor to Delaware Steam Appliance Company, Wilmington, Del. Injector	280,589	July 3	305	84	24	54
Dimick, George, Sedalia, Mo. Lubricating compound	287,643	Oct. 30	2372		25	460
Dimock, Gordon C., Madison, Nebr. Pneumatic clothes-pounder	280,145	June 26	1883	530	23	2468
Dimock, Henry S., Phelps, N. Y. Liquid-cooler	277,689	May 15	1445	390	23	1886
Dimock, Henry S., assignor of one-half to J. A. Stringer, Phelps, N. Y. Hitching-strap	280,363	July 3	30	8	24	7
Dimock, Ira, Hartford, Conn. Device for feeding spool-blanks and braid-roll blanks	278,320	May 29	2242	615	23	2040
Dimock, John W., Carbondale, Pa. Necktie-fastener	278,690	June 5	50	6	23	2128
Dimock, Otis, New London, Conn. Anvil	281,847	July 24	1911	522	24	352
Dimock, Robert H., and J. A. Robinson, New Haven, Conn. Oil-burner	286,914	Oct. 16	1430	393	25	272
D'Infeville, Georges, New York, N. Y. Telegraph apparatus	274,112	Mar. 20	1120	309	23	1041
D'Infeville, Georges, New York, N. Y. Quadruplex telegraph	281,249	July 17	1138	313 314 315	24	214
Dingens, John C. (See Bender, Louis L., assignor.)						
Dinkel, George. (See Niese and Dinkel.)						
Dinkel, George, Jersey City, N. J. Device for cleaning vacuum-pans	277,012	May 8	626	164	23	1739
Dinneen, Maurice, Boston, Mass. Faucet	272,536	Feb. 20	1200	335	23	664
Dinsley, Edward. (See Richards and Dinsley.)						
Dinsmore, Alfred S. (See Shaw and Dinsmore.)						
Dinsmore, Alfred S., Boston, Mass. Gaging-tunnel	280,804	July 10	584	163	24	110
Dinsmore, Alfred S., Boston, Mass. Oil-stove	282,504	Aug. 7	33	10	24	506
Dion, Joseph P., Biddeford, Me. Heel-burnisher and edge-setter	290,544	Dec. 18	1484	410	25	1163
Dishrow, Myron H., Rochester, N. Y. Fruit-crate	289,754	Dec. 4	479	135	25	970
Dishrow, Park. (See Riley, Phillip, Sr., assignor.)						
Dischinger, Henry, Elmore, Ohio. Paint-brush protector	271,814	Feb. 6	278	77	23	490
Diss, Albert B., Brooklyn, N. Y. Mold for forming articles of celluloid and other plastic materials	278,321	May 29	2243	616	23	2040
Disston, Albert H., et al. (See Settle, Thomas, assignor.)						
Disston, Hamilton, et al. (See Settle, Thomas, assignor.)						
Disston, Horace C., et al. (See Settle, Thomas, assignor.)						
Disston, William, et al. (See Settle, Thomas, assignor.)						
Distin, Henry, Philadelphia, Pa. Manufacture of musical instruments	286,398	Oct. 9	781	211	25	152
Distin, Henry, Philadelphia, Pa. Case for musical instruments	286,399	Oct. 9	782	211	25	152
Dittenhoefer, Myer, New York, N. Y. Syringe	285,978	Oct. 2	248	70	25	47
Dittenhoefer, Myer, assignor to H. Berolzheimer, New York, N. Y. Lead or crayon holder	290,178	Dec. 11	987	279	25	1069
Ditterline, William S., Mauch Chunk, Pa. Tremolo attachment for cornets	282,448	July 31	2685	736	24	488
Ditwiler, Homer B., Mansfield, Ohio. Suspender-end	277,997	May 22	1814	495	23	1957
Ditzel, Rudolph R. (See Kellar and Ditzel.)						
Divine, Silas R., Loch Sheldrake, N. Y., assignor to Rend Rock Powder Company, of New Jersey. Preparing explosive compounds	289,755	Dec. 4	480		25	970
Divine, Silas R., Loch Sheldrake, N. Y., assignor to Rend Rock Powder Company, of New Jersey. Explosive compound	289,756	Dec. 4	481		25	970
Divine, Silas R., Loch Sheldrake, N. Y., assignor to Rend Rock Powder Company, of New Jersey. Explosive compound	289,757	Dec. 4	482		25	970
Divine, Silas R., Loch Sheldrake, N. Y., assignor to Rend Rock Powder Company, of New Jersey. Explosive compound	289,758	Dec. 4	482		25	970
Divine, Silas R., Loch Sheldrake, N. Y., assignor to Rend Rock Powder Company, of New Jersey. Explosive compound	289,759	Dec. 4	483		25	970
Divine, Silas R., Loch Sheldrake, N. Y., assignor to Rend Rock Powder Company, of New Jersey. Explosive compound	289,760	Dec. 4	483		25	971
Divine, Silas R., Loch Sheldrake, N. Y., assignor to Rend Rock Powder Company, of New Jersey. Explosive compound	289,762	Dec. 4	486		25	971
Divine, Silas R., Loch Sheldrake, N. Y., assignor to Rend Rock Powder Company, of New Jersey. Explosive compound	289,763	Dec. 4	486		25	971
Divine, Silas R., Loch Sheldrake, N. Y., assignor to Rend Rock Powder Company, of New Jersey. Blasting-cartridge	289,764	Dec. 4	487		25	971
Divine, Silas R., Loch Sheldrake, N. Y., assignor to Rend Rock Powder Company, of New Jersey. Composition for preparing explosive compounds	289,765	Dec. 4	488		25	971
Divine, Silas R., Loch Sheldrake, and A. C. Rand, New York, N. Y., assignors to Rend Rock Powder Company, of New Jersey. Preparing blasting-cartridges	289,761	Dec. 4	484	136	25	971
Dixey, John, Michigan City, Ind. Stock-car	279,358	June 12	933	261	23	2291
Dixon, Breckon. (See Dixon, Henry and B.)						
Dixon, Charles A., assignor to R. Whitehill, Newburg, N. Y. Steam-condenser	276,526	Apr. 24	2126	591	23	1614
Dixon, Charles W. (See Griffin and Dixon.)						
Dixon, David A., St. Louis, Mo., assignor to C. S. Osborne & Co., Newark, N. J. Lap shaving and splitting machine	274,921	Apr. 3	45	11	23	1233

*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Dixon, Henry and B., Nottawasaga, Simcoe county, Ontario, Canada. Machine for driving fence-posts.....	281,848	July 24	1911	522	24	352
Dixon, Henry M., New York, N. Y. Pipe-clamp.....	288,035	Nov. 6	310	87	25	560
Dixon, John W., Philadelphia, Pa. Apparatus applicable to the manufacture of paper-pulp.....	276,162	Apr. 24	1666	460	23	1536
Dixon, John W., Philadelphia, Pa. Apparatus for the reduction of paper-pulp.....	276,163	Apr. 24	1667	460	23	1536
Dixon, Robert H., Chicago, Ill. Traction-wheel for harvesters.....	271,612	Feb. 6	35	9	23	446
Dixon, William B., Springfield, Mass. Car-wheel.....	286,183	Oct. 9	497	137	25	103
Doan, William, Blissfield, Mich. Road-scraper.....	282,862	Aug. 7	465	131	24	582
Doane, David S. G., et al. (See Dudley, Dana, assignor.)						
Doane, William H., Cincinnati, Ohio. Sand-paper machine.....	273,970	Mar. 13	935	257	23	1002
Doane, William H., Cincinnati, Ohio. Carriage-support for tenoning-machines.....	285,586	Sept. 25	1740	492	24	1227
Doane, William H., and G. W. Bugbee, Cincinnati, Ohio. Machine-table.....	272,220	Feb. 13	786	{ 218 219 }	23	588
Doane, William H., and G. W. Bugbee, Cincinnati, Ohio. Spoke tenoning and throating machine.....	276,009	Apr. 17	1469	405	23	1495
Doane, William H., and G. W. Bugbee, Cincinnati, Ohio. Machine for planing wheel-fellies.....	285,587	Sept. 25	1741	{ 492 493 494 }	24	1927
Doane, William H. H., Morganville, Kans. Fire-escape.....	285,471	Sept. 25	1607	451	24	1202
Dobbins, Horace G. (See Thornton, James, assignor.)						
Dobbs, Charles G., New York, N. Y. Garment-fastener.....	276,367	Apr. 24	1925	533	23	1580
Dobson, Benjamin A., Bolton, county of Lancaster, England. Mechanism for vibrating the fly or doffer combs of carding-engines.....	280,805	July 10	586	{ 163 164 }	24	110
Dobson, Isaac F. (See Laskey, John H., assignor.)						
Dobyne, James B., and R. S. Fleming, Chicago, Ill. Neck-yoke.....	281,250	July 17	1143	315	24	215
Dockum, Thomas, Brooklyn, N. Y. Rocket and whip.....	288,985	Nov. 27	1498	415	25	793
Dodd, William H., Eldred, Pa. Buckle.....	273,476	Mar. 6	306	83	23	885
Dodge, Caleb K., Niles, Mich. Locomotive ash-pan.....	270,541	Jan. 9	879	255	23	182
Dodge, Charles S., Lowell, Mass. Shoddy-picker.....	287,108	Oct. 23	1685	461	25	326
Dodge, Cyrus A., Syracuse, N. Y. Clothes-washer.....	280,915	July 10	710	{ 199 200 }	24	132
Dodge, Daniel R., Niles, Mich. Wheel-plow.....	278,519	May 29	2495	681	23	2085
Dodge, Edwin L., Somerville, Mass. Smoke-consuming stove.....	285,397	Sept. 25	1520	428	24	1186
Dodge, James, Newark, N. J. Apparatus for grinding sheet-metal scrap.....	288,625	Nov. 20	1054	290	25	706
Dodge, Jasper N., Detroit, Mich. Fish-net.....	270,641	Jan. 16	1006	290	23	213
Dodge, John A., Somerville, Mass. Wrench.....	274,113	Mar. 20	1122	309	23	1041
Dodge, John A., Somerville, assignor to Dodge Skate Company, Boston, Mass. Skate.....	286,792	Oct. 16	1272	344	25	246
Dodge, Miles B., San Francisco, Cal. Ore and rock crusher.....	273,477	Mar. 6	307	83	23	886
Dodge, Miles B., San Francisco, Cal. Rock-crusher.....	273,478	Mar. 6	308	83	23	886
Dodge, Miles B., San Francisco, Cal. Dry-ore separator.....	279,640	June 19	1280	{ 355 356 }	23	2356
Dodge, Miles B., San Francisco, Cal. Separator for wet ores.....	279,641	June 19	1282	356	23	2356
Dodge Skate Company. (See Dodge, John A., assignor.)						
Dodge, Theodore A., trustee. (See Addy, Charles J., assignor.)						
Dodge, Thomas H., Worcester, Mass. Support and guard for wire fences.....	275,607	Apr. 10	968	263	23	1400
Dodge, Thomas H., Worcester, Mass. Cotton-bale tie.....	280,725	July 3	465	133	24	83
Dodge, Thomas H., Worcester, Mass. Lightning-rod.....	282,449	July 31	2686	737	24	489
Dodge, Thomas H., Worcester, Mass. Support and guard for fencing.....	285,979	Oct. 2	249	71	25	48
Dodge, Thomas H., Worcester, Mass. Lightning-conductor.....	289,076	Nov. 27	1614	446	25	812
Dodge, Thomas H., Worcester, Mass. Rolling wire rods and apparatus therefor.....	290,002	Dec. 11	786	221	25	1032
Dodge, Ulysses E., Fredonia, N. Y. Ash-sifter.....	279,724	June 19	1380	385	23	2373
Dodge, Wallace H., Mishawaka, Ind. Band-pulley.....	276,230	Apr. 24	1744	483	23	1549
Dodge, Wallace H., Mishawaka, Ind. School-desk.....	286,594	Oct. 16	1023	277	25	202
Dodge, William F., Bloomfield, Iowa. Harrow.....	273,479	Mar. 6	308	83	23	886
Dodge, William P., Prospect, and J. Cummings, Jr., Utica, N. Y. Coat.....	289,236	Nov. 27	1801	499	25	847
Dods, Henry, and F. Hinde, Virginia City, Nev. Cable-grip apparatus.....	290,003	Dec. 11	789	222	25	1032
Dodson, Carrollton, Fall River, Kans. Washing-machine.....	277,243	May 8	914	245	23	1789
Dodson, Silas, New York, N. Y. Disintegrating-machine.....	274,574	Mar. 27	1732	481	23	1154
Dodson, Silas, Rochester, N. Y. Grain-decorator.....	277,998	May 22	1815	496	23	1957
Dodson, Wilson P., Philadelphia, Pa. Railway-switch.....	287,810	Nov. 6	23	8	25	511
Dodsworth, Caleb, and P. Burke, Cincinnati, Ohio. Device for heating and cooling mashes.....	271,692	Feb. 6	127	35	23	462
Doe, George W., Fairhaven, Mass. Loom-shuttle.....	271,433	Jan. 30	1998	577	23	401
Doerr, John H. (See Wigmore, William H., assignor.)						
Doerr, John H., Camden, N. J., and W. H. Wigmore, Philadelphia, Pa. Curtain-bracket for sleeping-cars.....	275,164	Apr. 3	366	101	23	1289
Doherty, Annie M., administratrix. (See Doherty, Frank.)						
Doherty, Charles. (See Prier, Doherty, and Everett.)						
Doherty, Fisher, and E. L. Sies, Crawfordsville, Ind. Two-wheeled vehicle.....	286,184	Oct. 9	498	137	25	103
Doherty, Frank, deceased, (A. M. Doherty administratrix.) Columbus, Ohio. Pipe-coupling for water and gas pipes and mains.....	284,285	Sept. 4	157	43	24	931
Doherty, Patrick J., Chelsea, Mass. Skate.....	279,359	June 12	935	261	23	2291
Doherty, William A., and C. G. Van Sickle, Muskegon, Mich. Crosscut-sawing machine.....	280,457	July 3	151	41	24	28
Doherty, William C., Sacramento, Cal. Fruit-drier.....	277,013	May 8	626	164	23	1739
Doig, William S. (See Smith and Doig.)						
Dolan, Edward J., Philadelphia, Pa. Sheet-metal press.....	271,044	Jan. 23	1503	{ 433 434 }	23	306
Dolan, Edward J., Philadelphia, Pa. Seaming-press.....	286,283	Oct. 9	639	171	25	126
Dolbear, Amos E., Somerville, Mass., assignor, by mesne assignments, to Dolbear Electric Telephone Company, of New Jersey. Telephone.....	288,215	Nov. 13	523	146	25	608
Dolbear Electric Telephone Company. (See Dolbear, Amos E., assignor.)						
Dolbeer, John, San Francisco, Cal. Logging-engine.....	290,755	Dec. 25	1768	488	25	1220
Dolbeer, John, San Francisco, Cal. Logging-locomotive.....	290,756	Dec. 25	1769	{ 488 489 }	25	1220
Dolberg, Rudolph. (See Wienke, Carl F. A., assignor.)						
Dolby, Thomas G. F., Dulwich, England. Closing cans.....	284,398	Sept. 4	293	82	24	953
Dole, Joseph L. (See Wilkins and Dole.)						
Dolen, John M., Wiconisco, Pa. Safety attachment for dampers.....	286,400	Oct. 9	784	211	25	153
Doll, Arnold, Cleveland, Ohio. Egg and flour mixer.....	270,642	Jan. 16	1007	290	23	213
Doll, Henry C. (See Robertson and Doll.)						
Dollison, Levi P., Wabash, Ind. Lubricator.....	270,762	Feb. 16	1162	332	23	242
Dolman, John H., Albany, Tex. Separator for pecan and other nuts.....	271,815	Jan. 6	279	77	23	490
Dolman, William H., St. Helen, Oreg. Fire-proof building.....	286,401	Oct. 9	784	212	25	153
Dolph, Edwin W., Bridgeport, Conn. Foot-rest.....	271,434	Jan. 30	1999	577	23	401



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Don, William, New York, assignor to W. White, White Plains, N. Y. Seat for street-cars.	287,644	Oct. 30	2372	640	25	460
Don, William, New York, assignor to W. White, White Plains, N. Y. Car-spring support.	288,779	Nov. 20	1245	342	25	739
Don, William, New York, assignor to W. White, White Plains, N. Y. Car-axle box.	288,780	Nov. 20	1246	342	25	739
Donahoe, John J., and P. J. Finn, New Orleans, La. Window-shutter opener.	270,027	Jan. 2	237	63	23	49
Donahue, Joseph L., Brooklyn, N. Y. Mucilage-wafer.	276,164	Apr. 24	1668	460	23	1536
Donalds, John, Stillwater, Minn. Attachment for logging-sleds.	289,815	Dec. 11	552	154	25	989
Donaldson Brothers. (See De Meza, Wilson, assignor.)						
Donaldson Brothers. (See De Quillfeldt, Charles, assignor.)						
Donaldson, George W. (See Hussey, Levi, assignor.)						
Donaldson, James A., Greenville, Pa. Apparatus for administering nitrous-oxide gas.	282,178	July 31	2344	646	24	423
Donaldson, Robert R., et al. (See Shiver, Elisha, assignor.)						
Donaldson, Sven, Texarkana, Tex. Hay and cotton press.	279,546	June 19	1175	325	23	2337
Donegan, William, Chicago, Ill. Adjustable balcony.	273,823	Mar. 13	759	206	23	972
Donlon, William, Eden Prairie, Minn. Stock-releasing device.	289,398	Dec. 4	31	10	25	892
Donnell & Co., J. E. (See Schwintzer and Graff, assignors.)						
Donnell, Edward F. (See Partidge, Alfred, assignor.)						
Donnell, Edward F., Chicago, Ill. Roller book-binding machine.	276,787	May 1	336	89	23	1684
Donnell, Edward F., Chicago, Ill. Paper-cutting machine.	290,004	Dec. 11	790	222	25	1032
Donnelly, Charles J., Philadelphia, Pa. Match-machine.	270,403	Jan. 9	697	206	23	146
Donnelly, Matthias, et al. (See Elliott, Charles W., assignor.)						
Donnelly, William E., assignor to T. Simmons, Cleveland, Ohio. Hemstitching attachment for sewing-machines.	288,036	Nov. 6	311	88	25	561
Donnenwerth, John G., Browning, Mo. Oiling cylinders of steam-engines.	288,037	Nov. 6	311	88	25	561
Donoghue, William, assignor to D. Garrison and G. C. Renkauf, Philadelphia, Pa. Ward-robe-bedstead.	273,480	Mar. 6	309	84	23	886
Donovan, Albert, et al. (See Bensus, Cephus, assignor.)						
Donovan, David H. (See Briggs, Orlando P., assignor.)						
Donovan, George L., assignor to C. Rogers & Bros., Meriden, Conn. Mirror-hinge.	285,239	Sept. 18	1329	374	24	1147
Donovan, John E., Cincinnati, Ohio. Self-belting pulley.	270,028	Jan. 2	238	69	23	49
Donovan, John E., Cincinnati, Ohio. Clothes wringer.	275,165	Apr. 3	367	101	23	1290
Donovan, John E., Cincinnati, Ohio. Pattern for producing castings.	275,166	Apr. 3	368	101	23	1290
Donovan, John E., Cincinnati, Ohio. Vapor-burner.	283,977	Aug. 28	1824	515	24	855
Donovan, Will, et al. (See Bensus, Cephus, assignor.)						
Doody, James. (See Hill and Doody.)						
Dooley, Thomas B., assignor to J. Souther, Boston, Mass. Printing-press.	286,689	Oct. 16	1147	309	25	224
Doolittle, D. Edward. (See Doolittle, William E. and D. E.)						
Doolittle, George. (See Stanley and Doolittle.)						
Doolittle, George, and H. D. Stanley, Bridgeport, Conn. Machine for confining strands.	289,077	Nov. 27	1614	447	25	813
Doolittle, George W., Kansas City, Mo. Grinding-mill.	276,570	May 1	34	9, 10	23	1633
Doolittle, Harrison, Plain City, Ohio. Harrow.	283,083	Aug. 14	726	203	24	636
Doolittle, James E., and H. C. Sherwood, assignors to I. W. Birdseye & Co., Bridgeport, Conn. Corset.	273,042	Feb. 27	1849	518	23	785
Doolittle, John H., Greystone, Conn. Crochet-needle.	287,109	Oct. 23	1656	462	25	326
Doolittle, Oscar B. (See McCarthy and Cumming, assignors.)						
Doolittle, William E. and D. E., assignors to Russell & Erwin Manufacturing Company, New Britain, Conn. Machine for putting nuts on bolts.	280,298	June 26	2070	582	23	2501
Dooner, John, San Francisco, Cal. Blackboard-rubber.	283,870	Aug. 28	1695	477	24	830
D'Opdorp, Fcois P., Brussels, Belgium. Advertising letter-paper and envelope.	290,179	Dec. 11	988	279	25	1069
Dopp, H. William, Buffalo, N. Y. Soap remelting and crutching apparatus.	285,736	Sept. 25	1933	547	24	1261
Dopp, Henry W., Buffalo, N. Y. Jacketed steam-kettle for rendering fats, boiling soap, and for other uses.	287,424	Oct. 30	2081	565	25	404
Dorchester, Daniel, Jr., et al. (See Murray, James W., assignor.)						
Dorflinger, Louis J. (See O'Connor, John S., assignor.)						
Dorin, James L., Brooklyn, N. Y. Toy house.	282,965	Aug. 14	580	164	24	610
Döring, Julius A., Leipsic, Germany. Sewing-machine.	284,190	Sept. 4	38	10, 11	24	911
Dorn, Rudolf, Omaha, Nebr. Medical compound for horses, &c.	275,472	Apr. 10	803	-----	23	1371
Dorr, H. A. (See Baldwin, Marcellus O., assignor.)						
Dorr, H. A. (See Haynes, Thomas, assignor.)						
Dorr, Herbert C., San Francisco, Cal. Hand-stamp.	283,583	Aug. 21	1346	376	24	756
Dorr, Robert E. A., and T. Williams, Philadelphia, Pa. Printer's galley.	288,038	Nov. 6	312	88	25	561
Dorrance, Charles J. (See Lockwood, William C., assignor.)						
Dorrell, Thomas B. (See Wood and Dorrell.)						
Dorsett, Daniel H., Chicago, Ill. Mold for casting pipe of plastic material.	284,191	Sept. 4	39	11, 12	24	911
Dorsey Machine Company. (See Remy, Noah T., assignor.)						
Doten, Charles C., Plymouth, Mass. Type-case.	278,782	June 5	146	43	23	2147
Dotterer, Thomas D., Charleston, S. C. Manufacture of sulphuric acid.	270,763	Jan. 16	1164	333	23	242
Dotts, Thomas J., Reading, Pa. Automatic shutter-fastener.	273,265	Mar. 6	96	8	23	839
Doty, Duane, Berlin, Wis. Machine for making whips.	270,029	Jan. 2	238	69	23	49
Doty, George L., Middletown, Ohio. Brick-mold bumper and palette-holder combined.	284,727	Sept. 11	703	197	24	1029
Doty, James M., Columbus, Ohio. Truck.	285,588	Sept. 25	1744	494	24	1228
Doty, Riley, Leonardsburg, Ohio. Valve for steam-engines.	283,978	Aug. 28	1826	515	24	855
Doty, Riley, Leonardsburg, Ohio. Slide-valve.	285,737	Sept. 25	1935	548	24	1261
Doty, William M., Chicago, Ill. Washing-machine.	282,615	Aug. 7	169	51	24	530
Doubleday, Henry H., trustee. (See Doubleday, William B., assignor.)						
Doubleday, William B., Binghamton, N. Y., assignor to H. H. Doubleday for himself and as trustee, Washington, D. C. Device for attaching reels to fishing-rods.	285,346	Sept. 18	1449	408	24	1168
Doud, Wesley E., Eureka, Kans. Rubber cement for the manufacture of memorandum-blocks and tablets.	285,980	Oct. 2	250	-----	25	48
Dougan, John B. (See Clark, Alvin B., assignor.)						
Dougherty, Andrew, Brooklyn, N. Y. Playing-card.	278,412	May 29	2364	646	23	2061
Dougherty, George P., Independence, Mo. Car-coupling.	273,481	Mar. 6	310	84	23	886
Dougherty, James H. (See Briggs and Dougherty.)						
Dougherty, James H., Whistler, Ala. Device for bending and shaping the ends of bars.	281,470	July 17	1416	389	24	262
Dougherty, Michael J., assignor of one-half to J. Burnett and E. McHale, Carbondale, Pa. Car-coupling.	290,005	Dec. 11	791	222	25	1033
Dougherty, Philip, Fort Dodge, Iowa. Corn-planting attachment for plows.	290,006	Dec. 11	792	223	25	1033
Dougherty, Tiberias, Philadelphia, Pa. Excavating apparatus.	283,703	Aug. 21	1482	417	24	782
Doughty, Henry C., Gray, and D. Hall, Auburn, Me. Latch.	281,036	July 10	860	239	24	159
Dongine, James T., Chicago, Ill. Cleaning sewers.	287,611	Nov. 6	25	8, 9	25	512
Douglas, Campbell M., Quebec, Quebec, Canada. Folding boat.	285,981	Oct. 2	251	71	25	48
Douglas, Charles, Detroit, Mich. Broom.	283,979	Aug. 28	1826	515	24	855
Douglas, Charles B., Troy, Ala. Sulky-plow.	273,971	Mar. 13	936	237	23	1002

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Douglas, Charles H., Chicago, Ill. Circular saw	274,922	Apr. 3	46	12	23	1233
Douglas, John B., assignor to Newsham, Nock & Douglas, Philadelphia, Pa. Pipe cutting and threading machine	273,348	Mar. 6	141	39, 40	23	857
Douglas, Joseph W., Middletown, Conn. Combined drill or reamer, tap, and socket	279,360	June 12	936	261	23	2291
Douglas, Joseph W., Middletown, Conn. Cutter and holder for lathes	280,146	June 26	1884	530	23	2468
Douglas, Joseph W., Middletown, Conn. Cutter and holder for lathes, &c.	280,147	June 26	1885	530	23	2469
Douglas, Joseph W., Middletown, Conn. Cutter and holder for lathes, &c.	280,148	June 26	1887	531	23	2469
Douglas, Silas H., Ann Arbor, Mich. Hydrocarbon-burner	272,863	Feb. 27	1634	457	23	749
Douglass, James N., Dulwich, county of Surrey, England. Burner for gas or oil	290,545	Dec. 18	1485	411	25	1163
Douglass, John, Brooklyn, N. Y. Metallic hub	287,645	Oct. 30	2374	640	25	460
Douglass, John L., Belleville, N. J. Increasing the flow and delivery of liquids	286,185	Oct. 9	499	138	25	103
Douglass, Samuel W., assignor to American Diamond Rock Boring Company, New York, N. Y. Expansion rotary drill	274,740	Mar. 27	1919	535	23	1189
Douglass, Samuel W., assignor to J. B. Edison, New York, N. Y. Process of and apparatus for the formation of deep wells	290,546	Dec. 18	1486	411	25	1163
Douty, William H. (See Brock, William M., assignor.)						
Dover, Samuel B., Dayton, Ohio. Straight-way valve	284,122	Aug. 28	2027	564	24	889
Dover, Samuel B., assignor to Buckeye Iron and Brass Works, Dayton, Ohio. Apparatus for extracting oil from oleaginous seeds, &c.	270,291	Jan. 9	550	162	23	117
Dow, Charles H., and W. H. Chandler, Virginia City, Nev., assignors of one-half to W. A. Shreves, Bordentown, and M. L. Justin, Jersey City, N. J. Process of grinding and apparatus for amalgamating ores	282,863	Aug. 7	466	132	24	583
Dow, Christopher C., assignor of one-half to H. Hovey, Camden, N. J. Marine-engine governor	279,861	June 19	1538	430	23	2400
Dow, Hiram A., Cincinnati, Ohio. Vapor-stove	283,216	Nov. 13	524	146	25	608
Dow, Lorenzo, Boston, Mass., assignor to American Iron Post and Construction Company, of New York. Wire fence. (Reissue.)	10,362	Aug. 7	554	156	24	509
Dowd, Daniel, Larue, Ohio. Cutting and feeding attachment for thrashing-machines	279,725	June 19	1380	385	23	2373
Dowd, Daniel, Larue, Ohio. Band-cutter and feeder for thrashing-machines	290,547	Dec. 18	1489	412	25	1164
Dowdell, Seleta C., La Salle, Tex. Pan-cover	287,425	Oct. 30	2083	566	25	404
Dowens, Harrison, New York, N. Y. Automatic correcting device for thermostats	270,643	Jan. 16	1008	291	23	213
Dowens, Harrison, New York, N. Y. Correcting attachment for automatic heat-alarms	273,349	Mar. 6	142	40	23	858
Dowling, Daniel E., New York, N. Y. Feed mechanism for roller-mills	289,518	Dec. 4	183	51	25	918
Dowling, Robert H., assignor of one-half to C. H. Follett, Newark, Ohio. Car-coupling	281,983	July 24	2071	568	24	370
Dowling, Thomas, Gloucester, Mass. Pump	279,923	June 26	1616	454	23	2421
Down, William H., et al. (See Burton, Joseph, assignor.)						
Downe, James R., et al. (See Burns and Buckman, assignors.) (Reissue.)						
Downes, Charles L. (See Kerner and Downes.)						
Downes, George W., New York, N. Y. Door-spring	278,783	June 5	147	43	23	2147
Downie, Alexander F. (See Nute, John H., assignor.)						
Downie, George, Salinas, Cal. Incrustation preventive	277,122	May 8	773		23	1764
Downie, Robert M., Fallston, Pa. Apparatus for cooling water	285,472	Sept. 25	1607	451	24	1202
Downie, William. (See Southack, Cyprian F., assignor.)						
Downing, Burton J., Seely, Kans. Hen's nest	271,318	Jan. 30	1843	535	23	372
Downing, Henry M., Enfield, Mass. Folding clothes-rack	284,286	Sept. 4	158	43	24	931
Downing, James H., Lane, Kans. Fire-escape	290,007	Dec. 11	793	223	25	1033
Downing, James L., Richmond, Ill. Hand truck	284,619	Sept. 11	563	159	24	1006
Downing, Jerome F., Erie, Pa. Child's carriage	286,186	Oct. 9	500	128	25	103
Downing, John C. (See Keller, Adam, assignor.)						
Downs, Benjamin J., et al. (See Payne, Newton W., assignor.)						
Dowse, William B., Boston, Mass. Cloak	272,537	Feb. 20	1200	335	23	664
Dowse, William B., Boston, Mass. Circular cloak	277,014	May 8	628	165	23	1740
Dowson, Joseph E., Westminster, London, England. Apparatus for the manufacture of gas	278,107	May 22	1939	532	23	1980
Doxsie, George W., assignor to himself and E. Shav, Haring, Mich. Logging-wheel	273,943	Feb. 27	1850	518	23	786
Doyle, Edward L., Lynn, Mass., and G. S. Burr, Montezuma, Colo.; said Burr assignor of one-half to said Doyle. Ore-concentrator	290,008	Dec. 11	794	223	25	1033
Doyle, John, Hoboken, N. J., assignor to himself and C. C. Dusenbury, White Plains, N. Y. Hand-protector	276,231	Apr. 24	1745	484	23	1549
Doyle, John, Hoboken, N. J., assignor to himself and C. C. Dusenbury, White Plains, N. Y. Game apparatus	281,348	July 17	1262	351	24	236
Doyle, John H., Hillsborough, Ohio. Dental lip and tongue holder	278,520	May 29	2496	681	23	2085
Doyle, John J., Chicago, Ill., assignor to Scholhorn & Tiesing Manufacturing Company, New Haven, Conn. Flap for carriage-doors	285,540	Sept. 18	1330	375	24	1147
Doyle, Richard, Grand Rapids, Mich. Book-binder's clamp	272,664	Feb. 27	1635	457	23	749
Doyle, Thomas, San Francisco, Cal. Horseshoe	271,228	Jan. 30	1730	501	23	353
Doyle, Thomas H., Norwich, N. Y. Whisk or other broom holder	274,471	Mar. 27	1583	434	23	1130
Doyle, William L., Buffalo, N. Y. Railway-signal	285,589	Sept. 25	1745	494, 495	24	1328
Dozier, Lewis D., St. Louis, Mo. Sheet-metal packing-box	279,726	June 19	1381	385	23	2373
Drainage Construction Company. (See Waring, George E., Jr., assignor.)						
Drake, Charles C., Trenton, N. J. Telephone and telegraph protector	280,916	July 10	711	200	24	132
Drake, Charles W., Pittsburg, Pa. Attachment for screw-drivers	290,218	Dec. 18	1049	295	25	1088
Drake, Edward P., et al. (See Aldrich, Hosea L., assignor.)						
Drake, George D., et al. (See Heyl, Frederick, assignor.) (Reissue.)						
Drake, James A. (See McNeely and Drake.)						
Drake, James H., St. Paul, Minn., and D. G. Weems, Chicago, Ill. Composite stone	273,824	Mar. 13	760		23	972
Drake, John B., Goshen, Ind. Pump	282,664	Aug. 7	467	132	24	583
Drake, John B., Goshen, Ind. Pump	285,241	Sept. 18	1331	375	24	1147
Drake, John T. II., Emporia, Mo. Sawing-machine	280,149	June 26	1888	531	23	2469
Drake, Mahlon S., et al. (See Heyl, Frederick, assignor.) (Reissue.)						
Drake, Mahlon S., Newark, N. J. Orange-clipper	278,108	May 22	1941	532	23	1980
Drake, Mahlon S., assignor to J. J. Walton, Newark, N. J. Hanging book-shelves	275,927	Apr. 3	195	51	23	1258
Drake, Nathaniel, et al. (See Heyl, Frederick, assignor.) (Reissue.)						
Drake, Robert, Newark, N. J. Hat-felting machine	270,292	Jan. 9	552	162	23	118
Drake, Robert, Newark, N. J. Hatter's tank	279,547	June 19	1175	326	23	2337
Drake, Warren W., Girard, Ohio. Fire-escape	275,608	Apr. 10	969	263	23	1400
Draper, Charles A., Centralia, Ill. Billet and buckle fastener	289,816	Dec. 11	553	155	25	990
Draper, Charles T., assignor to L. C. Beardsley & Co., Cleveland, Ohio. Tilting can	274,923	Apr. 3	47	12	23	1233
Draper, John B., Zanesville, Ill. Car-coupling	287,110	Oct. 23	1687	462	25	326
Draper, Luther M., Plainwell, Mich. Gate-hinge	276,165	Apr. 24	1669	461	23	1536
Draper & Sons, George. (See Allen, George H., assignor.)						
Draper & Sons, George. (See Carroll, William T., assignor.)						
Draper & Sons, George. (See Chase, Horace P., assignor.)						
Draper & Sons, George. (See Fay, Rimmon C., assignor.)						
Draper & Sons, George. (See Gray, James R., assignor.)						
Drawbaugh, Daniel, Eberly's Mill, Pa. Telephone-transmitter	272,865	Feb. 27	1636	458	23	749



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Drawbaugh, Daniel, Eberly's Mill, Pa. Speaking-trumpet for receiving-telephones .....	272,866	Feb. 27	1639	458	23	749
Drawbaugh, Daniel, Eberly's Mill, Pa. Telephone .....	290,978	Dec. 25	2057	566	25	1267
Drawbaugh, Daniel, Eberly's Mill, Pa. Telephone .....	290,979	Dec. 25	2058	566	25	1268
Drawbaugh, Daniel, Eberly's Mill, Pa. Telephone-transmitter .....	290,980	Dec. 25	2059	566	25	1268
Drawbaugh, Daniel, Eberly's Mill, Pa., assignor to People's Telephone Company, of New York. Electric signaling apparatus for telephone-lines .....	276,136	Apr. 17	1630	449	23	1522
Drawbaugh, Daniel, Eberly's Mill, Pa., assignor to People's Telephone Company, of New York. Telephone-transmitter .....	276,137	Apr. 17	1631	449	23	1522
Drawbaugh, Daniel, Eberly's Mill, Pa., assignor to People's Telephone Company, of New York. Telephone-repeater .....	287,111	Oct. 23	1689	{ 462 463 }	25	326
Drawbaugh, Daniel, Eberly's Mill, assignor of one-half to E. W. Chellis, Harrisburg, Pa. Hydraulic jack .....	288,697	Nov. 20	1145	315	25	721
Dredge, Edgar, Hoxton, county of Middlesex, assignor of one-half to Beath, Schiess & Co., London, England. Band-knife cloth-cutting machine .....	280,917	July 10	712	200	24	132
Dreiser, John, New York, N. Y. Fishing-reel .....	283,084	Aug. 14	726	203	24	636
Drennon, Robert H., et al. (See Kirkbride, Frederick L., assignor.) .....						
Drennon, Robert H., et al. (See Spooner, Samuel P., assignor.) .....						
Drescher, Henry, New York, N. Y. Feed-bag .....	285,117	Sept. 18	1186	332	24	1121
Dresdnor, Isidor, Brooklyn, N. Y. Fur-plucking machine .....	269,838	Jan. 2	23	7	23	7
Drew, Harry E., et al. (See Wishard, Lucinda B. J., assignor.) .....						
Drew, Walter F., Sacramento, Cal. Hand-rake .....	286,120	Oct. 2	417	114	25	77
Drew, William E., Richmond, Va. Car-coupling .....	277,690	May 15	1446	390	23	1886
Drew, William H., assignor to himself and S. Fildes, La Porte, Ind. Carpet-stretcher .....	277,015	May 8	628	165	23	1740
Dreyer, Johann H., assignor to C. Koster, New York, N. Y. Fire-proof ceiling or floor .....	273,825	Mar. 13	761	206	23	972
Dreyfus, Achille, New York, N. Y. Apparatus for treating argols in the manufacture of cream of tartar .....	277,016	May 8	629	{ 165 166 }	23	1740
Dreyfus, Henry, assignor to Lorsch, Dreyfus & Co., Providence, R. I. Button .....	277,999	May 22	1816	496	23	1958
Dreynass, Bernard, New York, N. Y. Advertising-card .....	270,764	Jan. 16	1165	333	23	242
Dreynass, Isidor. (See Helms and Dreyfuss.) .....						
Drillinger, James R., Terre Haute, Ind. Sliding door .....	290,757	Dec. 25	1771	489	25	1221
Drinkans, Philipp, Jr., Detroit, Mich. Rotary stamping-machine .....	283,871	Aug. 28	1696	478	24	830
Driscoll, Daniel P., Pittsburg, Pa., and J. H. Dugan, Dennison, Ohio. Switch-lock .....	271,435	Jan. 30	1999	577	23	401
Driscoll, Lawrence J., Somerville, assignor to A. M. Lougee, Boston, Mass. Machine for sewing on buttons .....	290,981	Dec. 25	2060	567	25	1268
Driver, Samuel, Providence, R. I. Feeding mechanism for carding-machines .....	290,758	Dec. 25	1772	489	25	1221
Drouin, Alexis, Paris, France. Extracting metals .....	290,548	Dec. 18	1490		25	1164
Drown, William A. (See Powell, John B., assignor.) .....						
Drum, Edgar M. (See Yeoman and Drum.) .....						
Drummond, Frank H., Bangor, and T. Jenkins, Jr., Howard, Me. Boring-machine .....	289,817	Dec. 11	554	155	25	990
Drummond, George, Jr., Philadelphia, Pa. Device for holding spigots, &c .....	285,590	Sept. 25	1747	495	24	1228
Dryden, Caelius O., et al. (See Santer, Charles, assignor.) .....						
Dryer, Bernhard A., New York, N. Y. Conduit for electric wires .....	288,555	Nov. 13	963	265	25	683
Dryfoos, Alphonso, New York, N. Y. Combined trunk and wardrobe .....	282,665	Aug. 7	469	132	24	583
Drysdale, William A., Philadelphia, Pa. Electric gas-lighter .....	281,471	July 17	1418	389	24	262
Du Barry, Edmund L. (See Stevens and Du Barry.) .....						
Du Bois, Addison, New York, N. Y. Guard-gate for cars .....	269,839	Jan. 2	25	8	23	7
Du Bois, B. F. (See Shive, David, assignor.) .....						
Du Bois, Frederick N., New York, N. Y. Plumber's trap .....	287,510	Oct. 30	2187	594	25	424
Du Bois, George W., Wilmington, Del. Pocket-knife .....	280,150	June 26	1888	531	23	2469
Du Bois, John. (See Lutz, W. Clay, assignor.) .....						
Du Bois, John, Du Bois, Pa. Dam and lock .....	282,062	July 31	2173	{ 596 597 }	24	402
Du Bois, Josiah S., Camden, N. J. Underground conduit for electric wires .....	272,221	Feb. 13	789	219	23	589
Du Bois, Josiah S., Camden, N. J. Boiler-feeder .....	280,364	July 3	30	8	24	7
Du Bois, Josiah S., Camden, N. J. Underground conduit .....	287,509	Oct. 30	2186	594	25	424
Du Bois, William A., assignor of one-half to C. O. Hale, Chicago, Ill. Bale-tie fastening .....	290,549	Dec. 18	1491	412	25	1164
Du Brul, Napoleon, Cincinnati, Ohio. Cigar coloring and flavoring machine .....	274,472	Mar. 27	1584	435	23	1130
Du Four, Joseph L. M., Bound Brook, N. J. Wheel toy .....	278,109	May 22	1942	533	23	1980
Du Shane, James, South Bend, Ind. Bolt for chilled mold-boards .....	274,743	Mar. 27	1926	536	23	1190
Du Shane, James, South Bend, Ind. Electric-arc lamp .....	274,744	Mar. 27	1926	536	23	1190
Du Shane, James, South Bend, Ind. Conduit for underground electric wires .....	290,919	July 10	716	201	24	133
Du Shane, James, South Bend, Ind. Dynamo-electric machine .....	290,550	Dec. 18	1492	412	25	1164
Dubler, John B., Philadelphia, Pa. Oil-stn. .....	283,471	Aug. 21	1214	341	24	731
Dublin Agricultural Company. (See Floyd, Halleck, assignor.) .....						
Dubois, Alexandre N., Philadelphia, Pa. Dyeing aniline-black .....	283,220	Aug. 14	893		24	666
Dubois, Alexander N., Philadelphia, Pa. Mordant for aniline-black .....	287,112	Oct. 23	1610		25	327
Dubreuil, George A., Baltimore, Md. Shirt .....	273,826	Mar. 13	762	206	23	973
Ducat, Henry A., Portage, Wis. Leg and foot protector .....	274,114	Mar. 20	1123	309	23	1041
Duchemin, William, assignor to W. S. Butler, Boston, Mass. Plaiting-machine .....	288,929	Nov. 20	1425	{ 392 393 }	25	773
Ducker, William M. (See Anthony, Frank H., assignor.) .....						
Duckworth, James, and E. Smith, Springfield, Mass. Combined protractor, square, and bevel .....	282,966	Aug. 14	581	165	24	611
Ducro, Gregory, Buffalo, N. Y. Bottle-stopper .....	270,765	Jan. 16	1165	333	23	243
Dudgeon, Richard. (See Dettmar, John F., assignor.) .....						
Dudgeon, Richard. (See Tanner, John C., assignor.) .....						
Dudley, Augustus C., Nashville, Tenn. Feather-renovator .....	270,030	Jan. 2	240	70	23	49
Dudley, Charles B., Altoona, Pa. Making soda-line .....	272,127	Feb. 13	682		23	570
Dudley, Charles B., Altoona, Pa. Purifying waters for boiler use .....	283,472	Aug. 21	1215		24	731
Dudley, Charles B., Altoona, Pa. Purifying feed-water .....	285,591	Sept. 25	1748	495	24	1229
Dudley, Dana, Boston, assignor to D. S. G. Doane, Cohasset, Mass., and D. A. Plecker, Monro, Crawford, Va. Rotary engine .....	282,505	Aug. 7	35	10	24	506
Dudley, Frederick, Eugene City, Ore. Sash-fastener .....	283,365	Aug. 14	1085	305	24	702
Dudley, George D. (See Bisbee and Dudley.) .....						
Dudley, James N., Petrolia, Cal. Saw-handle .....	283,221	Aug. 14	893	249	24	666
Dudley, Russell G., Jersey City, N. J., assignor to Dudley Shutter Worker and Burglar Alarm Company of New York. Shutter-worker .....	285,347	Sept. 18	1449	408	24	1168
Dudley Shutter Worker and Burglar Alarm Company of New York. (See Dudley, Russell G., assignor.) .....						
Dudley, Walter J., Boston, Mass. Telephone signaling apparatus .....	278,322	May 20	2244	616	23	2040
Dudley, Wells W. (See Foster and Dudley.) .....						
Dudley, William L., Covington, Ky., and C. F. Rapp, assignors to American Iridium Company, Cincinnati, Ohio. Electric-arc lamp .....	271,816	Feb. 6	280	77	23	490
Dueber, John C., Newport, Ky. Watch-case center .....	290,869	Dec. 25	1903	525	25	1243

## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Dueber, John C., Newport, Ky. Watch-case center .....	290,870	Dec. 25	1904	525	25	1244
Duell, Charles H., <i>et al.</i> (See Bustin, John H., assignor.)						
Duell, Charles H. (See Hey, George W., assignor.)						
Düerstock, Bernard, Cincinnati, Ohio. Fancet .....	288,781	Nov. 20	1243	343	25	740
Duff, James, Oswego, N. Y. Production of starch, dextrine, glucose, sirup, and grape-sugar .....	270,210	Jan. 9	456	.....	23	100
Duff, James, Oswego, N. Y. Method of and apparatus for manufacturing starch, dextrine, glucose, sirup, grape-sugar, or spirits, beer, and vinegar .....	270,894	Jan. 23	1318	380	23	277
Duff, John T., assignor of one-third to J. M. Montgomery, Allegheny, Pa. Machine for hanging circular plates .....	274,115	Mar. 20	1124	310	23	1041
Duffield, Patricio W., New York, N. Y. Ore-concentrator .....	275,809	Apr. 17	1239	341	23	1453
Duffy, Charles C., Newport News, Va. Door and door attachment for grain-cars .....	278,895	June 5	298	86	23	2174
Duffy, Charles C., Newport News, Va. Dumping-car .....	279,361	June 12	938	262	23	2292
Duffy, James. (See Kidd, James E., assignor.)						
Duffy, James F., Chicago, Ill. Die for making blacksmiths' fullers .....	277,468	May 15	1184	318	23	1843
Duffy, Patrick, assignor to himself and J. F. Powers, New Bedford, Mass. Nut-arbor .....	278,896	June 5	299	87	23	2174
Duffy, Thomas W., Boston, Mass., assignor to New York Steam Company, New York, N. Y. Expansion-joint .....	282,967	Aug. 14	582	165	24	611
Duffy, Walter B. (See Redmond, Edmund, assignor.)						
Dufour, John B., Gallipolis, Ohio. Baby-walker .....	283,222	Aug. 14	594	249	24	667
Dufrane, John L. (See Nickerson and Dufrane.)						
Dugan, Joseph H. (See Driscoll and Dugan.)						
Dugan, Robert, New York, N. Y. Umbrella-fixture .....	276,788	May 1	336	89	23	1684
Duggan, George A. (See Wilkie and Duggan.)						
Duggan, Keyran J., Montgomery, Ala. Spike-puller .....	285,242	Sept. 18	1331	375	24	1147
Duke, James B., Durham, N. C. Apparatus for waxing paper .....	286,402	Oct. 9	785	212	25	153
Duke, James B., Durham, N. C. Waxing paper .....	286,403	Oct. 9	786	212	25	153
Duke, James H., Jackson, Ga. Churn .....	283,085	Aug. 14	727	204	24	637
Duke, Thomas, Henry, Ill. Two-wheeled vehicle .....	285,592	Sept. 25	1749	496	24	1223
Dulaney, James M., and T. Owens, Topeka, Kans. Car-coupling .....	271,045	Jan. 23	1504	434	23	307
Dull, Norman R., assignor of one-half to H. C. Canfield, Toledo, Ohio. Clip-bender .....	274,741	Mar. 27	1922	536	23	1189
Dumaresq, John. (See Prosser, Thomas, assignor.)						
Dumas, Anthelme, Paris, France. Distribution of water in houses .....	277,691	May 15	1447	390	23	1886
Dumke, Frank F., assignor to C. Borchert, W. P. Vollert, and H. Bollow, Milwaukee, Wis. Pen and pencil rack .....	271,817	Feb. 6	283	77	23	491
Dummer, Edward, Boston, Mass. Electrical signal .....	288,556	Nov. 13	964	266	25	684
Dunn, James F., <i>et al.</i> (See Hill, James F., assignor.)						
Dumont, Alexandre, Paris, France. Wind-motor .....	274,299	Mar. 20	1344	{ 369 370 }	23	1080
Dumont, James H., New York, N. Y. Railway-express indicator .....	275,609	Apr. 10	971	264	23	1400
Dunan, John J., Lima, Ohio. Bag-holding truck .....	281,472	July 17	1419	369	24	262
Dunand, Albert, Paris, France. Apparatus and system for telephonic communication .....	280,365	July 3	31	9	24	8
Dunbar, Henry D., North Hartland, Vt. Compound engine .....	276,368	Apr. 24	1926	{ 534 535 }	23	1580
Dunbar, John H., assignor to Clement & Dunbar, Philadelphia, Pa. Machine for forming the hooks of tub-handles .....	281,984	July 24	2072	568	24	380
Dunbar, John K., <i>et al.</i> (See Flint, Edward, Jr., assignor.)						
Dunbar, Junius H., assignor to himself and F. Brown, Youngstown, Ohio. Nail-plate feeder .....	286,121	Oct. 2	417	114	25	77
Dunbar, Junius H., assignor to himself and F. Brown, Youngstown, Ohio. Nail-plate feeder .....	287,368	Oct. 23	2008	546	25	383
Dunbar & Son, R. (See Gardner, Frederick A., assignor.)						
Duncan, Andrew J., Pittsburg, Pa. Soldering cylindrical articles of tinware .....	271,319	Jan. 30	1844	{ 535 536 }	23	373
Duncan, Garnett, and J. R. Evens, assignors of one-third to J. J. Haight and W. P. Cunningham, Gainesville, Tex. Stalk-cutter .....	281,621	July 17	1606	439	24	203
Duncan, George. (See Wilson, Duncan, and Lander.)						
Duncan, James, London, and B. E. R. Newlands, Clyde Wharf, Victoria Docks, county of Essex, England. Manufacture and treatment of sugar and apparatus employed there-in .....	278,110	May 22	1942	533	23	1980
Duncan, James S., Browning, Mo. Combined tub-stand and clothes-rack .....	270,031	Jan. 2	240	70	23	50
Duncan & Johnston. (See Deuther, Lorenz A., assignor.)						
Duncan, Joseph M., Warsaw, N. Y. Evaporator .....	284,952	Sept. 11	973	273	24	1077
Duncan, Mason F., and R. E. Coyle, May's Lick, Ky. Cotton, corn, and tobacco fender .....	290,009	Dec. 11	796	224	25	1033
Duncan, William F. (See Reiff, William H., assignor.)						
Dunckel, Edwin N., Butte City, Mont. Ter. Portable steam sawing-machine .....	284,620	Sept. 11	564	160	24	1006
Duncklee, Edward P. (See Green and Duncklee.)						
Dundon, Patrick F., San Francisco, Cal. Steam-boiler .....	281,037	July 10	861	239	24	159
Dungan, Andrew M., and M. Laerone, Springfield, Ohio. Elevator .....	280,151	June 26	1889	{ 531 532 }	23	2460
Dungan, William H., Rock Lane, Ind. Bag-holder .....	286,793	Oct. 16	1275	344	25	246
Dunham, Arthur C., Winthrop, Mass. Blind-fastener .....	272,417	Feb. 20	1052	295	23	639
Dunham, Charles H., <i>et al.</i> (See Basford, Charles B., assignor.)						
Dunham, Frank H. (See Dunham, George and F. H.)						
Dunham, George and F. H., Olean, N. Y. Apparatus for extinguishing fires in oil-tanks .....	290,010	Dec. 11	796	224	25	1034
Dunham, Henry, Glen Aubrey, N. Y. Rock-drilling machine .....	277,244	May 8	915	245	23	1789
Dunham, John S., St. Louis, Mo. Confection .....	281,849	July 24	1912	.....	24	352
Dunham, John W., <i>et al.</i> (See Basford, Charles B., assignor.)						
Dunham, Joseph T., Brooklyn, N. Y. Combined tag and envelope .....	277,245	May 8	918	246	23	1790
Dunham, Thomas H., Boston, Mass. Insulated electrical conductor .....	280,366	July 3	32	9	24	8
Dunkel, Wilber R., near Macon, Ill. Automatic grain-measure .....	282,063	July 31	2174	597	24	402
Dunlap, John Q., Seymour, Tex. Sheep-wash .....	273,972	Mar. 13	938	.....	23	1002
Dunlap, William H., and J. Ketchum, Jr., Brooklyn, N. Y. Manufacture of hats .....	288,986	Nov. 27	1499	415	25	793
Dunlap, William H., and J. Ketchum, Jr., Brooklyn, N. Y. Hat-drying apparatus .....	288,987	Nov. 27	1501	415	25	793
Dunlap, William J., Flushing, Ohio. Thrashing-machine separator .....	271,046	Jan. 23	1506	434	23	307
Dunlop, Oliver P., Canal Winchester, Ohio. Corn-planter .....	283,330	Aug. 14	1035	290	24	692
Dunlop, Richard A. (See Burgyn, William H. S., assignor.)						
Dunn, Charles W. (See Dunn, Phineas D. and C. W.)						
Dunn, George R. (See Woodlief and Dunn.)						
Dunn, Leonard F., Oneida Community, N. Y. Nickel-plating .....	278,784	June 5	148	.....	23	2148
Dunn, Leonard F., Oneida Community, N. Y. Manufacture of spoons and forks .....	280,918	July 10	714	{ 200 201 }	24	132
Dunn, Leonard F., Oneida Community, N. Y. Nickel-plating .....	280,937	Nov. 27	1925	.....	25	871
Dunn, Michael J., Philadelphia, Pa. Shoe-maker's last .....	273,482	Mar. 6	311	84	23	886
Dunn, Michael J., Philadelphia, Pa. Shoe-maker's last .....	286,794	Oct. 16	1276	345	25	246
Dunn, Phineas D. and C. W., Cleveland, Ohio. Machine for setting and gumming saws .....	284,192	Sept. 4	40	12	24	911
Dunn, Stanley E., Herrick Centre, Pa. Churn .....	271,818	Feb. 6	284	78	23	491



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Dunn, Thomas H. (See Spencer and Dunn.)						
Dunn, William, assignor of two-thirds to D. B. Raffner and G. S. Bolton, Philadelphia, Pa. Nut-fastener	270,877	Jan. 16	1292	373	23	267
Dunn, William J., assignor to himself, T. Stone, and R. C. Billington, Lewiston, Me. Pickerstick holder for looms	278,111	May 22	1945	533	23	1980
Dunn, William W., Fort Worth, Tex. Apparatus for grain-drying and coffee-roasting	234,738	Sept. 11	704	197	24	1030
Dunnaway, James W. (See Ballagh, Andrew H., assignor.)						
Dunneback, Joseph F. (See Clarke, John S., assignor.)						
Dunnet, Edward L., assignor of one-half to W. H. Lockerman, Philadelphia, Pa. Hanger for carboys	270,183	Jan. 2	417	121	23	85
Dunning, William B., Geneva, N. Y. Steam-heater. (Reissue)	10,391	Oct. 9	988	{ 266 267 }	{ 25 }	190
Dunscomb, John A. S. (See Monk, Henry and W., assignors.)						
Dunstedter, Jacob. (See Williams and Dunstedter.)						
Dunton, Charles H., Oakland, Cal. Cooking-stove	270,766	Jan. 16	1166	{ 333 334 }	{ 23 }	243
Dunwoody, James B., Jr., Walterborough, S. C. Shutter-bower	275,167	Apr. 3	369	102	23	1290
Dupont, John B. (See Loomis and Dupont.)						
Durand, Arthur. (See Chaine, Durand, and De Chaligny.)						
Durant, Edward G., Racine, Wis. Building veneer boats	272,663	Feb. 20	1362	382	23	693
Durant, Edward G., and E. Shupe, Racine, Wis. Folding seat	278,691	June 5	20	6	23	2128
Durant, Edward G., Racine, Wis., assignor of one-half to T. Kane, Chicago, Ill. Opera-chair	271,320	Jan. 30	1847	536	23	373
Durant, Edward G., Racine, Wis., and T. Kane, Chicago, Ill. Opera-chair	274,742	Mar. 27	1924	536	23	1190
Durand, George F., St. Louis, Mo. Telephone-exchange system	286,595	Oct. 16	1024	278	25	202
Durden, Henry S., et al. (See Learned, Edward A., assignor.)						
Durell, Frank H., Bay City, and W. Goldie, West Bay City, Mich. Boom-stick	276,789	May 1	337	89	23	1685
Duret, James S., Peru, Ind. Calculating device	283,331	Aug. 14	1036	291	24	693
Durfee, William F., Bridgeport, Conn., and T. Egleston, New York, N. Y. Apparatus for casting copper	287,646	Oct. 30	2375	{ 640 641 }	{ 25 }	461
Durgin, Henry J. (See Brown and Durgin.)						
Durgin, Henry J., Rochester, N. Y. Table-leaf support	279,231	June 12	768	212	23	2264
Durgin, Henry J., Rochester, N. Y. Machine for channeling table-legs	284,193	Sept. 4	41	12, 13	24	912
Durkee, Alonzo, assignor to National Automatic Piano and Organ Manufacturing Company, New York, N. Y. Mechanical musical instrument	282,179	July 31	2345	646	24	428
Durkee, Edward W., Mason, Ill. Wire-coiling machine	273,483	Mar. 6	312	85	23	887
Durkee, George B. (See Edwards and Durkee.)						
Durkee, George B. (See Turner and Durkee.)						
Durkee, William H., assignor to himself and G. Marshall, Cincinnati, Ohio. Compound for preserving belts and preventing their slipping	277,017	May 8	633	.....	23	1740
Durlach, Elias, Brooklyn, N. Y. Toy stove	272,664	Feb. 20	1364	382	23	694
Durlach, Elias, Brooklyn, N. Y. Toy kitchen	272,665	Feb. 20	1365	383	23	694
Durning, Joseph S., Allegheny, Pa. Horse hay-fork	278,897	June 5	300	87	23	2174
Duryea, Edgar E., and P. H. Grimm, Glen Cove, assignors to Glen Cove Manufacturing Company, New York, N. Y. Apparatus for cooling liquids	271,436	Jan. 30	2000	577	23	401
Duryea, John. (See Grimm, Paul H., assignor.)						
Duryea, George, New York, N. Y. Brick and fire-proof lining for furnaces	271,437	Jan. 30	2001	.....	23	402
Dusenberry, William W., et al. (See Grant, Joseph C., assignor.)						
Dusenbury, C. Coles. (See Doyle, John, assignor.)						
Dusenbury, James W. (See Way, Orville W., assignor.)						
Dusenbury, Philip S., assignor of one-half to J. H. Kruse, Sedalia, Mo. Cuspidor	277,692	May 15	1448	391	23	1886
Dutcher Temple Company. (See Stimpson, Edward S., assignor.)						
Dutemple, William, Boston, Mass. Elevator	287,012	Oct. 23	1558	429	25	300
Dutemple, William R., assignor of two-thirds to G. C. and A. B. Case, Providence, R. I. Ear-ring fastener	280,726	July 3	466	133	24	83
Dutot, James, and H. B. Anderson, Newton, Iowa. Steam balanced valve	275,610	Apr. 10	971	264	23	1400
Dutrow, David E., Washington, D. C. Velocipede	277,246	May 8	918	246	23	1790
Dutrow, David E., Washington, D. C., assignor of one-half to C. W. Bready, Montgomery County, Md. Paddle-wheel propeller	276,010	Apr. 17	1472	406	23	1495
Dutton, Charles, et al. (See Huntress, John H., assignor.)						
Dutton, Chauncey N. (See Wilson and Dutton.)						
Dutton, Chauncey N., assignor of one-half to T. Wilson, Washington, D. C. Water-closet	280,017	June 26	1736	{ 486 487 }	{ 23 }	2441
Dutton, Chauncey N., assignor of one-half to T. Wilson, Washington, D. C. Water-closet	280,018	June 26	1740	{ 488 489 }	{ 23 }	2442
Dutton, George W., assignor of two-thirds to L. Guldayer and M. L. Murphy, Tomales, Cal. Two-wheeled vehicle	274,183	Mar. 20	1205	331	23	1057
Dutton, Leander K., Oskaloosa, Iowa. Washing-machine	274,473	Mar. 27	1555	435	23	1131
Dutton, Rufus, Yonkers, N. Y. Mowing-machine	271,819	Feb. 6	284	78	23	491
Duval, George R., Benicia, Cal. Vehicle-brake	271,047	Jan. 23	1507	435	23	307
Duval, Paul, Paris, France. Life-boat	281,622	July 17	1606	439	24	293
Duval, Elbridge G. (See Willis, Daniel, assignor.)						
Duval, Grafton H., assignor of one-half to B. Thomas, Philadelphia, Pa. Floor-plank clamp	280,152	June 26	1890	532	23	2469
Duval, Henry R., et al. (See Wagner and Seath, assignors.)						
Duval, William C., et al. (See Kirkbride, Frederick L., assignor.)						
Duval, William C., et al. (See Spooner, Samuel P., assignor.)						
Dwight, James, Boston, Mass. Pole for lawn-tennis nets	282,506	Aug. 7	36	11	24	506
Dwyer, Daniel, Marshall, Tex. Life-boat	273,713	Mar. 13	605	163	23	945
Dwyer, James, Detroit, Mich. Heating-stove	272,128	Feb. 13	683	186	23	570
Dwyer, John J., New York, N. Y. Sash-follower	283,384	Aug. 21	1111	313	24	712
Dwyer, William M. (See Fitz Gerald, Walter H., assignor.)						
Dye, Alexander M., Minneapolis, Minn. Fire-escape	284,542	Sept. 4	464	132	24	983
Dyer, Charles E., Malden, Mass. Hitching device	282,968	Aug. 14	583	165	24	611
Dyer, Hugh, Joplin, Mo. Baking-pan	271,321	Jan. 30	1849	536	23	373
Dyer, Josiah W., Philadelphia, Pa. Lightning-arrester for telegraph-circuits	272,867	Feb. 27	1640	459	23	750
Dyer, Josiah W., Philadelphia, Pa., assignor to Automatic Current Protector and Electric Manufacturing Company. Lightning-arrester	287,647	Oct. 30	2377	641	25	461
Dyer, Josiah W., Philadelphia, Pa., assignor to Automatic Current Protector and Electric Manufacturing Company. Lightning-arrester	289,629	Dec. 4	316	88	25	943
Dyer, Josiah W., Philadelphia, Pa., assignor to Automatic Current Protector and Electric Manufacturing Company. Circuit-breaker and lightning-arrester for electric circuits	289,630	Dec. 4	318	89	25	944
Dyer, Lucius. (See Young and Dyer.)						
Dyer, Richard N., assignor of one-third to H. W. Seely, New York, N. Y. Thermostatic fire-indicator	287,757	Oct. 30	2526	681	25	489

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Dyer, Richard N., and H. W. Seely, Menlo Park, N. J., assignors of one-third to S. Insull, New York, N. Y. Electric flat-iron.....	287,758	Oct. 30	2529	{ 681 682 }	25	490
Dyer, Stephen R. (See Conlon and Dyer.)						
Dyer, Stephen R., New Orleans, La. Car-axle box.....	273,484	Mar. 6	313	85	23	887
Dynamite Nobel Société Anonyme. (See Barbe, Paul, assignor.)						
Eager, Frank L., Palmer, Mass. Car-coupling.....	270,032	Jan. 2	241	70	23	50
Eager, Frank L., Palmer, Mass. Car-coupling.....	282,616	Aug. 7	170	51	24	530
Eagle Lock Company. (See Bradt, William D., assignor.)						
Eagle Lock Company. (See Ogden, Mortimer C., assignor.)						
Eagle Lock Company. (See Roche, James, assignor.)						
Eagleson, Alexander M. (See Huntington, Lawson G., assignor.) (Reissue.)						
Eames, Charles J., New York, N. Y. Process of and apparatus for burning water-gas in furnaces.....	272,378	Feb. 13	991	277	23	623
Eames, Ryland W. (See Bishop and Eames.)						
Eames, Wilfred, assignor to Evansville Pump Company, Evansville, Ind. Pump.....	280,920	July 10	717	201	24	133
Earhart, George W. (See Butler, Earhart, and Crawford.)						
Earhart, John F., Columbus, Ohio. Casting a plate for decorative printing, &c.....	282,866	Aug. 7	471		24	584
Earhart, John F., Columbus, Ohio. Printing-plate.....	284,399	Sept. 4	294	82	24	953
Earl, Edwin P., et al. (See Westerfield, William C., assignor.)						
Earl, Francis, St. Ives, county of Huntingdon, England. Egg-beater.....	280,019	June 26	1743	489	23	2442
Earl, Gardner, et al. (See Betts, Edgar K., assignor.)						
Earl, Henry W., assignor of two-thirds to G. F. Sinton and S. P. Ryland, Jr., Baltimore, Md. Seal-lock.....	278,227	May 22	2100	578	23	2007
Earl, John H., et al. (See Westerfield, William C., assignor.)						
Earl, William S., et al. (See Betts, Edgar K., assignor.)						
Earl & Wilson. (See Turner, Isaac P., assignor.)						
Earle, Daniel D. (See Williams, Eben B., assignor.)						
Earle, George W., and G. S. Strail, Tully, N. Y. Running-gear for carriages.....	276,011	Apr. 17	1473	406	23	1495
Earle, John, Darby, Pa. Engraving.....	277,412	May 8	1107	297	23	1823
Earle Manufacturing Company, T. K. (See Arnold, Oliver, assignor.)						
Earls, William H., Kalkaska, Mich. Spittoon.....	271,820	Feb. 6	286	78	23	491
Early, Louis S. and M. J. B., Ladonia, Tex. Stalk-cutter.....	280,590	July 3	305	85	24	55
Early, Matthias J. B. (See Early, Louis S. and M. J. B.)						
Earnshaw, Charles W., Boston, Mass. Sales-book.....	283,872	Aug. 28	1697	478	24	831
East Hampton Bell Company. (See Goff, George W., assignor.)						
East, John T., Castana, Iowa. Saw-set.....	279,140	June 12	673	185	23	2248
Eastburn, David B., South Bend, Ind. Roaster.....	282,617	Aug. 7	171	51	24	530
Eastman, Haskett D., Minneapolis, Minn. Fire-escape.....	275,895	Apr. 17	1341	369	23	1472
Eastman, Henry A. (See Force, Douglas S., assignor.)						
Eastman, William E., Boston, Mass. Air-motor.....	278,228	May 22	2101	579	23	2007
Eastman, William W., et al. (See McManus, Henry, assignor.)						
Eastman, William W., Brooklyn, N. Y. Lamp-burner.....	281,674	July 24	1678	457	24	311
Easton, Henry. (See Ives, Henry, assignor.)						
Easton, James W., New York, N. Y. Dynamo-electric machine.....	290,551	Dec. 18	1493	413	25	1164
Eastwood, John. (See Merrill and Eastwood.)						
Eastwood, John, Hillsdale, Mich. Portable fence.....	271,322	Jan. 30	1849	536	23	373
Eastwood, John W., Denver, Colo. Combined book-clamp and portfolio.....	283,980	Aug. 28	1827	516	24	855
Eastwood Wire Manufacturing Company. (See Smith, Charles, assignor.)						
Eatherton, Henry H., assignor of one-half to A. C. Thompson, Monticello, Ill. Railway time-signal.....	279,084	June 5	580	159	23	2223
Eatherton, Henry H., assignor of one-half to A. C. Thompson, Cisco, Ill. Tile-ditcher.....	279,141	June 12	674	185	23	2248
Eatherton, Henry H., assignor of one-half to A. C. Thompson, Monticello, Ill. Railway-signal.....	286,122	Oct. 2	420	115	25	78
Eatherton, Henry H., assignor of one-half to A. C. Thompson, Monticello, Ill. Railway-signal.....	286,915	Oct. 16	1431	393	25	272
Eatherton, Henry H., assignor of one-half to A. C. Thompson, Monticello, Ill. Cutter-chain for ditching-machines, &c.....	288,930	Nov. 20	1430	393	25	773
Eaton, Asahel K., et al. (See Wallace, William, assignor.)						
Eaton, Asahel K., Brooklyn, N. Y. Thermo-electric battery.....	289,631	Dec. 4	320	89	25	944
Eaton, Benjamin F., Cossackie, N. Y., assignor, by mesne assignments, to Union Cabinet and Paper Company, Boston, Mass. Paper-holder.....	285,398	Sept. 25	1521	428	24	1187
Eaton, Charles E., Chelsea, Mass. Car-axle.....	284,194	Sept. 4	48	14	24	913
Eaton, Enoch C., Pinckneyville, Ill. Sulky-plow.....	270,033	Jan. 2	243	71	23	50
Eaton, Frederick, Los Angeles, Cal. Protecting iron water-pipes from rust.....	289,900	Dec. 11	663	185	25	1009
Eaton, George S., Brooklyn, N. Y. Type-rubbing machine.....	278,785	June 5	149	44	23	2148
Eaton, George S., Brooklyn, N. Y. Insulated electric conductor.....	280,153	June 26	1891	332	23	2470
Eaton, George S., assignor to himself and W. A. French, Brooklyn, N. Y. Burial-casket.....	274,575	Mar. 27	1733	481	23	1154
Eaton, Hiram A., Manchester, Me. Alarm-signal. (Reissue.)	10,295	Mar. 13	1092	301	23	1029
Eaton, Isaac, New Sharon, Iowa. End-gate.....	280,020	June 26	1743	489	23	2442
Eaton, Marcus, Circleville, Ohio. Lifting-jack.....	277,247	May 8	920	246	23	1790
Eaton, Oliver N., New York, N. Y. Endless hod-elevator.....	287,013	Oct. 23	1558	{ 429 430 }	25	300
Eaton, Thomas W., and F. H. Prince, Chicago, Ill. Barb-wire-fence machine.....	275,810	Apr. 17	1240	341	23	1453
Eayrs, Harrison P., et al. (See Kohler, Edward, assignor.)						
Ebbert, Jerry, Martin's Ferry, Ohio. Steam cooking-vessel.....	280,591	July 3	306	85	24	55
Ebbert, John, Rockaway Beach, N. Y., assignor to P. A. Hall, Chicago, Ill. Spike-extractor.....	290,011	Dec. 11	798	224	25	1034
Ebbes, Alexander. (See Mitchell, Ardon M., assignor.)						
Eber, Caspar C., St. Paul, Minn. Car-coupling.....	281,251	July 17	1144	316	24	215
Eber, Henry C., Quincy, Ill. Beer-cask.....	289,632	Dec. 4	321	89	25	944
Eberhard, Anton, Philadelphia, Pa. Steam-engine.....	290,871	Dec. 25	1905	526	25	1244
Eberhard, George F., Cleveland, Ohio. Trace-loop.....	288,626	Nov. 20	1057	291	25	707
Eberhard, George F., Cleveland, and J. E. Renz, Medina, Ohio. Trace-supporter.....	289,519	Dec. 4	185	51	25	919
Eberhard, William, assignor of one-half to G. T. Ford, Akron, Ohio. Grain-cutting machine.....	283,981	Aug. 28	1828	516	24	856
Eberhard, William, assignor of one-half to G. T. Ford, Akron, Ohio. Cuspidor-stand.....	290,759	Dec. 25	1773	490	25	1231
Eberhardt, Henry E., Newark, N. J. Friction-clutch.....	290,671	Dec. 25	1649	454	25	1198
Eberhart, Lloyd, Joliet, Ill. Check-rover attachment for seed-planters.....	272,538	Feb. 20	1201	335	23	665
Eberhart, Lloyd, Joliet, Ill. Anchor for check-ro cords.....	281,473	July 17	1420	389	24	262
Eberhart, Lloyd, and I. D. Stevens, Joliet, Ill. Door-hanger.....	278,692	June 5	22	6	23	2128
Eberle, Louis, Altoona, Pa. Composition for gilt moldings.....	289,237	Nov. 27	1802		25	847
Eberley, Friderich C. and R. Richter, Denver, Colo. Coke oven and kiln.....	282,064	July 31	2175	{ 597 598 }	24	402
Eberline, Thomas, Tarentum, Pa. Axle-skein.....	283,982	Aug. 28	1829	516	24	856



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Eberly, Cyrus, Columbus, Ohio. Window-curtain cornice .....	279,232	June 12	770	212	23	2264
Eberman, Albert S., Sandy Lake, Pa. Injector .....	288,039	Nov. 6	313	88, 89	25	561
Eberman, William S., Sandy Lake, Pa. Car-axle .....	282,507	Aug. 7	37	11	24	507
Ebert, Jacob F., Decatur, Ill. Check-rower for corn-planters .....	273,827	Mar. 13	763	207	23	973
Ebert, Jacob F., Decatur, Ill. Check-rower for corn-planters .....	282,508	Aug. 7	38	11	24	507
Ebi, Edward, Cedar Rapids, Iowa. Coupling for brake-rods .....	276,370	Apr. 24	1931	536	23	1581
Ebi, Edward, Cedar Rapids, Iowa. Binding attachment for harvesters .....	278,521	May 29	2497	682	23	2085
Ecanbert, Frederic, New York, N. Y. Device for making and ornamenting watch-centers .....	270,644	Jan. 16	1010	291	23	214
Eccles, Nicholas, Anburn, N. Y. Die for making clip king-bolts .....	270,404	Jan. 9	699	206	23	146
Eccles, William M., St. Louis, Mo. Corn-planter .....	290,552	Dec. 18	1495	413	25	1165
Eccles, William M., assignor of one-half to I. N. Byrns, St. Louis, Mo. Nut-lock .....	276,527	Apr. 24	2127	592	23	1614
Eckardt, John C., Stuttgart, Germany. Friction-clutch .....	287,915	Nov. 6	157	45, 46	25	535
Eckart, George, <i>et al.</i> (See Rebstock, Christian, assignor.) .....						
Eckart, William R., San Francisco, Cal. Pumping apparatus .....	275,473	Apr. 10	804	217	23	1371
Eckert, Edward A. (See Eckert, Seely, and Eckert.) .....						
Eckert, Jacob H. (See Ritty and Birch, assignors.) .....						
Eckert, William H., and J. A. Seely, New York, N. Y. Telephonic circuit .....	282,867	Aug. 7	472	133	24	584
Eckert, William H., and J. A. Seely, New York, N. Y. Telephone system .....	288,627	Nov. 20	1057	291	25	707
Eckert, William H., J. A. Seely, and E. A. Eckert, Cincinnati, Ohio. Adjustable support for telephonic transmitters .....	275,611	Apr. 10	972	264	23	1401
Eckert, William H., J. A. Seely, and E. A. Eckert, Cincinnati, Ohio. Adjustable telephone-holder and automatic circuit-breaker .....	288,320	Nov. 13	659	182	25	630
Eckstein, Horatio G., Philadelphia, Pa. Feed-water heater .....	271,575	Jan. 30	2172	626	23	430
Eclipse Improved Wheat Cleaning Machine Company. (See Teter, William L., assignor.) .....						
Economic Motor Company. (See Hopkins, George M., assignor.) .....						
Economic Motor Company. (See Hopkins, George M. and I. N., assignors.) .....						
Economist Plow Company. (See Meagher, Edmund D., assignor.) .....						
Eddington, William. (See Elwanger and Eddington.) .....						
Eddowes, Archibald K., Philadelphia, Pa. Crank-pin for steam-engines .....	286,404	Oct. 9	788	212	25	153
Eddy, Albert C., Providence, R. I. Apparatus for working vulcanizable gum compounds .....	277,018	May 8	633	166	23	1740
Eddy, Albert C., Providence, R. I. Working and vulcanizing gum compounds .....	277,019	May 8	637	166, 167	23	1741
Eddy, Almon W. (See Buchholz and Eddy.) .....						
Eddy, Alson W., Macomb, Ill. Earthenware cover for milk-vessels .....	288,931	Nov. 20	1431	393	25	773
Eddy, Peter, assignor of one-half to J. G. Hartwell, Nevada City, Cal. Combined ore-grinder and amalgamator .....	287,256	Oct. 23	1870	511, 512	25	358
Eddy, Romulus A., assignor of two-thirds to J. S. Estabrook and S. S. Garigues, East Saginaw, Mich. Fire-kindler .....	282,868	Aug. 7	473	133	24	584
Eddy, Walden, Greenwich, N. Y. Shovel-plow .....	289,238	Nov. 27	1802	499	25	847
Eddy, William H., Worcester, Mass. Friction-clutch .....	285,593	Sept. 25	1750	496	24	1229
Edenborn, William, and G. Griesche, St. Louis, Mo. Barbed fence-wire .....	271,693	Feb. 6	129	35	23	462
Edenborn, William, and G. Griesche, St. Louis, Mo.; said Griesche assignor to said Edenborn. Barb-wire machine .....	270,645	Jan. 16	1012	291, 292	23	214
Edenborn, William, and G. Griesche, St. Louis, Mo.; said Griesche assignor to said Edenborn. Barb-wire machine .....	270,646	Jan. 16	1015	292, 293	23	214
Edes, William C., <i>et al.</i> (See Magaw, Frederick L., assignor.) .....						
Edgar, Dennis P., Jackson, Mich. Fire-escape .....	287,257	Oct. 23	1872	512	25	358
Edge, James S., Jr. (See Deely and Edge.) .....						
Edge, William C. (See Bauer, Hermann, assignor.) .....						
Edge, William C. (See Spicer, George A., assignor.) .....						
Edge, William C., Newark, N. J. Inlaid work and producing the same .....	272,032	Feb. 13	556	151	23	549
Edge, William C., Newark, N. J. Inlaid work and producing the same .....	272,033	Feb. 13	557	151	23	549
Edgerly, Samuel H., Jackson, Mich. Crane .....	282,869	Aug. 7	473	133	24	584
Edgerton, Henry H., Fort Wayne, Ind. Manufacture of illuminating-gas from hydrocarbon oils .....	274,442	Mar. 20	1547	424	23	1116
Edgerton, Henry H., Danbury, Conn. Apparatus for the manufacture of gas from hydrocarbon oils .....	274,443	Mar. 20	1549	425	23	1116
Edgerton, Marvin D., Bristol, Conn. Nail-puller .....	283,223	Aug. 14	895	249	24	667
Edgerton, Nathan H., Philadelphia, Pa. Electroplated insulated conductor of electricity .....	277,248	May 8	922	246	23	1790
Edgerton, Nathan H., Philadelphia, Pa. Dynamo-electric machine .....	279,362	June 12	938	262, 263	23	2292
Edgerton, Nathan H., Philadelphia, Pa. Electric-arc lamp .....	279,363	June 12	948	263, 264	23	2293
Edison Electric Light Company. (See Bradley, Charles S., assignor.) .....						
Edison Electric Light Company. (See Edison, Thomas A., assignor.) .....						
Edison Electric Light Company. (See Edison and Clarke, assignors.) .....						
Edison Electric Light Company. (See Goddard, Calvin, assignor.) .....						
Edison Electric Light Company. (See Haid, Alfred, assignor.) .....						
Edison Electric Light Company. (See Mott, Samuel D., assignor.) .....						
Edison Electric Light Company. (See Ott, John F., assignor.) .....						
Edison Electric Light Company. (See Stieringer, Luther, assignor.) .....						
Edison Lamp Company. (See Holzer, William, assignor.) .....						
Edison, Thomas A., Menlo Park, N. J. Manufacture of incandescing electric lamps .....	271,613	Feb. 6	36	9	23	447
Edison, Thomas A., Menlo Park, N. J. Shafting .....	271,614	Feb. 6	37	9	23	447
Edison, Thomas A., Menlo Park, N. J. Governor for dynamo-electric machines .....	271,615	Feb. 6	38	10	23	447
Edison, Thomas A., Menlo Park, N. J. Regulator for dynamo-electric machines .....	271,616	Feb. 6	39	10	23	447
Edison, Thomas A., Menlo Park, N. J. Telephone .....	272,034	Feb. 13	557	151	23	549
Edison, Thomas A., Menlo Park, N. J. Incandescing electric lamp .....	274,485	Mar. 6	314	85	23	887
Edison, Thomas A., Menlo Park, N. J. Incandescing electric lamp .....	274,486	Mar. 6	314	85	23	887
Edison, Thomas A., Menlo Park, N. J. Regulator for dynamo-electric machines .....	273,487	Mar. 6	315	86	23	887
Edison, Thomas A., Menlo Park, N. J. Regulator for dynamo-electric machines .....	273,488	Mar. 6	317	86	23	887
Edison, Thomas A., Menlo Park, N. J. Turn-table for electric railways .....	273,489	Mar. 6	318	86	23	888
Edison, Thomas A., Menlo Park, N. J. Electro-magnetic railway system .....	273,490	Mar. 6	318	86	23	888
Edison, Thomas A., Menlo Park, N. J. Regulator for driving engines of electrical generators .....	273,491	Mar. 6	319	87	23	888
Edison, Thomas A., Menlo Park, N. J. Secondary battery .....	273,492	Mar. 6	321	87	23	889
Edison, Thomas A., Menlo Park, N. J. Valve-gear for electrical generator-engines .....	273,493	Mar. 6	322	87	23	889
Edison, Thomas A., Menlo Park, N. J. Electrical railway .....	273,494	Mar. 6	323	88	23	889
Edison, Thomas A., Menlo Park, N. J. Magneto-electric signaling apparatus .....	273,714	Mar. 13	607	163	23	945
Edison, Thomas A., Menlo Park, N. J. Malleableizing iron .....	273,715	Mar. 13	608	.....	23	946
Edison, Thomas A., Menlo Park, N. J. System of underground conductors for electrical distribution .....	273,828	Mar. 13	764	207	23	973
Edison, Thomas A., Menlo Park, N. J. System of electrical distribution .....	274,290	Mar. 20	1346	370	23	1081
Edison, Thomas A., Menlo Park, N. J. Mold for carbonizing .....	274,291	Mar. 20	1348	371	23	1081

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Edison, Thomas A., Menlo Park, N. J. Secondary battery	274,292	Mar. 20	1349	371	23	1081
Edison, Thomas A., Menlo Park, N. J. Electric lamp	274,293	Mar. 20	1350		23	1081
Edison, Thomas A., Menlo Park, N. J. Incandescing electric lamp	274,294	Mar. 20	1350	371	23	1081
Edison, Thomas A., Menlo Park, N. J. Incandescing electric lamp	274,295	Mar. 20	1352	371	23	1081
Edison, Thomas A., Menlo Park, N. J. Manufacture of incandescents	274,296	Mar. 20	1354		23	1082
Edison, Thomas A., Menlo Park, N. J. Transmitting-telephone	274,576	Mar. 27	1734	482	23	1154
Edison, Thomas A., Menlo Park, N. J. Telephone	274,577	Mar. 27	1736	482	23	1155
Edison, Thomas A., Menlo Park, N. J. Manufacture of incandescing electric lamps	275,612	Apr. 10	973		23	1401
Edison, Thomas A., Menlo Park, N. J. Incandescing electric lamp	275,613	Apr. 10	974	264	23	1401
Edison, Thomas A., Menlo Park, N. J. Operating and regulating electrical generators	276,232	Apr. 24	1746	485	23	1550
Edison, Thomas A., Menlo Park, N. J. Electrical generator and motor	276,233	Apr. 24	1749	485	23	1550
Edison, Thomas A., Menlo Park, N. J. Magneto-electric signaling apparatus	282,267	July 31	2463	679	24	450
Edison, Thomas A., Menlo Park, N. J. System of electrical distribution	283,963	Aug. 28	1830	517	24	856
Edison, Thomas A., Menlo Park, N. J. Electric regulator	287,511	Oct. 30	2158	594	25	425
Edison, Thomas A., Menlo Park, N. J. Dynamo-electric machine	287,512	Oct. 30	2190	595	25	425
Edison, Thomas A., Menlo Park, N. J. Dynamo-electric machine	287,513	Oct. 30	2191	595	25	425
Edison, Thomas A., Menlo Park, N. J. Dynamo-electric machine	287,514	Oct. 30	2191	595	25	426
Edison, Thomas A., Menlo Park, N. J. System of electrical distribution	287,515	Oct. 30	2193	596	25	426
Edison, Thomas A., Menlo Park, N. J. System of electrical distribution	287,516	Oct. 30	2194	596	25	426
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Regulator for dynamo-electric machines	278,413	May 29	2366	646	23	2061
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Regulator for dynamo-electric machines	278,414	May 29	2367	646	23	2062
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Manufacture of incandescing electric lamps	278,415	May 29	2368	647	23	2062
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Manufacture of incandescing electric lamps	278,416	May 29	2369	647	23	2062
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Manufacture of incandescing electric lamps	278,417	May 29	2370	647	23	2062
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Apparatus for translating electric currents from high to low tension	278,418	May 29	2371	648	23	2062
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Dynamo-electric machine	278,419	May 29	2372	648	23	2063
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. System of electrical distribution	280,727	July 3	466	133	24	83
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Regulator for dynamo-electric machines	281,349	July 17	1263	351	24	236
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Regulator for dynamo-electric machines	281,350	July 17	1264	351	24	236
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Electrical generator	281,351	July 17	1265	352	24	236
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Webermeter	281,352	July 17	1269	352	24	237
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Dynamo or magneto electric machine	281,353	July 17	1270	353	24	237
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. System of electrical distribution	283,964	Aug. 28	1832	517	24	856
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. System of electrical distribution	283,985	Aug. 28	1833	518	24	857
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. System of electrical distribution	283,986	Aug. 28	1835	518	24	857
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. System of electrical distribution	287,517	Oct. 30	2195	596	25	427
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Manufacturing incandescing electric lamps	287,518	Oct. 30	2196	596	25	427
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Incandescing electric lamp	287,519	Oct. 30	2197	597	25	427
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Incandescing conductor for electric lamps	287,520	Oct. 30	2198	597	25	427
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Dynamo or magneto electric machine	287,521	Oct. 30	2198	597	25	427
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Mold for carbonizing	287,522	Oct. 30	2200	598	25	428
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Dynamo or magneto electric machine	287,523	Oct. 30	2201	598	25	428
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Regulator for dynamo-electric machines	287,524	Oct. 30	2202	598	25	428
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Regulator for dynamo or magneto electric machines	288,318	Nov. 13	656	181	25	630
Edison, Thomas A., Menlo Park, N. J., and C. L. Clarke, assignors to Edison Electric Light Company, New York, N. Y. Regulator for systems of electrical distribution	287,525	Oct. 30	2204	598	25	429
Edmonds, John A., Dover, Del. Fire-escape	272,120	Feb. 13	683	186	23	570
Edmonds, John W., New York, N. Y. Transparent blower for fire-places	280,154	June 26	1893	533	23	2470
Edmonds, Robert, Norfolk, Va. Universal joint	281,850	July 24	1913	522	24	352
Edmunds, Henry, Jr., New York, N. Y., assignor to T. J. Montgomery, Boston, Mass. Contact for electric lamps	288,217	Nov. 13	526	146	25	608
Edmunds, Henry, Jr., New York, N. Y., assignor to T. J. Montgomery, Boston, Mass. Contact for electric lamps	288,218	Nov. 13	526	146	25	609
Edmunds, Henry, Jr., New York, N. Y., assignor to T. J. Montgomery, Boston, Mass. Switch for electric lamps	290,406	Dec. 18	1285	361	25	1130
Edmunds, Henry, Jr., New York, N. Y., assignor to T. J. Montgomery, Boston, Mass. Circuit-conductor for electrolyzers	290,407	Dec. 18	1286	361	25	1130
Edmunds, Milton L., Danbury, Iowa. Window	279,364	June 12	951	264	23	2293
Edney, Samuel R., South Mills, N. C. Wagon-axle	290,760	Dec. 25	1773	490	25	1221
Edsall, William H., Brooklyn, N. Y. Joint for cornice-poles	288,319	Nov. 13	658	182	25	630
Edson, Charles H., Canisio, N. Y. Cut-off valve	276,528	Apr. 24	2127	592	23	1614
Edson, George F., Van Wert, Ohio. Corn-planter	282,288	July 31	2464	679	24	451
Edson, Jacob, Boston, Mass. Surgical truss	273,228	Feb. 27	2081	528	23	826
Edson, Jarvis B. (See Douglass, Samuel W., assignor.)						
Edson, Jarvis B., New York, N. Y. Accumulator of power	273,044	Feb. 27	1851	518	23	786
Edson, Jarvis B., North Adams, Mass. Frame for drying substances in sheets	277,693	May 15	1449	391	23	1887
Edson, Jarvis B., North Adams, Mass. Nozzle for making rods and tubes from celluloid and other plastic compounds	277,694	May 15	1450	391	23	1887



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Edson, Jarvis B., Adams, Mass. Formation of deep wells in quicksand, &c.	277,695	May 15	1451	391	23	1887
Edson, Jarvis B., Adams, Mass. Method of and apparatus for forming thin sheets of a plastic and yielding compound.	283,224	Aug. 14	895	250	24	667
Edson, Jarvis B., Adams, Mass. Manufacture of artificial ivory.	283,225	Aug. 14	896	250	24	667
Edson, Jarvis B., Adams, Mass. Formation of deep wells and apparatus therefor.	288,557	Nov. 13	967	266	25	684
Edson, Jarvis B., Adams, Mass. Treating material with zylonite to resemble pebble, goat, French calf, and alligator leather.	289,338	Nov. 27	1926	499	25	871
Edson, Jarvis B., Adams, Mass. Apparatus for polishing sheets of zylonite, &c.	289,239	Nov. 27	1803	499	25	847
Edson, Jarvis B., Adams, Mass. Forming and finishing surfaces coated with zylonite.	289,240	Nov. 27	1804	499	25	848
Edson, Jarvis B., Adams, Mass. Patent-leather and a substitute therefor.	289,241	Nov. 27	1805	499	25	848
Edson, Jarvis B., Adams, Mass. Forming and finishing fabrics coated with zylonite or similar pyroxyline compounds for collars and cuffs, &c.	289,242	Nov. 27	1805	499	25	848
Edson, Jarvis B., Adams, Mass. Combining sheets of zylonite with other sheeted substances.	290,553	Dec. 18	1498	413	25	1165
Edward, John C., and John G. Bisset, Detroit, Mich. Boiler and steam cooker.	284,729	Sept. 11	706	198	24	1030
Edwards, Abraham, Asbury Park, N. J. Mercury-seal trap for lavatories, bath-tubs, &c.	287,369	Oct. 23	2010	547	25	383
Edwards, Abraham, assignor to I. S. Edwards, Asbury Park, N. J. Mercury-seal trap.	280,155	June 26	1893	533	23	2470
Edwards, Abraham, Asbury Park, N. J., and S. J. Van Stavoren, Philadelphia, Pa., assignors to said Edwards. Mercury-seal-joint trap for bath-tubs, &c.	270,034	Jan. 2	244	71	23	50
Edwards, Albert T., South Kingston, R. I. Paint-brush holder.	286,405	Oct. 9	789	213	25	153
Edwards, Alfred, New Haven, Conn. Drying apparatus.	288,782	Nov. 20	1248	343	25	740
Edwards, Alfred, New Haven, Conn. Fertilizer for tobacco-crops.	290,633	Dec. 18	1600	599	25	1182
Edwards, Alfred, New Haven, Conn., assignor to Farmers Protective Union, Long Island City, N. Y. Packing and shipping fertilizers.	287,526	Oct. 30	2206	599	25	429
Edwards, Austen M., Buffalo, N. Y. Sphygmograph.	286,795	Oct. 16	1277	345	25	247
Edwards, Craig K., Boston, Mass. Shovel.	283,086	Aug. 14	728	204	24	637
Edwards, David, New York, N. Y. Feed-water regulator.	278,112	May 22	1946	533 534	23	1981
Edwards, David P. (See Stevens, Major, and Edwards.)						
Edwards, Edgar A., Cincinnati, Ohio. Telegraph-key.	270,767	Jan. 16	1167	334	23	243
Edwards, Edgar A., Cincinnati, assignor to O. M. Gottschall, trustee, Dayton, Ohio. Electric-arc lamp.	275,168	Apr. 3	369	102	23	1290
Edwards, Edgar A., Cincinnati, assignor to O. M. Gottschall, trustee, Dayton, Ohio. Armature for dynamo-electric machines.	275,169	Apr. 3	370	102	23	1290
Edwards, Edgar A., Cincinnati, assignor to O. M. Gottschall, trustee, Dayton, Ohio. Electric-arc lamp.	275,170	Apr. 3	371	102 103	23	1291
Edwards, Edgar A., Cincinnati, assignor to O. M. Gottschall, trustee, Dayton, Ohio. Electric-arc lamp.	275,171	Apr. 3	373	103	23	1291
Edwards, Edgar A., Cincinnati, assignor to O. M. Gottschall, trustee, Dayton, Ohio. Electric-arc lamp.	275,172	Apr. 3	374	103 104	23	1291
Edwards, Edgar A., Cincinnati, assignor to O. M. Gottschall, trustee, Dayton, Ohio. Electric-arc lamp.	275,173	Apr. 3	376	104	23	1291
Edwards, Edgar A., Cincinnati, assignor to O. M. Gottschall, trustee, Dayton, Ohio. Electric-arc lamp.	275,174	Apr. 3	377	105	23	1292
Edwards, Edgar A., Cincinnati, assignor to O. M. Gottschall, trustee, Dayton, Ohio. Dynamo-electric machine.	281,985	July 24	2074	569	24	380
Edwards, Frank A. (See Gazaille, Henry, assignor.)						
Edwards, George J., Philadelphia, Pa. Paper box.	281,354	July 17	1271	353	24	237
Edwards, Isabella S. (See Edwards, Abraham, assignor.)						
Edwards, John S., et al. (See Cartwright, Edward, assignor.)						
Edwards, Nathan J. (See Frazier and Edwards.)						
Edwards, Nelson, Jericho, Vt. Frictional connection for the bars and slats of window-blinds.	280,156	June 26	1894	533	23	2470
Edwards, Reuben B. (See Leffingwell, John G., assignor.)						
Edwards, Robert. (See Lungen, Adam, assignor.)						
Edwards, William B., assignor to Upson Nut Company, Unionville, Conn. Machine for pointing bolts.	285,738	Sept. 25	1936	548 549	24	1261
Edwards, William C., et al. (See De Lamater, William, assignor.)						
Edwards, William F., Covington, Ga. Seed-planter and fertilizer-distributor.	284,826	Sept. 11	821	229	24	1050
Edwards, William F., Cincinnati, Ohio. Window-shade roller.	271,438	Jan. 30	2002	578	23	402
Edwards, William F., Cincinnati, Ohio. Shipping-tag.	276,166	Apr. 24	1669	461	23	1536
Edwards, William F., assignor of two-thirds to G. Quigley and P. T. Schultz, Cincinnati, Ohio. Shipping-tag.	276,167	Apr. 24	1670	461	23	1536
Edwards, William J., and G. B. Durkee, Chicago, Ill., assignors to said Edwards. Grading and ditching machine.	275,614	Apr. 10	975	205 206	23	1401
Egan, Charles, Zanesville, Ohio, assignor of two-thirds to D. S. Robeson, New York, N. Y., and E. A. Leslie, Washington, D. C. Telephone.	282,969	Aug. 14	584	165	24	611
Ege, Joseph A., et al. (See Hershey and Hitchcock, assignors.)						
Egelhoff Manufacturing Company. (See Bolte, Frank H., assignor.)						
Egells, Hermann, Berlin, Germany. Apparatus for cooling and freezing liquids.	272,667	Feb. 20	1366	383	23	694
Eger, George, Covington, Ky. Cross-bow.	272,418	Feb. 20	1052	295	23	639
Eger, John, assignor of three-fourths to W. H. Meyer, F. J. H. Wiehman, Chicago, and H. Brueggeman, Mattison, Ill. Machine for smoothing stones.	287,648	Oct. 30	2379	641	25	461
Egermann, William, et al. (See Schermerhorn, Herschel A., assignor.)						
Egerton, C. Calvert, assignor to Scott Manufacturing Company, Baltimore, Md. Standard for children's carriages.	278,000	May 22	1817	496	23	1958
EGGE, Frederick. (See Aberle, Fredrick, assignor.)						
EGGE, Frederick, Bridgeport, Conn., assignor to Universal Button Hole Attachment Company, New York, N. Y. Clamp for button-hole sewing-machines.	271,323	Jan. 30	1850	537	23	373
EGGE, Frederick, assignor to Smith & EGGE Manufacturing Company, Bridgeport, Conn. Padlock.	278,229	May 22	2103	579	23	2008
EGGE, John J., et al. (See Beidler, Charles, assignor.)						
Eggert, Charles A. (See Baker, Christian E., assignor.)						
Egleston, Charles H., Marshall, Mich. Wheel harrow and cultivator.	272,668	Feb. 20	1368	384	23	694
Egin, William, Somerville, Mass. Elevator-bucket.	270,035	Jan. 2	245	71	23	51
Egleston, Thomas. (See Durfee and Egleston.)						
Egleston, Thomas, New York, N. Y. Crucible, muffle, &c.	284,287	Sept. 4	159	44	24	931
Egleston, Thomas, New York, N. Y., assignor to Plume & Atwood Manufacturing Company, Thomaston, Conn. Making electric conductors.	286,796	Oct. 16	1280	345	25	247
Egli, Rudolf, Rapperschwil, assignor to A. Bannwart, Zurich, Switzerland. Machine for making shoe and upholsterers' nails.	280,458	July 3	152	41, 42	24	28
Enzor, James M., Catskill, N. Y. Stove-pipe and chimney attachment.	287,258	Oct. 23	1873	513	25	358
Ehle, James A., St. Cloud, Wis. Hay-tedder.	286,406	Oct. 9	790	213	25	153
Ehler, Berthold. (See Piepgrass, Ludwig, assignor.)						
Ehrhardt, John, assignor of two-thirds to H. and C. Hopmann, St. Louis, Mo. Skylight.	283,332	Aug. 14	1036	291	24	693

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Ehrig, Charles S., <i>et al.</i> (See Beidler, Charles, assignor.)						
Ehrlich, Leo, St. Louis, Mo. Portable transfer-track	270,405	Jan. 9	699	207	23	146
Ehrlich, Paul, Gohlis, near Leipsic, Saxony, Germany. Mechanical musical instrument	290,672	Dec. 25	1650	454	25	1198
Eibee, Carl, Brooklyn, N. Y. Belt-coupling	275,896	Apr. 17	1342	369	23	1472
Eichelberger, Abdiel W., Hanover, Pa. Ice-creeper	272,669	Feb. 20	1369	384	23	694
Eichelberger, Abdiel W., assignor of one-half to J. W. Forney, Hanover, Pa. Chair	281,038	July 10	862	240	24	160
Eichholtz, William M., Williamsburg, Pa. Lifting-jack	276,371	Apr. 24	1932	536	23	1581
Eichling, Henry, and A. S. Fitch, New York, N. Y. Canopy-top for perambulators	281,675	July 24	1679	457	24	311
Eicke, Louis, New York, N. Y. Drill-stock	283,473	Aug. 21	1216	342	24	731
Eickemeyer, Rudolf, Yonkers, N. Y. Harvesting-machine	271,694	Feb. 6	129	36	23	462
Eickemeyer, Rudolf, Yonkers, N. Y. Machine for mounting hats on finishing-blocks	278,001	May 22	1818	497	23	1958
Eickemeyer, Rudolf, Yonkers, N. Y. Hat-felting machine	289,243	Nov. 27	1808	499 500	25	848
Eickemeyer, Rudolf, Yonkers, N. Y. Fulling-mill	289,901	Dec. 11	663	185	25	1009
Eickemeyer, Rudolf, Yonkers, N. Y. Hat-ironing machine	290,408	Dec. 18	1287	361	25	1130
Eimecke, Gustav, O., and W., Brunswick, assignors to S. Sudheim, Cassel, Prussia, Germany. Double-acting hot-air engine	270,036	Jan. 2	246	72	23	51
Eimecke, Otto. (See Eimecke, Gustav, O., and W.)						
Eimecke, Wilhelm. (See Eimecke, Gustav, O., and W.)						
Einsel, Rudolf, New York, N. Y. Electric gas-lighting apparatus	278,898	June 5	301	87	23	2175
Eisele, Joseph. (See Gore and Eisele.)						
Eisele, Samuel O. (See Unger and Eisele.)						
Eiseman, Solomon M., assignor to International Transportation Company, New York, N. Y. Treating volatile or inflammable fluids and oils	282,970	Aug. 14	585		24	611
Eisenbise, Harry W. (See Hamm and Eisenbise.)						
Eisenmann, Edward J., New York, N. Y., and H. Kock, Hoboken, N. J.; said Eisenmann assignor to said Kock. Dressing-case	279,233	June 12	770	213	23	2265
Eisenmann, Raphael. (See Bendix, Josef, assignor.)						
Ekl, Martin A., A. Hoyda, M. Cizek, and V. Skala, St. Louis, Mo. Drag-saw	288,558	Nov. 13	968	266	25	684
Ekl, Martin A., V. Skala, A. Hoyda, and M. Cizek, St. Louis, Mo. Permutation-padlock	288,559	Nov. 13	969	266	25	685
Ekman, Carl D., London, England. Obtaining coloring-matters	282,971	Aug. 14	587		24	612
Ekman, Carl D., Bergvik, Sweden, G. Fry, London, England, and W. B. Espeut, Jamaica, West Indies. Extraction of saccharine matter from vegetable substances	286,187	Oct. 9	501		25	103
Ela, Roger J. (See Foulsham, Robert, assignor.)						
Elbers, Alexander D., Hoboken, N. J. Treating blast-furnace slag	278,002	May 22	1821		23	1958
Ellbreg, George, Columbus, Ohio. Disintegrating-mill	273,829	Mar. 13	765	207	23	973
Elder, Cornelius D., Osage, Iowa. Cream-transportation tank	285,348	Sept. 18	1450	409	24	1169
Elder, John, St. James, Mo. Car-coupling	270,768	Jan. 16	1168	334	23	243
Elder, Joseph, Peoria, Ill. Device for increasing the traction of locomotives	290,012	Dec. 11	799	225	25	1034
Elder, Joseph, assignor of one-half to B. A. Reid, Peoria, Ill. Device for packing bran, &c.	290,013	Dec. 11	800	225	25	1034
Eldred, Horace H. (See Scrivane, Grégoire, assignor.)						
Eldredge, Alonzo W., Big Rapids, Mich. Portable steam-generator	282,618	Aug. 7	172	52	24	530
Eldredge, Alonzo W., Big Rapids, assignor to himself and A. Leitelt, Grand Rapids, Mich. Ice-machine	277,249	May 8	923	247	23	1791
Eldredge, John V. D., Detroit, Mich. Fire-pot for stoves and furnaces	283,584	Aug. 21	1347	376	24	756
Eldridge, Daniel, <i>et al.</i> (See Fuller, Willard M., assignor.)						
Eldridge, James W., Hartford, Conn. Padlock	277,469	May 15	1185	318	23	1843
Eldridge, Stuart, Yokohama, Japan, assignor of one-half to E. C. Hine and R. W. Beyrich, Brooklyn, N. Y. Doll	278,420	May 29	2374	648	23	2063
Electric Purifier Company. (See Kuhnminch, Joseph, assignor.)						
Electric Tube Company. (See Kruesi, John, assignor.)						
Elfering, John H., Chicago, Ill. Electric-lamp cut-out	274,297	Mar. 20	1355	372	23	1082
Elfers, John F. C. (See Taylor and Elfers.)						
Elfrink, Jacob, Barrington, Ill. Platform-spring equalizer	282,972	Aug. 14	588	166	24	612
Elgin Tubular Iron Tower Company. (See Adams, John S., assignor.) (Reissue.)						
Elhel, Albert L., assignor of one-half to J. Hoelle, La Salle, Ill. Glass-blowing apparatus	282,870	Aug. 7	474	133	24	584
Elkan, Camil, San Francisco, Cal. Spool or bobbin	287,426	Oct. 30	2083	566	25	404
Elkins, Ida, Brooklyn, N. Y. Apparatus for killing mosquitoes	286,407	Oct. 9	791	213	25	154
Elliott, George C., <i>et al.</i> (See Whiting, James M., assignor.)						
Ellerbeck, Thomas R., and A. C. Young, Salt Lake City, Utah Ter. Hose and rope reel	286,408	Oct. 9	792	213	25	154
Ellery, Charles, Albany, N. Y. Automatic feeding device for printing-presses	272,419	Feb. 20	1054	296	23	639
Ellicott, H. William, Baltimore, Md. Hot-blast stove for blast-furnaces	276,790	May 1	338	90	23	1685
Ellicott, H. William, Baltimore, Md. Steam-generator	289,818	Dec. 11	556	156	25	990
Ellinwood, Augustus E. (See Miller and Ellinwood.)						
Elliot, Charles, San Francisco, Cal. Apparatus for purifying water for boilers	271,821	Feb. 6	286	78	23	491
Elliot, Charles F., <i>et al.</i> (See Howe, Solon G., assignor.)						
Elliot, Henry, St. Louis, Mo. Railway-switch stand	289,633	Dec. 4	322	89	25	944
Elliot, John W., Toronto, Ontario, Canada. Dentist's flask	285,243	Sept. 18	1333	375	24	1147
Elliot, William H., New York, N. Y. Magazine fire-arm	274,578	Mar. 27	1738	482	23	1155
Elliot, William H., New York, N. Y. Magazine fire-arm	278,003	May 22	1821	498	23	1958
Elliot, William H., New York, N. Y. Magazine fire-arm	278,324	May 29	2250	617	23	2041
Elliot, William H., New York, N. Y. Magazine fire-arm	285,020	Sept. 18	1069	299	24	1101
Elliot, Charles B., Green Point, N. Y. Outrigger oar-lock	289,924	Jan. 2	121	36	23	25
Elliot, Charles W., assignor to himself, H. N. Ruggles, and M. Donnelly, Boston, Mass. Automatic sash lifter and lock	278,323	May 29	2249	617	23	2040
Elliot, Edmund. (See Hammond, Isaac B., assignor.)						
Elliot, Francis M., Summum, Ill. Check-rover	288,040	Nov. 6	315	89	25	561
Elliot, George E., assignor of one-half to E. J. Crangle, Calais, Me. Steam-actuated valve	283,226	Aug. 14	897	250	24	667
Elliot, George F., Charlestown, Mass. Trenching-tool	285,594	Sept. 25	1751	496	24	1229
Elliot, George M. (See Moore, Charles, assignor.)						
Elliot, Gilbert R., Boston, Mass. Store-service system	279,862	June 19	1538	430	23	2400
Elliot, Gilbert R., assignor of one-half to M. Clark, Boston, Mass. Wire carriage-way	276,529	Apr. 24	2128	592	23	1615
Elliot, Gilbert R., assignor of one-half to M. Clark, Boston, Mass. Cash and parcel carrier	278,658	May 29	2662	728	23	2113
Elliot, Gilbert R., assignor of one-half to M. Clark, Boston, Mass. Cash and parcel carrier	278,659	May 29	2663	729	23	2113
Elliot, Gilbert R., assignor of one-half to M. Clark, Boston, Mass. Parcel-holder for elevated ways in stores	279,727	June 19	1382	386	23	2373
Elliot, Gilbert R., assignor of one-half to M. Clark, Boston, Mass. Cash and parcel carrier for store-service	283,087	Aug. 14	729	204	24	637
Elliot, Gilbert R., assignor of one-half to M. Clark, Boston, Mass. Store-service system	283,088	Aug. 14	730	205	24	637
Elliot, Gilbert R., Boston, Mass., assignor to Continental Cash Car Company, Baltimore, Md. Carrying system for stores	284,933	Sept. 11	974	273	24	1078



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Elliott, Gilbert R., Boston, Mass., assignor to Continental Cash Car Company, Baltimore, Md. Speed-governor for parcel-carriers in stores.	284,954	Sept. 11	975	274	24	1078
Elliott, Hiel J., North Manchester, Ind. Gate	290,554	Dec. 18	1499	413	25	1166
Elliott, James, Montreal, Quebec, Canada. Grate-bar	290,872	Dec. 25	1906	526	25	1244
Elliott, James A., Anderson Court-House, S. C. Cotton-planter and guano-distributor combined	287,014	Oct. 23	1561	430	25	301
Elliott, James B., London, England. Fire-wheel for bicycle performances	288,413	Nov. 13	794	215	25	654
Elliott, James B., London, England. Bicycle riding-platform	288,414	Nov. 13	795	216	25	654
Elliott, James E. (See Bowyer and Elliott.)						
Elliott, James M., Jr., Gadsden, Ala. Sawdust-conveyer	271,822	Feb. 6	287	79	23	492
Elliott, John W., Rudd, Iowa. Sheaf-carrier	284,400	Sept. 4	294	83	24	953
Elliott, Leonard W., Green Point, N. Y. Velocipede	288,219	Nov. 13	527	147	25	609
Elliott, Noah B., and J. T. Lloyd, Holden, Mo. Clothes-pounder	278,522	May 29	2498	662	23	2085
Elliott, Robert T. (See Beecher and Elliott.)						
Elliott, Thomas E., Norfolk, Va. Self-closing hatchway	288,041	Nov. 6	316	89	25	562
Elliott, William, Evans, Colo. Paris-green distributor	280,157	June 26	1895	533	23	2470
Elliott, William F., and S. D. Lance, Columbus, Ohio. Foot-iron for vehicle dash-frames	275,811	Apr. 17	1242	342	23	1454
Elliott, William H. (See Park and Elliott.)						
Elliott, William V., assignor of one-half to G. Hall, Lima, Ohio. Water-heater for steam fire-engines	270,647	Jan. 16	1019	293	23	215
Elliott, William V., assignor of one-half to G. Hall, Lima, Ohio. Water-heater for fire-engines	279,085	June 5	581	159	23	2223
Elliott, William W., Reading, and W. J. Towne, Newton, Mass. Sink	275,755	Apr. 10	1160	318	23	1432
Ellis, Aldridge C., assignor of one-half to H. A. and G. F. Randall, Birmingham, Mich. Car-coupling	285,473	Sept. 25	1608	452	24	1202
Ellis, Charles W., Peoria, Ill. Fly-screen	270,037	Jan. 2	249	72	23	51
Ellis, Edwin. (See Crawford, Witsius A., assignor.)						
Ellis, Ferrand F., Vernon, N. Y. Soldering device	279,234	June 12	771	213	23	2265
Ellis, George B. (See Ellis, John, assignor.)						
Ellis, George W., Spencer, Ind. Bedstead	277,470	May 15	1187	318	23	1843
Ellis, John, assignor to G. B. Ellis, Pottstown, Pa. Thrashing-machine	285,505	Sept. 25	1752	497	24	1229
Ellis, John H., Boston, Mass. Device for preventing horses from cribbing	275,370	Apr. 10	659	176	23	1347
Ellis, Joseph F., Eau Claire, Wis. Butter-package	277,696	May 15	1452	392	23	1887
Ellis, Joseph L., assignor of one-half to J. A. Damon, Millington, Mich. Churn	273,671	Mar. 6	554	147	23	928
Ellis, Joseph L., assignor of one-half to J. A. and I. T. Damon, Millington, Mich. Velocipede	280,299	June 26	2072	583	23	2502
Ellis, Nathan C. (See Emerson, George W., assignor.)						
Ellis, Norton A., Boonesborough, Iowa. Siphon-faucet	273,495	Mar. 6	324	88	23	869
Ellis, Norton A., Boonesborough, Iowa. Siphon-faucet	283,987	Aug. 28	1837	518	24	857
Ellis, Ralph E., assignor of one-half to G. W. Crozier, Muncie, Ind. Folding carriage-top	283,873	Aug. 28	1698	478	24	831
Ellis, Robert. (See Aram, Jonathan G., assignor.)						
Ellis, Robert F., Whitt, Tex. Combined harrow, seed-planter, and cultivator	278,113	May 22	1947	534	23	1981
Ellis, William, Jr., North Lawrence, Kans. Road-scraper	273,830	Mar. 13	766	207	23	973
Ellithorpe, Solomon B., Rochester, N. Y. Picture-hanger	287,113	Oct. 23	1691	463	25	327
Ellithorpe, Albert C., Chicago, Ill. Fire-escape	277,891	May 22	1687	460	23	1936
Ellich Hardware Manufacturing Company. (See Ellich, Robert C., assignor.)						
Ellich, Robert C., Southington, assignor to Ellich Hardware Manufacturing Company, Plantsville, Conn. Tool-handle	288,560	Nov. 13	970	267	25	683
Ellich, Robert C. (See Allen and Ellich.)						
Ellsworth, Dewitt, Riverdale, Mich. Feed-water alarm-indicator	284,195	Sept. 4	49	14	24	913
Ellsworth, John C. (See Adams, George L., assignor.)						
Ellsworth, John J., assignor of two-thirds to G. A. Watson, Langston, Mich. Vehicle shaft-support	280,459	July 3	157	43	24	29
Elwanger, John W., and W. Eddington, St. Louis, Mo. Lock for elevator-gates	270,648	Jan. 16	1020	293	23	215
Elwood & Co., I. L. (See Stover, Daniel C., assignor.)						
Elwood, Everett C., Green's Farms, Conn. Seed-drill	269,520	Dec. 4	185	52	25	919
Elwood, Hiram. (See Upham, Andrew J., assignor.)						
Elwood, I. L., et al. (See Gunderson, Albert, assignor.)						
Elwood, Isaac L., et al. (See Kittleson, Ole O., assignor.)						
Elwood, Isaac L., et al. (See Root, William A., assignor.)						
Elwood, Isaac L., et al. (See Stevens, Sidney M., assignor.)						
Elwood, Isaac L., et al. (See Upham, Andrew J., assignor.)						
Elwood, Isaac L., et al. (See Wells, David G., assignor.)						
Elwood, Renhen, and A. J. Upham, Sycamore, Ill.; said Upham assignor to said Elwood. Machine for manufacturing barbed fencing	278,523	May 29	2498	682 } 683 }	23	2086
Elmer, Jacob, Biloxi, Miss. Railway-switch	277,697	May 15	1453	392	23	1887
Elmes, Charles F., Chicago, Ill. Sharpening horseshoe-calks	283,385	Aug. 21	1112	314	24	712
Elphinstone, William B. F., Musselburgh, Scotland, and C. W. Vincent, Holloway, county of Middlesex, England. Dynamo-electric machine	284,288	Sept. 4	159	44 } 45 } 46 }	24	931
Elphinstone, William B. F., Carberry Tower, Musselburgh, Scotland, and C. W. Vincent, Holloway, county of Middlesex, England. Dynamo-electric machine	288,042	Nov. 6	318	89, 90	25	562
Elrod, William M., Marshall, Mo. Camera-box	271,048	Jan. 23	1507	435	23	307
Elsinger, Daniel, assignor of one-half to M. W. Hughes, Scranton, Pa. Stove-grate	271,229	Jan. 30	1730	501	23	353
Elsoo, Alexander, and F. M. Crockett, Unionville, Mo. Device for converting motion	278,859	June 5	303	88	23	2175
Elterich, P. Otto, Nuremberg, Bavaria, Germany. Stove	291,011	Dec. 25	2097	578	25	1274
Elting, Irving, Poughkeepsie, N. Y. Thill-coupling	256,123	Oct. 2	421	115	25	78
Elton, Joseph. (See Strohm, Samuel D., assignor.)						
Eltonhead, William B., assignor to United States Lock Nut Company, (limited,) Philadelphia, Pa. Nut-lock	285,399	Sept. 25	1522	429	24	1187
Eltringham, William, Minersville, Pa. Miner's fuse	280,158	June 26	1896	534	23	2470
Elveena, Charles, Detroit, Mich. Door-knob	280,728	July 3	469	134	24	84
Elward, John H., Stillwater, Minn. Traction-engine	272,670	Feb. 20	1370	384 } 385 }	23	695
Elward, John H., Stillwater, Minn. Separator for portable steam-engines	275,615	Apr. 10	984	266	23	1402
Elward, John H., Stillwater, Minn. Secretary	275,616	Apr. 10	985	266	23	1402
Elward, John H., Polo, Ill. Engine-furnace	276,372	Apr. 24	1933	536	23	1581
Elward, John H., Polo, Ill. Feed-water heater	276,373	Apr. 24	1936	536	23	1582
Elward, John H., Polo, Ill. Portable engine-furnace	276,374	Apr. 24	1937	537	23	1582
Elward, John H., assignor to M. Elward, Polo, Ill. Horse-power	277,835	May 15	1611	440	23	1917
Elward, John H., assignor to M. Elward, Polo, Ill. Bed-plate for steam-engines	279,924	June 26	1617	454	23	2421
Elward, John H., assignor to M. Elward, Polo, Ill. Traction-engine	279,925	June 26	1618	455	23	2421
Elward, John H., assignor to M. Elward, Polo, Ill. Mowing-machine	279,926	June 26	1620	455	23	2421
Elward, John H., assignor to M. Elward, Polo, Ill. Horse-power	287,259	Oct. 23	1874	513	25	358

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Elward, Mary. (See Elward, John H., assignor.)						
Elwell, Orlando, Van Ettenville, N. Y. Counter-balance	284,827	Sept. 11	823	229	24	1050
Elwell, William D., Romeo, Mich. Lid for pots, kettles, &c	283,227	Aug. 14	808	251	24	667
Ely, Calvin A., Taylor Hill, Ill. Railway-gate	289,244	Nov. 27	1810	500	25	848
Ely, Charles M., assignor to W. C. Goodloe, Lexington, Ky. Varnish	289,766	Dec. 4	489		25	971
Ely, Eugene A., Branchville, assignor of one-third to W. F. Ely, Afton, N. J. Apparatus for unloading hay	280,159	June 26	1897	534	23	2471
Ely, Philip, Centreville, N. J. Oil-can faucet	273,831	Mar. 13	767	208	23	973
Ely, Philip, Centreville, N. J. Stamping-die	275,897	Apr. 17	1342	370	23	1472
Ely, Theodore N., J. W. Cloud, Altoona, Pa., and E. B. Wall, Columbus, Ohio. Refrigerator-car	290,324	Dec. 18	1184	332	25	1111
Ely, William F. (See Ely, Eugene A., assignor.)						
Ely, William H. (See Miller, David L., assignor.)						
Emack, John D., Baldwin, N. Y. School-slate	288,698	Nov. 20	1146	315	25	721
Embree, E. B., et al. (See Fayette, Henry W., assignor.)						
Embree, J. R., et al. (See Fayette, Henry W., assignor.)						
Emerson, Benjamin K., Cleveland, Ohio. Horse-collar	282,450	July 31	2686	737	24	489
Emerson, Charles B., Lynn, Mass. Car-coupling	289,399	Dec. 4	33	10	25	893
Emerson, Charles T., Lawrence, Mass. Safety-guard for car-trucks	273,973	Mar. 13	938	258	23	1002
Emerson, Cyrus J., Jr. (See Greene and Emerson.)						
Emerson, Edward, and G. G. Cook, Humboldt, Iowa. Foot-rest for rocking-chairs	280,160	June 26	1898	534	23	2471
Emerson, George W., assignor to himself and N. C. Ellis, Lynn, Mass. Builing-machine	281,355	July 17	1271	353	24	237
Emerson, George W., assignor of one-half to P. G. Jacobus, Oakland, Cal. Belt-replacer	289,793	Dec. 4	520	144	25	976
Emerson, Howard B., Charlestown, Mass. Combined razor strop and drawer	287,260	Oct. 23	1876	514	25	359
Emerson, James, Willimansett, Mass. Piano-stool	281,676	July 24	1680	457	24	311
Emerson, James, Willimansett, assignor of one-half to Holyoke Water Power Company, Holyoke, Mass. Apparatus for regulating the flow and delivery of water through canals, flumes, and water-ways	275,371	Apr. 10	660	176 177	23	1347
Emerson, James E., Beaver Falls, Pa. Saw	281,252	July 17	1145	316	24	215
Emerson, James E., Beaver Falls, Pa. Saw	281,253	July 17	1147	316	24	216
Emerson, James E., Beaver Falls, Pa. Process of and machine for straightening, tempering, and flattening saw-blades	286,284	Oct. 9	641	171	25	127
Emerson, James F., et al. (See Simonds, George W., assignor.)						
Emerson, John P., assignor of one-half to E. Levering & Co., Baltimore, Md. Coffee-cooler	285,349	Sept. 18	1451	409	24	1169
Emerson, Lowe. (See Horton, George W., assignor.)						
Emerson, Ralph, et al. (See Whitney, Charles, assignor.)						
Emerson, Sumner A. (See Scott and Emerson.)						
Emery, Albert H., New York, N. Y. Pipe-joint	279,086	June 5	583	159	23	2223
Emery, Albert H., New York, N. Y. Pipe-coupling	279,087	June 5	584	159	23	2223
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Beam-scale	278,900	June 5	303	88	23	2175
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Beam-scale	278,901	June 5	306	88	23	2176
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Platform-scale	278,902	June 5	310	88, 89	23	2176
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Platform-scale	278,903	June 5	315	89	23	2177
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Platform-scale	278,904	June 5	318	90	23	2177
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Platform-scale	278,905	June 5	320	90	23	2178
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Weighing machinery	278,906	June 5	323	91 92 93	23	2178
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Pressure-gage	278,907	June 5	332	93	23	2180
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Pressure-gage	278,908	June 5	334	93	23	2180
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Pressure and vacuum gage	278,909	June 5	335	94	23	2180
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Pressure-gage	278,910	June 5	337	94	23	2181
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Dynamometer	278,911	June 5	339	94	23	2181
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Dynamometer	278,912	June 5	343	95	23	2182
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Weighing-machine and dynamometer	278,913	June 5	345	95	23	2182
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Machinery for testing the strength of metal	278,914	June 5	347	95, 96 96 97 98	23	2183
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Machinery for testing the strength of materials	278,915	June 5	352	97 98	23	2183
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Machine for testing the strength of materials	278,916	June 5	358	98, 99 99	23	2184
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Machine for testing the strength of materials	278,917	June 5	361	100 100 100	23	2185
Emery, Albert H., New York, N. Y., assignor to Emery Scale Company, Stamford, Conn. Machinery for testing the strength of metal	278,918	June 5	366	101 102 102	23	2186
Emery, Charles E., Brooklyn, N. Y. Connected bridge-girder	279,927	June 26	1622	455 456	23	2492
Emery, Charles E., Brooklyn, N. Y., assignor, by mesne assignments, to Emery Scale Company, Stamford, Conn. Hydraulic testing-machine	278,919	June 5	377	102 103	23	2187
Emery, Charles L., assignor, by mesne assignments, to himself and O. F. Page, Biddeford, Me. Ring for spinning-frames	288,932	Nov. 20	1431	394	25	773
Emery, Cyrus. (See Smith, Walton D., assignor.)						
Emery, Lewis, and F. B. Stebbins, Galion, Ohio. Cutter-head	286,409	Oct. 9	793	214	25	154
Emery, Lorenzo W. (See McConnell, Robert B., assignor.)						
Emery Scale Company. (See Emery, Albert H., assignor.)						
Emery Scale Company. (See Emery, Charles E., assignor.)						
Emmerich & Co., Charles. (See Hammermiller, William, assignor.)						
Emmett, William, Logansport, Ind. Car-coupling	278,633	June 5	22	6, 7	23	2123
Emmick, Andrew C., assignor to himself and E. N. Hatchor, Columbus, Ohio. Axle-skein	282,229	July 31	2466	679	24	451



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Emmick, Andrew C., assignor to himself and E. N. Hatcher, Columbus, Ohio. Machine for forming axle-skins	290,382	Dec. 25	2063	567	25	1369
Emmons, Lucius H., assignor of one-half to L. Lybrand, Noblesville, Ind. Thill-coupling.	280,806	July 10	587	568	24	110
Empress Sewing Machine Company. (See Dearborn, Charles A., assignor.)				164		
Empson, John H., Cincinnati, Ohio. Non-heat-conducting package for ice-cream, &c.	281,851	July 24	1914	522	24	352
Emsley, John W., Worcester, Mass. Balloon	276,012	Apr. 17	1474	407	23	1495
Endebrook, George W., Cincinnati, Ohio. Hub-band	289,339	Nov. 27	1927	535	25	872
Endemann, Hermann, Brooklyn, assignor to G. L. Jaeger, New York, N. Y. Manufacture of matches	275,617	Apr. 10	987		23	1403
Endemann, Hermann, Brooklyn, assignor to W. Pickhardt and A. Kuttroff, New York, N. Y. Production of sulpho-acid compound of betanaphthol	277,864	May 15	1649		23	1923
Enders, William. (See Neff, Enders, and Fieser.)						
Enderson, George. (See Richardson and Enderson.)						
Engel, George, assignor of two-thirds to H. Boyd and P. Reitz, Buffalo, N. Y. Apparatus for forcing beer	275,756	Apr. 10	1161	319	23	1432
Engel, George, assignor of one-half to M. Engel, Buffalo, N. Y. Steam-radiator attachment.	275,757	Apr. 10	1163	319	23	1433
Engel, Joseph and R., Boston, Mass. Brush-holder	277,471	May 15	1187	319	23	1843
Engel, Lawrence, London, England. Umbrella or parasol	285,021	Sept. 18	1071	299	24	1102
Engel, Martin. (See Engel, George, assignor.)						
Engel, Robert. (See Engel, Joseph and R.)						
Engelbach, Augustus L., Leadville, Colo. Vehicle-wheel	284,621	Sept. 11	566	160	24	1006
Engelhardt, Charles E. (See Rantz and Engelhardt.)						
Engelking, George L., assignor to W. Starkey and G. E. Williams, Pittsburg, Pa. Gage-cock and low-water detector	275,175	Apr. 3	379	105	23	1292
Engelmann, Etienne I., St. Louis, Mo. Wood-fluting machine.	283,874	Aug. 28	1698	478	24	831
Engels, Gottlieb. (See Brewer, Russell, assignor.)						
Engert, Adam C., Three Mills Lane, county of Middlesex, England. Steam-boiler and furnace	281,852	July 24	1915	523	24	352
Englaender, Joseph. (See Bapple, James W., assignor.)						
England, Alexander, Kingman, Me. Hide-splitter	290,555	Dec. 18	1500	414	25	1166
England, Henry J., Falls Church, Va. Sash-fastener	272,671	Feb. 20	1371	385	23	695
England, James, New York, N. Y. Cavity-plane	270,769	Jan. 16	1169	334	23	243
Engle, David H., Mount Joy, Pa. Shade-roller	284,543	Sept. 4	465	132	24	983
Engle, Jacob, Jr., Sharon Centre, N. Y. Awning for hop-pickers	276,791	May 1	339	90	23	1625
Engle, Stephen D., Hazleton, Pa. Engraving-machine	275,618	Apr. 10	988	267	23	1403
Englehart, Philip, Stanislaus County, Cal. Sulky-scraper	281,986	July 24	2076	569	24	380
English, Albert R., Rochester, N. Y. Scale-beam	279,548	June 19	1177	326	23	2337
English, Analdo M. (See Pratt and English.)						
English, Andrew J., Cincinnati, Ohio. Water-elevator	288,783	Nov. 20	1249	343	25	740
English, Robert. (See Black and English.)						
English, Thomas, Hawley, Dartford, county of Kent, England. Apparatus for subaqueous boring	286,797	Oct. 16	1281	346	25	247
Ennis, John, Stamford, Conn. Tide-water swimming-bath	270,293	Jan. 9	554	163	23	118
Ennis, John B., Ottumwa, Iowa. Cultivator	280,021	June 26	1744	489	23	2443
Eno, Joseph A., Newark, N. J. Railway-rail joint	276,792	May 1	339	91	23	1685
Enos, John A., assignor to R. H. Brown and F. E. Farnham, Peabody, Mass. Leather-splitting machine	277,413	May 8	1109	298	23	1823
Enos, John A., assignor of eight sixty-fourths to G. H. Low, Peabody, Mass. Electric voting-machine for legislative bodies	287,649	Oct. 30	2380	642	25	462
Enos, Silvanus F., Etna, Ill. Educational device	288,628	Nov. 20	1060	291	25	707
Enright, Joseph, San José, Cal. Traction-wheel	276,530	Apr. 24	2129	592	23	1615
Enslinger, Emanuel and H. S., Bloomington, Ill. Sash-fastener	282,290	July 31	2466	680	24	451
Enslinger, H. C. (See Moore, Joseph V., assignor.)						
Enslinger, Henry S. (See Enslinger, Emanuel and H. S.)						
Enterprise Manufacturing Company. (See Baker, John G., assignor.)						
Enterprise Manufacturing Company. (See Hyatt, Ely E., assignor.)						
Enterprise Manufacturing Company of Pennsylvania. (See Baker, John G., assignor.)						
Ephraim, Ferdinand, San Francisco, Cal. Rubber sole and heel for boots or shoes	282,710	Aug. 7	295	83	24	551
Eppler, Andrew, Jr. (See Smith and Eppler.)						
Eppler, Andrew, Jr., et al. (See Stirekler, Albert E., assignor.)						
Eppler, Andrew, Jr., Quincy, Mass., assignor to Eppler Manufacturing Company, Portland, Me. Pegging-machine	269,840	Jan. 2	26	8	23	7
Eppler, Andrew, Jr., and E. C. Ray, assignors to D. Whittemore, Quincy, Mass. Eyeletting-machine	271,049	Jan. 23	1509	435	23	308
Eppler, Andrew, Jr., Boston, Mass., assignor to Union Fastening Company, Jersey City, N. J. Nailing-machine	283,228	Aug. 14	899	251	24	667
Eppler Manufacturing Company. (See Eppler, Andrew, Jr., assignor.)				252		
Epps, Edwin. (See Nunn, James W., assignor.)						
Erb, John C., Newport, Ky., assignor of one-half to W. B. Burnet, Cincinnati, Ohio. Iron railing	282,180	July 31	2346	646	24	428
Erb, Samuel, Minneapolis, Minn. Adjusting edger-saws	289,819	Dec. 11	556	156	25	991
Erbaucher, Frank W., et al. (See Clark, Henry, assignor.)						
Erbe, John, et al. (See Nies, Phillip, assignor.)						
Ercabrack, Charles H., Alden, Ill. Device for converting motion	286,596	Oct. 16	1027	278	25	203
Erdman, Daniel H., Camden, N. J. Portable heater	286,410	Oct. 9	794	214	25	154
Erdman, Robert, and W. Phillips, Philadelphia, Pa. Combination-tool	276,793	May 1	340	91	23	1685
Erft, John, et al. (See Held, August S., assignor.)						
Erickson, Daniel, Chicago, Ill. Sinkers for fish-nets	286,188	Oct. 9	502	138	25	103
Erickson, John, New York, N. Y. Speed-regulator	288,699	Nov. 20	1147	316	25	722
Erkenzweig, Gustav, Hagen, Prussia, Germany. Rolling-mill	281,474	July 17	1420	390	24	263
Erkenzweig, Gustav, Hagen, Prussia, Germany. Rolling-mill	281,475	July 17	1423	390	24	263
Erlanger, Charles, Baltimore, Md. Stays for garments	279,549	June 19	1178	326	23	2338
Erlanger, Charles, Baltimore, Md., assignor of two-thirds to C. E. Conover, Middletown, N. J., and J. Forge, Chicago, Ill. Button and button-fastener	290,409	Dec. 18	1289	362	25	1130
Erlenborn, Charles C., Chicago, Ill. Oilier	277,555	May 15	1291	347	23	1859
Ernst, Charles E., et al. (See Reichling, Oscar E. H. N., assignor.)						
Ernst, John C., Cleveland, Ohio. Screw-book	276,375	Apr. 24	1938	537	23	1582
Ernst, John G., assignor of one-half to J. D. Mallory, Baltimore, Md. Car-axle box	282,871	Aug. 7	475	134	24	585
Ernst, William H., Chase, Kans. Grain-weighing apparatus	278,114	May 22	1949	534	23	1981
Ernst, Wilson, Camden, N. J. Furnace	289,634	Dec. 4	322	90	25	944
Ersland, Amos K., Shelby, Iowa. Wagon-dump	280,592	July 3	307	85	24	55
Ervin, James K., Marshall, Mo. Sulky-plow	285,022	Sept. 18	1072	299	24	1102
Erwin, Andrew, et al. (See De Lamater, William, assignor.)						
Erwin, Henry J., Marysville, Ohio. Eaves-trough hanger	270,038	Jan. 2	250	72	23	51

*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Erwin, James B. (See Brown, Wencel, assignor.)						
Erwin, James B., Milwaukee, Wis. Water-meter	286,285	Oct. 9	643	171	25	127
Erwin, Orlando R., Chicago, Ill. Street-car motor	270,938	Jan. 23	1374	396	23	286
Erwin, Thomas M., Verona, assignor of one-fourth to E. Fried, Allegheny City, Pa. Spring-washer for locking nuts	279,088	June 5	585	160	23	2223
Eshelman, Benjamin F., Harlan, Iowa. Dental plugger	290,014	Dec. 11	801	226	25	1035
Eshelman, John L., Leadville, Colo. Construction of sea-going vessels	279,863	June 19	1539	430	23	2400
Eskildson, Henry W., assignor to himself and C. A. Shaw, Boston, Mass. Hoop-cutting machine	273,266	Mar. 6	27	8	23	839
Eskrett, Cyrus, and W. H. Searle, Hull, county of York, England. Manufacture of oil-press mats	280,460	July 3	158	43	24	29
Espel, Ferdinand, San Francisco, Cal. Ice-cream freezer	274,298	Mar. 20	1356	372	23	1082
Espel, Ferdinand, San Francisco, Cal. Ice-cream freezer	277,250	May 8	924	247	23	1791
Espel, Ferdinand, San Francisco, Cal. Vegetable-slicer	280,161	June 20	1899	534	23	2471
Espeut, W. Bancroft. (See Ekman, Fry, and Espeut.)						
Essick, Samuel V., Alliance, Ohio. Printing-telegraph	279,550	June 19	1179	326 327	23	2338
Estabrook, Alanson C., assignor to Florence Manufacturing Company, Florence, Mass. Manufacture of brushes	278,660	May 29	2664	729	23	2114
Estabrook, Alanson C., assignor to Florence Manufacturing Company, Florence, Mass. Machine for milling bone blanks for tooth-brushes	279,728	June 19	1383	386	23	2373
Estabrook, John S., et al. (See Eddy, Romulus A., assignor.)						
Estabrook, Joseph M., Milford, Mass. Metal sole-fastening	280,022	June 26	1745	490	23	2443
Estabrook, Joseph M., Milford, Mass. Machine for forming wire from sheet metal	280,023	June 26	1747	490 491	23	2443
Estabrook, Joseph M., Milford, Mass. Belt-suspending device	290,219	Dec. 18	1050	295	25	1089
Estberg, William T., Brooklyn, N. Y. Window-shade	288,043	Nov. 6	320	90	25	562
Estell, Samuel F., Chicago, Ill. Glove and shoe buttoner	288,700	Nov. 20	1148	316	25	722
Estep, Thomas B., Cincinnati, Ohio, assignor of one-half to H. M. Stephenson, Covington, Ky. Street-car-switching system	280,300	June 26	2073	584	21	2502
Esterbrook, William P., assignor to G. W. Rader & Co., New York, N. Y. Chimney and ventilating flue	280,024	June 26	1749	491	23	2443
Esterly, George, Whitewater, Wis. Grain-binding machine	278,524	May 29	2501	683	23	2086
Esterly, George, Whitewater, Wis. Grain-binding machine	281,023	July 17	1607	440	24	293
Esterly, George, Whitewater, Wis. Grain harvesting and binding machine	282,065	July 31	2177	598 599	24	403
Esterly, George, Whitewater, Wis. Grain-harvesting machine	288,784	Nov. 20	1251	343	25	740
Estes, Henry B., Manchester, N. H. Stopping mechanism for drawing-frames	289,902	Dec. 11	665	186	25	1009
Estey & Co., J. (See Foster, Edwin A., assignor.)						
Estey Organ Company. (See Fuller, Levi K., assignor.)						
Estill, John F., et al. (See Lutz, Charles H., assignor.)						
Esty, William, Laconia, N. H. Knitting-machine	276,146	Apr. 17	1643	453	23	1524
Etève, Eugène, and C. C. Lallemt, Paris, France. Gas-engine	272,130	Feb. 13	685	187	23	570
Ethell, John J., St. Louis, Mo. Millstone	285,118	Sept. 18	1186	332	24	1121
Ethell, William J., and M. D. L. Swank, Anderson, Ind. Button-fastener	282,872	Aug. 7	476	134	24	585
Ethridge Heeling Machine Company. (See Ethridge, Martin V., assignor.)						
Ethridge, Martin R., Lynn, Mass. Lasting-machine	269,841	Jan. 2	27	8, 9	23	8
Ethridge, Martin R., Lynn, Mass. Manufacture of boots and shoes	269,842	Jan. 2	29	9	23	8
Ethridge, Martin V., assignor to Ethridge Heeling Machine Company, Boston, Mass. Shoe-heeling machine	271,617	Feb. 6	40	10	23	447
Ethridge, Martin V., assignor to Ethridge Heeling Machine Company, Boston, Mass. Heel-nailing machine	285,596	Sept. 25	1755	497 498	24	1230
Etter, Cyrus H., Medford, Mass. Adjustable toe-weight for trotting horses	286,189	Oct. 9	501	139	25	104
Etzensperger, John. (See Fontneau, Frank, assignor.)						
Etzensperger, John, North Attleborough, Mass. Ornamental chain	281,853	July 24	1916	523	24	352
Etzensperger, John, North Attleborough, Mass. Slide for bracelets and chains	283,333	Aug. 14	1037	291	24	693
Eubank, Thomas, Gerard, Ill., assignor of one-half to R. A. Willett, Sedalia, Mo. Billiard-table leveler	285,739	Sept. 25	1938	549	24	1262
Eudaly, William A. (See Culbertson and Eudaly.)						
Eureka Silk Manufacturing Company et al. (See Landfear, William R., assignor.)						
Eustes, John. (See Eveland, William L., assignor.)						
Eustis, John P., Newark, N. J. Drinking-flask	285,597	Sept. 25	1756	498	24	1230
Eutebrook, Charles H., Boston, Mass. Fire-arm	289,521	Dec. 4	187	52	25	919
Evans, Abner, Jr., New York, assignor of one-third to A. Hicks, West New Brighton, N. Y. Target and ring game	281,624	July 17	1609	440	24	293
Evans, Austin C., Springfield, Ohio. Fertilizing attachment for corn-planters	280,367	July 3	33	9, 10	24	8
Evans, Austin C., Springfield, Ohio. Harrow	281,755	July 24	1787	487	24	330
Evans, Austin C., Springfield, Ohio. Corn-planter	281,756	July 24	1789	487 488 489	24	330
Evans, Austin C., Springfield, Ohio. Seat-bar for vehicles	282,181	July 31	2347	646	24	429
Evans, Charles A., Salem, N. H., assignor to himself and T. S. Very, Boston, Mass. Flocked fabric or imitation textile fabric	275,176	Apr. 3	380		23	1292
Evans, Charles T., et al. (See Kennedy, Samuel A., assignor.)						
Evans, Darius P., Nevada, Mo. Tire-tightener	271,050	Jan. 23	1511	435	23	308
Evans, Edward, Mansfield, Ohio. Railway-crossing	275,028	Apr. 3	195	52	23	1258
Evans, Edwin B. (See Harris and Evans.)						
Evans, Edwin J., Leavenworth, Kans. Lifting-jack	270,649	Jan. 16	1021	293	23	215
Evans, Franklin J., Iowa Falls, Iowa. Breech-loading fire-arm	283,089	Aug. 14	731	205	24	637
Evans, G. Frank, Mechanic Falls, Me. Machine for reducing wood to pulp and fiber	279,551	June 19	1183	327	23	2338
Evans, George R. (See Blochman and Evans.)						
Evans, George W., Baltimore, Md. Milk and cream can	274,745	Mar. 27	1928	537	23	1190
Evans, George W., Baltimore, Md. Spigot	287,427	Oct. 30	2084	566	25	404
Evans, Harry M., et al. (See Kennedy, Samuel A., assignor.)						
Evans, Harry N., assignor of two-thirds to G. Corbion, Jr., and W. D. Mull, Philadelphia, Pa. Heat and gas regulator	273,716	Mar. 13	609	163	23	946
Evans, Henry H., et al. (See Pullen, Joseph, assignor.)						
Evans, James, Oncont, N. Y. Railway-switch	283,875	Aug. 28	1699	479	24	831
Evans, John, Etna, assignor of one-half to Spang, Chalfant & Co., Allegheny city, Pa. Puddling-furnace	270,184	Jan. 2	418	121	23	85
Evans, John, and R. Low, Dundee, county of Forfar, Scotland. Gun and its projectile for throwing life-lines	281,041	July 10	866	241	24	160
Evans, John E., Spanish Fork, Utah Ter. Harness-tug hook	281,967	July 24	2076	570	24	381
Evans, John E., Spanish Fork, Utah Ter. Barbed-wire fence	287,261	Oct. 23	1876	514	25	359



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Evans, John W., Cleveland, Ohio. Process of and apparatus for separating naphtha from oil.	281,039	July 10	863	240	24	160
Evans, John W., Cleveland, Ohio. Extraction of oils from vegetable and animal matter.	281,040	July 10	865	240	24	160
Evans, John W., Cleveland, Ohio. Process of and mechanism for extracting oil.	285,598	Sept. 25	1757	498	24	1230
Evans, Matthias F., Nevada, Mo. Roller-skate.	285,599	Sept. 25	1759	499	24	1231
Evans, Miner H. A., et al. (See Ballou, Hiram P., assignor.)						
Evans, Othniel B., assignor of one-half to A. Hunt, Philadelphia, Pa. Water-closet.	284,544	Sept. 4	466	132	24	983
Evans, Pierce. (See Kinkead, James H., assignor.)						
Evans, Plummer & Co. (See Plummer, Charles S., assignor.)						
Evans, Thomas, Gravesend, assignor of two-thirds to W. H. Roberts, New York, and C. R. Turner, Brooklyn, N. Y. Fifth-wheel.	289,767	Dec. 4	489	136	25	971
Evans, Thomas E. (See Allison, John, and Evans.)						
Evans, W. Warrington, Washington, D. C. Apparatus for forming dental plates.	279,365	June 12	952	{ 264 265 }	{ 23 23 }	{ 2294 2294 }
Evans, W. Warrington, Washington, D. C. Dental plugger.	279,928	June 26	1625	456	23	2422
Evans, William, Providence, R. I. Picker-stick-operating mechanism for looms.	281,254	July 17	1148	316	24	216
Evans, William, Providence, R. I. Loom.	281,476	July 17	1424	{ 390 391 }	{ 24 24 }	{ 263 263 }
Evans, William H., Boston, Mass. Tongs.	276,572	May 1	38	10	23	1633
Evans, William K., Berkley, assignor to himself and J. Y. Anthony, Taunton, Mass. Spinning-ring.	272,868	Feb. 27	1642	459	23	750
Evansville Pump Company. (See Eames, Wilfred, assignor.)						
Everts, Charles A., assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Hanging lamp.	284,955	Sept. 11	975	274	24	1078
Everts, James M., New Haven, Conn. Machine for bending pipe.	275,029	Apr. 3	198	53	23	1259
Everts, John A., assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Friction-brake for elevating devices.	287,262	Oct. 23	1877	514	25	359
Eveland, William L., Port Stanley, Ontario, assignor of one-half to J. Eustes, Fingal, Canada. Plumb-level.	274,089	Mar. 13	1080	298	23	1027
Eveleth, Frederick A., Cynthiana, Ky. Device for making cart-saddles.	288,933	Nov. 20	1432	394	25	773
Evenson, James W., Rome, N. Y. Ale-condenser.	278,525	May 29	2502	683	23	2086
Evens, John R. (See Duncan and Evens.)						
Everding, John, Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Machine for breaking or cutting up sheets of celluloid or other compounds of pyroxyline.	286,535	Oct. 9	941	254	25	182
Evered, John, Macy, Ind. Mole-trap.	285,400	Sept. 25	1523	429	24	1187
Evered, Joshua. (See Farr and Evered.)						
Everett, Charles G., Bellefontaine, Ohio. Automatic check-row corn-planter.	272,222	Feb. 13	791	220	23	589
Everett, Charles D. (See Johns, Charles T., assignor.)						
Everett, Charles J., Tenaflly, N. J. Soap.	276,376	Apr. 24	1938		23	1582
Everett, Edward H. (See Parkhurst, Amos F., assignor.)						
Everett, Pierce E. (See Prier, Doherty, and Everett.)						
Everett, Pierce E. (See Prier, Doherty, and Everett.)						
Everett, Sidney J., assignor, by mesne assignments, to Fishkill Manufacturing Company, New York, N. Y. Folding box.	276,676	May 1	182	47	23	1655
Everiss, Joseph E., Adrian, Mich. Pillow.	273,974	Mar. 13	939	258	23	1002
Everitt, James. (See Vero and Everitt.)						
Everitt, John, Prairie City, Ill. Pump.	282,973	Aug. 14	588	166	24	612
Everitt, Percival, London, England. Cigarette-machine.	274,746	Mar. 27	1929	{ 537 538 }	{ 23 23 }	{ 1190 1190 }
Evrsson, Martin V. B., Hoboken, N. J. Oscillating chair.	281,477	July 17	1427	391	24	263
Evrsson, Martin V. B., Hoboken, N. J. Oscillating chair.	283,988	Aug. 28	1838	518	24	857
Evrsson, Martin V. B., Hoboken, N. J. Treadle attachment for rocking-chairs.	290,634	Dec. 18	1601	439	25	1182
Ervinger, Noah, Terre Haute, Ind. Seed-planter.	281,677	July 24	1681	458	24	311
Ewan, John T., Bethalto, Ill. Machine for scouring wheat, &c.	287,370	Oct. 23	2012	547	25	384
Ewart Manufacturing Company. (See Ewart, William D., assignor.)						
Ewart Manufacturing Company. (See Howe, Eugene L., assignor.)						
Ewart, William D., assignor to Link-Belt Machinery Company, Chicago, Ill. Clutch.	272,947	Feb. 27	1737	485	23	765
Ewart, William D., Chicago, Ill., assignor to Ewart Manufacturing Company, of Illinois. Drive-chain.	280,729	July 3	469	134	24	84
Ewing, John H., Wheeling, W. Va. Lantern.	278,920	June 5	381	{ 103 104 }	{ 23 23 }	{ 2188 2188 }
Ewing, John H., and E. L. Bill, Wheeling, W. Va. Lamp and lantern.	275,474	Apr. 10	805	217	23	1371
Ewing, Orville, and G. A. Henderson, Decatur, Ill. Ditching-machine.	283,765	Aug. 28	1572	{ 444 445 }	{ 24 24 }	{ 810 810 }
Ewing, William L., Wheeling, W. Va. Making glass lamps.	277,414	May 8	1110	298	23	1823
Ewing, William L., Wheeling, W. Va. Lamp.	281,678	July 24	1682	458	24	311
Ewins, James A., assignor to T. B. Barker, Birmingham, county of Warwick, England. Gas-engine.	273,421	May 29	2374	648	23	2063
Ewins, Philo S., West Berkshire, Vt. Sorghum-evaporator.	284,123	Aug. 28	2025	565	24	889
Excelsior Hatch Company. (See Fraser, Daniel, assignor.)						
Excelsior Manufacturing Company. (See O Keefe, John O., assignor.)						
Excelsior Manufacturing Company. (See Schafer, Joseph D., assignor.)						
Excelsior Manufacturing Company. (See Smullen, Daniel, assignor.)						
Exner, William, Harper's Ferry, W. Va. Sled.	284,196	Sept. 4	50	14	24	913
Eybel, Bernhard, New York, N. Y. Pencil-holder.	271,439	Jan. 30	2003	578	23	402
Ever, John, Jr., Morrill, Kans. Cooking utensil.	281,042	July 10	867	241	24	160
Eyl, Emil C., Jefferson City, Mont. Ter. Car-coupling.	275,177	Apr. 3	381	105	23	1292
Eyl, Emil C., Jefferson City, Mont. Ter. Fire-escape.	285,740	Sept. 25	1939	549	24	1262
Eyster, Edward G., assignor of one-half to J. D. Miller, York, Pa. Broom-holder.	279,481	June 12	1091	301	23	2316
Ezell, Charles M., Baskinton, La. Car-coupling.	273,045	Feb. 27	1851	518	23	786
Ezell, Francis L., Nashville, Tenn. Plow.	272,223	Feb. 13	792	220	23	589
Faas, Gustav A., assignor of one-fourth to A. P. Usher, Lawrence, Kans. Extension-table.	290,180	Dec. 11	989	{ 279 280 }	{ 25 25 }	{ 1070 1070 }
Faber, Eberhard. (See Schrag, Philip, assignor.)						
Faber, Henry C., Utica, N. Y. Trunk.	284,197	Sept. 4	51	14	24	913
Fabing, Frederic. (See Blue, Dennis S., assignor.)						
Fabric Fire Hose Company. (See Gillespie, James E., assignor.)						
Facer, James A., and A. Schaub, Philadelphia, Pa.; said Schaub assignor to said Facer. Device for manufacturing car-wheel tires.	271,823	Feb. 6	288	79	23	492
Fachmon, Oswald, Lindsey, Ohio. Drag-saw.	285,982	Oct. 2	252	71	25	48
Faessler, John, Moberly, Mo. Flue-expander.	270,770	Jan. 16	1170	335	23	243
Fagan, Thomas B., assignor of one-half to W. Smith, Van Wert, Ohio. Tile-ditching machine.	275,372	Apr. 10	664	177	23	1347

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Fagnant, Benjamin, <i>et al.</i> (See Chassé, Joseph G., assignor.)						
Fabrig, Frank E., Scranton, Pa. Furnace for burning culm and other fine fuel	289,400	Dec. 4	34	10	25	893
Fahrney, Andrew, Milledgeville, Ill. Mechanical movement	290,220	Dec. 18	1052	296	25	1089
Fahys Watch Case Company. (See Lamont, James, assignor.)						
Fair, George W., assignor of one-half to W. Walker, Jr., Dayton, Ohio. Heating-furnace	284,545	Sept. 4	467	133	24	984
Fair, Nathaniel G., Bristol, Tenn. Tinner's machinery	271,440	Jan. 30	2004	578	23	403
Fairbanks, Charles M. (See Woodward and Fairbanks.)						
Fairbanks, Charles M., New York, N. Y., assignor to E. A. Wilkinson, trustee, Newark, N. J. Sewing-machine treadle	269,925	Jan. 2	122	36	23	25
Fairbanks, Charles N., Sturgis, Mich. Jeweler's tool	271,051	Jan. 23	1512	436	23	309
Fairbanks & Co., E. & T. (See Fairbanks, Franklin, assignor.)						
Fairbanks & Co., E. & T. (See Merrill, John A., assignor.)						
Fairbanks & Co., E. & T. (See Miller, Charles C., assignor.)						
Fairbanks, Crawford M., Pawtucket, R. I. Tool-handle	285,802	Oct. 2	25	9	25	6
Fairbanks, Crawford M., Pawtucket, R. I. Tool-handle	286,124	Oct. 2	422	115	25	78
Fairbanks, Franklin, assignor to E. & T. Fairbanks & Co., St. Johnsbury, Vt. Platform-scale	285,600	Sept. 25	1760	499	24	1231
Fairbanks, Harlan, assignor to New England Patent Fire Escape Company, Boston, Mass. Fire-escape	277,415	May 8	1112	298	23	1823
Fairbanks, Henry, St. Johnsbury, Vt. Feed-water heater	290,015	Dec. 11	803	226	25	1035
Fairchild, Frederick, <i>et al.</i> (See Fairchild, George S., assignor.)						
Fairchild, George S., assignor of two-thirds to F. Fairchild and L. Herring, Brooklyn, N. Y. Bottle	282,974	Aug. 14	589	166	24	612
Fairchild, Le Roy W. (See Collard, Richard M., assignor.)						
Fairfield, Thomas D., Cleveland, Ohio. Process of and apparatus for chilling paraffine-oils, &c.	290,016	Dec. 11	804	226	25	1035
Fairlamb, Charles C., deceased, (C. T. Clark, administrator,) Chicago, Ill. Nut-lock	278,230	May 22	2104	579	23	2008
Fairman, Harry E., San Francisco, Cal. Post-driver	276,677	May 1	184	48	23	1655
Fairman, Harry E., Plymouth, Mich. Post-driver	285,881	Oct. 2	130	37	25	25
Falconer, John S., Pardeeville, Wis. Chicken-crate	273,496	Mar. 6	325	88	23	889
Falconer, William, Foster's Mills, Pa. Machine for the manufacture of carbon-black	277,472	May 15	1188	319	23	1843
Falconnet, Eugene F., Nashville, Tenn. Aerial ship	270,939	Jan. 23	1376	397 398	23	287
Fales & Jenks Machine Company, <i>et al.</i> (See Booth, John, assignor.)						
Falk, Leonard. (See June and Falk.)						
Falkenberg, Charles, and J. Lederer, New York, N. Y. Shirt	270,039	Jan. 2	851	73	23	51
Fallesen, Christian, and J. M. Jensen, Brooklyn, N. Y.; said Jensen assignor to said Fallesen. Fifth-wheel for vehicles	278,786	June 5	150	44	23	2148
Fallon, William, Newburg, N. Y. Dumping-car	287,650	Oct. 30	2383	643	25	462
Fallows, James, Philadelphia, Pa. Toy car, wagon, or other vehicle	273,046	Feb. 27	1852	519	23	786
Fallows, James, Philadelphia, Pa. Toy	278,694	June 5	24	7	23	2129
Famous Shoe and Clothing Company, <i>et al.</i> (See Jones, Richard F., assignor.)						
Fanckboner, William, <i>et al.</i> (See Colvin, Orson, assignor.)						
Fancher, Alton H., Brooklyn, assignor to American Package Company, New York, N. Y. Metal box hinge	284,828	Sept. 11	823	229	24	1050
Fannin, Oliver P., West Wymnton, Fla. Bale-tie	278,787	June 5	151	45	23	2148
Fanning, James, Salem, Mass. Cash-desk	278,921	June 5	382	104 105	23	2188
Fanning, James, Salem, Mass. Lantern	282,291	July 31	2467	680	24	451
Farbwerke Hoechst, vormals Meister, Lucius & Brüning. (See Limpach, Leonhard, assignor.)						
Farbwerke, vormals Meister, Lucius & Brüning. (See Fischer, Eugen, assignor.)						
Farbwerke, vormals Meister, Lucius & Brüning. (See Fischer, Otto, assignor.)						
Farbwerke, vormals Meister, Lucius & Brüning. (See Rudolph, Christian, assignor.)						
Farley, Alfred D. F., Leavenworth, Kans. Croquet set	280,807	July 10	587	164	24	110
Farley, Jesse K. (See Oberle and Janggen, assignors.)						
Farley, John P., Kansas City, Mo. Hydrant	289,903	Dec. 11	667	186	25	1010
Farley, Michael, Portland, Oreg. Instrument for surveying inaccessible heights, &c.	288,321	Nov. 13	661	183	25	631
Farley, Michael, assignor of one-half to D. P. Kennedy, Portland, Oreg. Bevel-square	285,601	Sept. 25	1763	499	24	1231
Farlin, Dudley. (See Gibson, Thomas H., assignor.)						
Farmer, George P. (See Fost, Charles P., assignor.)						
Farmer, George P. (See Jenkins, Joel, assignor.)						
Farmer, George P., <i>et al.</i> (See Smith, Luella E., assignor.)						
Farmer, George P., Montclair, N. J. Button. (Reissue)	10,340	June 12	1134	314	23	2323
Farmer, George P., Montclair, N. J. Button	275,619	Apr. 10	929	267	23	1403
Farmer, Hannah T., Newport, R. I. Head protector	290,017	Dec. 11	805	226	25	1035
Farmer, Henry, Richmond, Ind., assignor of one-half to H. P. Deuser, Hamilton, Ohio. Check-rower cord	274,579	Mar. 27	1741	483	23	1156
Farmer, Henry, Richmond, Ind., assignor of one-half to H. P. Deuser, Hamilton, Ohio. Check-row seeder	274,580	Mar. 27	1741	483	23	1156
Farmer, James C. (See White and Farmer.)						
Farmer, James C., Providence, R. I., and R. A. Calder, Lynn, Mass. Rod-packing	285,244	Sept. 18	1334	376	24	1148
Farmer, James C., Providence, R. I., assignor to himself, C. E. Ferreira, Quincy, D. A. Brooks, Brantree, C. H. Brown, and A. A. Reeve, Boston, Mass. Locomotive smoke-box	275,812	Apr. 17	1243	342	23	1454
Farmer, Moses G., Newport, R. I. System of electric lighting	285,602	Sept. 25	1763	500	24	1231
Farmer, Moses G., Newport, R. I. System of electrical generation and distribution	290,873	Dec. 25	1907	527	25	1244
Farmer, William, Wytheville, Va. Adjustable chair-support	280,593	July 3	308	85, 86	24	55
Farmer's Friend Manufacturing Company. (See Runstetter, Andrew and M., assignors.)						
Farmer's Friend Manufacturing Company. (See Runstetter, Michael and A., assignors.)						
Farmer's Friend Manufacturing Company. (See Runstetter and Marlay, assignors.)						
Farmers Protective Union. (See Edwards, Alfred, assignor.)						
Farnham, Frank E., <i>et al.</i> (See Enos, John A., assignor.)						
Farnham, Frank G., assignor to himself and C. W. Demarest, White Mills, Pa. Gun-wad	288,168	Nov. 6	462	129	25	588
Farnham, Isaiah H., Portland, Me. Telephone system and apparatus	281,478	July 17	1428	391	24	263
Farnham, Orison L., assignor to J. H. Paddock, St. Johnsbury, Vt. Ore-separating machine	284,401	Sept. 4	295	83	24	954
Farnham, Thomas H., assignor to Union Carpet Lining Company, Boston, Mass. Machine for folding carpet-linings	270,940	Jan. 23	1380	399	23	287
Farnsworth, Charles L., Detroit, Mich. Button-fastener	280,730	July 3	471	134	24	84
Farnsworth, George C. (See Sherwood and Farnsworth.)						
Farnsworth, Hattie A., New York, N. Y. Muff	275,373	Apr. 10	665	177	23	1348
Farnum, George, Swampscott, Mass. Car-axle	269,926	Jan. 2	123	36	23	26
Farnum, John R., Waltham, Mass. Screen or grid for gas-purifiers	283,090	Aug. 14	732	205	24	638
Farnum, William C., assignor of one-fourth to E. S. Peck, Hoosick Falls, N. Y. Weighing-scale	279,864	June 19	1541	431	23	2401



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Name, residence, and invention.	No.	Date.	Monthly volumo.		Official Gazette.	
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Farquhar, John F. C., Long Acre, county of Middlesex, England. Steadying floating vessels	283,091	Aug. 14	733	206	24	638
Farr, Freeman S., and J. Evered, Muskegon, Mich. Log-roller	288,415	Nov. 13	797	216	25	654
Farr, George, Cincinnati, Ohio. Smoke and gas consuming furnace	272,035	Feb. 13	559	{ 151 152 }	23	549
Farr, George, assignor of one-half to J. R. Whittemore and M. Spickerman, Cincinnati, Ohio. Gas-consuming furnace	286,286	Oct. 9	645	172	25	127
Farr, Hiram G., Boston, Mass. Ring for halters, tie-straps, pessaries, &c.	277,473	May 15	1190	320	23	1844
Farr, Hiram G., Boston, Mass. Uterine supporter	286,798	Oct. 16	1382	346	25	247
Farr, Willis M., Dowagiac, Mich. Sand-protector for vehicles	270,650	Jan. 16	1022	294	23	216
Farr, Willis M., Dowagiac, Mich. Sand-band for vehicles	273,832	Mar. 13	768	208	23	974
Farr, Willis M., Dowagiac, Mich. Sand-band	282,066	July 31	2181	599	24	403
Farra, Walter H., assignor of two-thirds to M. M. and C. A. R. Moore, Mount Jackson, Va. Cutter-bar for harvesters	278,922	June 5	383	105	23	2188
Farrar, Benjamin F., San Francisco, Cal. Sofa-bed	278,004	May 22	1823	498	23	1959
Farrar, Charles F., South Lyon, and A. Bowman, Mason, Mich. Stock-food steamer and evaporator	279,142	June 12	675	186	28	2340
Farrar, George F., Hoosick Falls, N. Y. Horse hay-rake	276,013	Apr. 17	1475	407	23	1496
Farrell, Francis A., Brooklyn, N. Y. Fare-box	270,651	Jan. 16	1032	594	23	216
Farrell, Franklin. (See Moore, Harry F., assignor.)						
Farrell, Henry K. (See Longergan and Farrell.)						
Farrell, John, Huntsville, N. J. Hay fork and carrier	273,350	Mar. 6	143	40, 41	23	858
Farrell, John, Pittsburg, Pa. Coiling lead pipe	278,695	June 5	25	7	23	2129
Farrell, John, Pittsburg, Pa. Coiling lead pipe	278,696	June 5	26	8	23	2129
Farrell, John, Pittsburg, Pa. Machine for making electric cables. (Reissue)	10,401	Nov. 6	497	138	25	594
Farrell, John, Pittsburg, Pa. Machine for making electric cables. (Reissue)	10,402	Nov. 6	501	139	25	595
Farrell, Sylvester, et al. (See Jensen, Mathias, assignor.)						
Farrell, William E. (See Thompson and Farrell.)						
Farren, William D., Boise City, Idaho Ter. Telegraph-key	270,652	Jan. 16	1024	294	23	216
Farrington, De Witt C., Lowell, Mass. Electric railway-signal	279,929	June 26	1627	{ 456 457 }	23	2423
Farrington, George K. and H. C., Kirksville, Mo., assignors of one-third to B. S. Potter, Edinborough, Pa.; said George K. Farrington assignor to said H. C. Farrington. Mechanical telephone	271,324	Jan. 30	1851	537	23	373
Farrington, Homer C. (See Farrington, George K. and H. C.)						
Farrington, James M., assignor to J. E. Gage, Concord, N. H. Sight for fire-arms	285,474	Sept. 25	1609	452	24	1202
Farrington, South R. (See Clark, Farrington, and Sheard.)						
Farrington, Thomas B. (See Oberst, Peter J., assignor.)						
Farrington, Thomas B., Minneapolis, Minn. Stay for garments	287,916	Nov. 6	158	46	25	535
Farrington, Thomas B., Minneapolis, Minn. Drier	289,635	Dec. 4	324	90, 91	25	945
Farris, Edwin B., Palermo, Me., assignor to Oglesby, Moore & Co., Middletown, Ohio. Blotting paper	283,474	Aug. 21	1217	342	24	731
Farris, William H. (See Horrall, William A., assignor.)						
Farrish, William F., et al. (See Simpson, Andrew J., assignor.)						
Farson, Enoch S., Philadelphia, Pa. Refrigerator	275,620	Apr. 10	990	267	23	1403
Farson, Enoch S., Philadelphia, Pa. Shoe-black apparatus and chair combined	275,621	Apr. 10	991	268	23	1403
Farthing John, Chicago, Ill. Water-closet shut-off	270,211	Jan. 9	459	133	23	101
Farwell, Frederick E., Fitchburg, Mass. Shoe	275,813	Apr. 17	1243	342	23	1454
Farwell, Lalon Z., et al. (See Hazlett, Frederic B., assignor.)						
Farwell, Willard B., New York, N. Y., assignor of five-eighths to J. Landers and I. M. Taylor, San Francisco, Cal. Dry-ore concentrator	274,581	Mar. 27	1743	484	23	1156
Farwell, Willard B., assignor of five-eighths to J. Landers and I. M. Taylor, San Francisco, Cal. Dry-ore concentrator	278,325	May 29	2254	617	23	2041
Fashing, John, Winfield, Kans. Car-coupling	276,168	Apr. 24	1672	461	23	1536
Fassitt, John H., Philadelphia, Pa. Dog-collar	272,036	Feb. 13	562	152	23	550
Fassler, Jerome, et al. (See Green, George F., assignor.)						
Fatjo, John. (See Sweatt, Leroy A., assignor.)						
Faucette, James B., Searcy, Ark. Washing-machine	271,230	Jan. 30	1731	501	23	353
Faucette, James B., Dover, Ark. Theodolite	289,401	Dec. 4	35	11	25	893
Faught, Luther R., Philadelphia, Pa. Boring-bar	289,522	Dec. 4	188	53	25	919
Faulkner, Daniel A., Sacramento, Cal. Dirt-scraper	290,410	Dec. 18	1291	362	25	1130
Faulkner, Thomas D., Fort Mill, S. C. Spring-motor	273,047	Feb. 27	1853	519	23	786
Faulstich, Wendelin, Belleville, Ill. Chimney-top	286,597	Oct. 16	1029	278	25	203
Faust, Abraham, Allegheny city, Pa. Shaft-coupling	287,651	Oct. 30	2385	643	25	463
Fawcett, Fred, St. Louis, Mo. Removable calk for horseshoes	272,672	Feb. 20	1373	385	23	695
Fawcett, Richard, Salem, Ohio. Shifting seat for vehicles	272,420	Feb. 20	1056	{ 296 297 }	23	639
Faweett, Thomas C., and J. C. Hargreaves, Leeds, county of York, England. Preventing boiler explosions	282,292	July 31	2468	680	24	451
Faweett, William, New York, N. Y. Hame-tug	283,475	Aug. 21	1217	342	24	732
Fawkes, Joseph W., Storm Lake, Iowa. Show-case	279,366	June 12	954	265	23	2294
Fay, Albert T., Oak Park, Ill. Railway-switch	276,794	May 1	341	91	23	1685
Fay, Bernard, Pittsburg, Pa. Burglar-alarm	285,623	Sept. 18	1073	300	24	1102
Fay, Georgianna, Richmond, Va. Newspaper-wrapper	278,923	June 5	384	105	23	2188
Fay, Moses, Townville, Pa. Rotary engine	280,162	June 26	1899	535	23	2471
Fay, Rimmon C., assignor to G. Draper & Sons, Hopedale, Mass. Knot-tying apparatus	280,921	July 10	718	202	24	133
Fayette, Henry W., New York, assignor of one-half to J. R. and E. B. Embree, Westchester, N. Y. Attachment for cupola-furnaces for receiving the dump	287,527	Oct. 30	2207	599	25	429
Fearey, George D., Albany, N. Y. Sandpapering-machine	282,509	Aug. 7	39	12	24	507
Fearn, John, Washington, D. C. Spring-motor	272,830	Feb. 20	1567	441	23	730
Fearton, Thomas, Yonkers, N. Y. Outrigger-boat	271,441	Jan. 30	2006	579	23	402
Fechtelner, Henry, assignor to himself and R. Artmann, New York, N. Y. Wall-decoration	281,679	July 24	1683	458	24	311
Fress, John, Marysville, Cal. Sulky-harrow	275,030	Apr. 3	198	53	23	1259
Fegley, Willoughby, Ovid, N. Y. Fly-net for horses	270,040	Jan. 2	251	73	23	51
Fewster, Henry P., Philadelphia, Pa. Multicolor-printing machine	273,672	Mar. 6	554	147	23	929
Feix, Johann, Albrechtsdorf, Austria-Hungary. Production of enameled or metallized glass	276,014	Apr. 17	1476	.....	23	1496
Felbel, Jacob, New York, N. Y. Paper box	278,526	May 29	2503	684	23	2086
Felber, Arthur, Nyack, N. Y. Stop-motion for button-hole sewing-machines	275,622	Apr. 10	992	268	23	1403
Felch, Frank L. (See Liedke, Edward L., assignor.)	282,711	Aug. 7	296	84	24	551
Feldman, Joseph, London, England. Umbrella	270,041	Jan. 2	252	73	23	52
Feldmann, Alfred, Bremen, Germany. Apparatus for the manufacture of ammonia	278,115	May 22	1951	535	23	1981

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Feldmann, Hermann B., assignor to S. P. M. Tasker, Philadelphia, Pa. Hopper for pulverizing-machines	274,090	Mar. 13	1081	298	23	1027
Feldmann, Hermann B., assignor of one-half to S. P. M. Tasker, Philadelphia, Pa. Pulverizing-machine	275,031	Apr. 3	200	53, 54	23	1260
Feldmann, Hermann B., assignor to J. R. Tasker, Philadelphia, Pa. Pulverizing-machine	290,874	Dec. 25	1910	527	25	1244
Felix, Numa J., New York, N. Y. Watch-case spring	290,761	Dec. 25	1774	490	25	1221
Fell, Ambrose G., New York, N. Y. Manufacture of glucose	270,042	Jan. 2	253		23	52
Fell, Jasper P. (See Gregg and Fell.)						
Fell, Jasper P., and E. C. Gregg, Wheeling, Mo. Hay-stacker	270,043	Jan. 2	255	73, 74	23	52
Fell, John R., Philadelphia, Pa. Fire-escape	285,603	Sept. 25	1766	500	24	1232
Fell, Thomas M., Brooklyn, N. Y. Feeding air to furnaces	270,653	Jan. 16	1025	{ 294 295 }	23	216
Fell, Thomas M., Brooklyn, N. Y. Obtaining motive power	287,917	Nov. 6	160	46, 47	25	535
Fell, Thomas M., Brooklyn, N. Y. Furnace	288,416	Nov. 13	797	216	25	655
Fell, Thomas M., Brooklyn, N. Y. Process of and apparatus for making heating and illuminating gas	288,701	Nov. 20	1149	{ 316 317 }	25	722
Fellers, John E., Burlington, Ind. Grain-tally	280,163	June 26	1900	535	23	2471
Fellows, A. Clarke, Troy, N. Y. Collar	284,829	Sept. 11	824	230	24	1050
Fellows, A. Clarke, Troy, N. Y. Collar	287,263	Oct. 23	1878	514	25	359
Fellows, Charles F., Chelmsford, assignor to J. W. Bennett, Lowell, Mass. Lamp and lantern	283,989	Aug. 28	1839	519	24	858
Fellows, Edgar D., assignor to Davis Sewing Machine Company, Watertown, N. Y. Vertical-feed sewing-machine	280,731	July 3	473	134	24	84
Fellows, Edgar D., assignor to Davis Sewing Machine Company, Watertown, N. Y. Vertical-feed sewing-machine	280,732	July 3	475	135	24	84
Fellows, Edgar D., assignor to Davis Sewing Machine Company, Watertown, N. Y. Vertical-feed sewing-machine	282,873	Aug. 7	477	134	24	585
Fellows, Edgar D., assignor to Davis Sewing Machine Company, Watertown, N. Y. Vertical-feed sewing-machine	282,874	Aug. 7	479	134	24	585
Felps, Thomas, Clinton, La. Cotton-scraper attachment for plows	270,654	Jan. 16	1026	295	23	217
Felstead, William, Boston, Mass. Lunch-box	277,251	May 8	925	248	23	1791
Felt, Hannibal, assignor of one-half to H. P. Deucher, Hamilton, Ohio. Wagon-brake	278,924	June 5	385	105	23	2189
Felt, Harriet A. (See Felt, John, assignor.)						
Felt, John, Clayton, N. Y. Sash-holder	286,125	Oct. 2	422	115	25	78
Felt, John, assignor to H. A. Feit, Clayton, N. Y. Combined stopper and tube for ink-stands	280,922	July 10	719	202	24	133
Felthoff, John. (See Weaver, James C., assignor.)						
Felthousen, Edward G., and D. L. Volker, Buffalo, N. Y. Injector	283,229	Aug. 14	902	252	24	668
Felthousen, William H., Baltimore, Md. Conveyor	275,758	Apr. 10	1164	319	23	1433
Felton, Lucius E., Potsdam, N. Y. Galvanic-battery cell	287,812	Nov. 6	27	9	25	512
Felts, Oscar N., Carrington, Mo. Gang-plow	283,585	Aug. 21	1348	{ 376 377 }	24	756
Fenn, J. R. (See Hendricks, Clarke, assignor.)						
Fenn, Joseph E., Elizabeth, N. J. Telephone-exchange system	285,245	Sept. 18	1335	376	24	1148
Fenn, Joseph E., Elizabeth, N. J., assignor to Western Union Telegraph Company, New York, N. Y. Duplex telegraph	275,334	Apr. 3	591	159	23	1326
Fenn, William B., Meriden, Conn. Grinding and polishing machine	282,293	July 31	2468	680	24	451
Fenn, William B., assignor to F. Merriam & Co., Meriden, Conn. Joiner's plane	287,371	Oct. 23	2013	547	25	384
Fennell, Joseph, Cynthia, Ky. Knee-boot for horses	283,990	Aug. 28	1840	519	24	858
Fennell, Joseph, Cynthia, Ky. Quarter-boot for horses	288,220	Nov. 13	528	147	25	609
Fenner, George P., New London, Conn. Air-cushioning device for printing-presses	272,673	Feb. 20	1374	385	23	695
Fenner, George P., New London, Conn. Gripper-motion for printing-presses	272,674	Feb. 20	1375	386	23	695
Fenner, George P., New London, Conn. Journal-bearing	276,015	Apr. 17	1477	408	23	1496
Fenner, James W., Cleveland, Ohio, assignor to Nathan & Dreyfus, New York, N. Y. Oil-cup	272,379	Feb. 13	993	277	23	623
Fenner, William H., Jr. (See Potter and Fenner.)						
Fennerty, John M., Memphis, Tenn. Bilge-water indicator	274,474	Mar. 27	1586	435	23	1131
Feno, Isaac, Boston, Mass. Horseshoe	289,402	Dec. 4	36	11	25	893
Fenton, John, Indianapolis, Ind. Toe-weight	270,941	Jan. 23	1381	399	23	287
Fenton, John H. (See Hise, George J., assignor.)						
Fenton, John H. (See Hise and Fenton.)						
Fenton, John H. (See Lightford and Fenton.)						
Fenton, John H., Chicago, Ill. Toe-weight for horses	286,190	Oct. 9	504	139	25	104
Fenwick, George, Gateshead, and B. Cochrane, Durham, county of Durham, England. Reverbatory furnace	271,442	Jan. 30	2008	579	23	403
Feraille, F. Stephen. (See Kursh and Feraille.)						
Ferguson, Benjamin F., Allen, Tex. Cotton-gin building	273,048	Feb. 27	1854	{ 519 520 }	23	786
Ferguson, Caroline, St. Louis, Mo. Clothes-basket	276,377	Apr. 24	1940	537	23	1582
Ferguson, Charles H., and A. Baker, Boston, Mass. Coal and ash sifter	289,820	Dec. 11	558	156	25	991
Ferguson, Charles L. (See Ferguson, Thomas and C. L.)						
Ferguson, Charles W., Janesville, Wis. Car-coupling	281,479	July 17	1432	{ 391 392 }	24	264
Ferguson, Edward G., Macon, Ga. Vehicle-wheel	277,252	May 8	926	248	23	1791
Ferguson, James, Bridgewater, Mass. Cotton-bale tie	280,221	Dec. 18	1054	296	25	1089
Ferguson, James E. (See Suprenant and Ferguson.)						
Ferguson, James L., Columbia City, Ind. Ticket-case	278,925	June 5	386	106	23	2189
Ferguson, Monroe J., Winthrop, Iowa. Sleigh	278,326	May 29	2253	618	23	2042
Ferguson, Oliver, Milton, Ind. Grain-binder	286,799	Oct. 16	1282	346	25	247
Ferguson, Robert W., assignor to W. H. Acuff and J. M. Wiswell, Decatur, Ill. Joint-fastener	281,854	July 24	1916	523	24	353
Ferguson, Stephen B., Hallowell Township, Ontario, Canada. Cheese-vat	285,803	Oct. 2	25	9	25	7
Ferguson, Stephen M. (See Atkins, Callabill, assignor.)						
Ferguson, Thomas and C. L., Toronto, Ontario, Canada. Thill-coupling	273,497	Mar. 6	325	88	23	890
Ferguson, William C., G. D. Grismore, and W. M. Wetherill, St. Louis, Mo. Pick	285,804	Oct. 2	26	9	25	7
Fern, John. (See Grimes and Fern.)						
Fern, John, Hyde Park, Pa. Apparatus for separating slate from coal	274,747	Mar. 27	1933	538	23	1191
Fernald, Edward S. M., Saco, Me. Tool-rest for lathes	286,490	Oct. 16	1151	309	25	924
Fernald, James W., Detroit, Mich. Reversing mechanism for washing-machines	283,586	Aug. 21	1349	377	24	756
Fernie, John, Philadelphia, Pa. Ventilating apparatus	280,594	July 3	309	86	24	55
Fernie, John, Philadelphia, Pa. Apparatus for ventilating apartments	280,595	July 3	310	86	24	55
Feroe, Alfred E., Albany, and W. E. Ferro, Poughkeepsie, N. Y. Manufacturing beer, sirup, and distilled liquor	282,619	Aug. 7	173	52	24	531



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Feroe, William E. (See Feroe, Alfred E. and W. E.)						
Ferrall, Thomas R., Boston, Mass. Self-lubricating bearing	272,869	Feb. 27	1643	459 460	23	750
Ferrall, Thomas R., Boston, Mass. Trawl-roller	272,870	Feb. 27	1644	460		750
Ferrall, Thomas R., Boston, Mass. Anti-frictional bearing	279,552	June 19	1184	327	23	2339
Ferrall, Thomas R., Boston, Mass. Pulley-block	279,553	June 19	1185	328	23	2339
Ferrall, Thomas R., Boston, Mass. Pulley-block	279,554	June 19	1186	328	23	2339
Ferre, William T., assignor to himself and E. W. Bennett, Springfield, Mass. Device for bottling liquids	278,661	May 29	2665	729	23	2114
Ferreira, Charles E., <i>et al.</i> (See Farmer, James C., assignor.)						
Ferren, Myron J., Stoneham, Mass. Feed mechanism for sewing-machines	270,185	Jan. 2	419	122	23	85
Ferren, Myron J., Stoneham, Mass. Apparatus for making vamps for shoes	287,264	Oct. 23	1879	515	25	359
Ferren, Myron J., Stoneham, Mass. Boot and shoe pattern	288,417	Nov. 13	798	216	25	655
Ferronburg, Jonathan P., New Madrid, Mo. Shingle-machine	290,222	Dec. 18	1055	296	25	1089
Ferrier, Charles P., Ypsilanti, Mich. Corn-sheller	275,623	Apr. 10	993	268 269	23	1404
Ferris, Alfred. (See Thornton and Ferris.)						
Forris, Andrew C., Hackensack, N. J. Fire-escape ladder	277,124	May 8	774	203	23	1764
Forris, George D., Mexico, Mo. Washing-machine	276,795	May 1	342	92	23	1066
Forris, Henry L., Alden, Ill. Hay elevator and carrier	276,016	Apr. 17	1478	408	23	1496
Forris, Hudson, Chicago, Ill. Burglar-alarm	286,598	Oct. 16	1030	278	25	203
Forris, Sherwood B., Brooklyn, N. Y. Corset	271,618	Feb. 6	42	10, 11	23	448
Forris, Smith, New York, N. Y. Caster	280,164	June 26	1901	535	23	2471
Ferrou, Alexandre, assignor to himself and Société Anonyme des Anciens Etablissements Cail, Paris, France. Machine for crushing and disintegrating sugar-cane	279,235	June 12	773	213	23	2265
Ferry, Daniel J., Philadelphia, Pa. Paper box	290,018	Dec. 11	806	227	25	1035
Ferry, Harlow H., Kingsville, Ohio. Curd-stirring machine	288,785	Nov. 20	1253	344	25	741
Fest, Charles P., Philadelphia, Pa., assignor to G. P. Farmer, New York, N. Y. Compound for and process of dyeing mother-of-pearl and other material	276,378	Apr. 24	1940		23	1582
Fetter, Jacob, <i>et al.</i> (See Inglis, Charles A., assignor.)						
Fetzer, James J., Columbiana, Ohio. Carriage-spring	280,078	Nov. 27	1616	447	25	813
Fourhake, Henry. (See Scott, Schaub, and Fourhake.)						
Feust, Sigmund, New York, N. Y. Buffing and polishing machine	270,294	Jan. 9	554	163	23	118
Feust, Sigmund, New York, N. Y. Buffing and polishing machine	272,871	Feb. 27	1644	460	23	750
Fey, Louis, Cincinnati, Ohio. Flying-target	286,800	Oct. 16	1284	347	25	248
Feyl, Henry, assignor to Goodell & Waters, Philadelphia, Pa. Mortising-machine	281,855	July 24	1917	524	24	353
Fichtenberg, Werner, New York, N. Y. Pin-holder for neck-wear shields	287,652	Oct. 30	2386	644	25	463
Fichtenberg, Werner W., New York, N. Y. Neck-wear hook	274,924	Apr. 3	47	12	23	1233
Fichtner, Josef, assignor of one-half to G. Patck, Milwaukee, Wis. Hammock	276,234	Apr. 24	1751	485	23	1550
Fichtner, Sebald. (See Blasewitz and Fichtner.)						
Fickett, Franklin H., and J. W. Reid, Chicago, Ill. Folding or cabinet bath-tub	281,255	July 17	1149	317	24	216
Fickett, William S., assignor of three-fifths to W. R. Clark and H. C. Daniels, Rochester, N. Y. Preservative compound	285,350	Sept. 18	1452		24	1169
Fickett, William S., assignor of three-fifths to W. R. Clark and H. C. Daniels, Rochester, N. Y. Culinary boiler	285,351	Sept. 18	1453	409	24	1169
Ficks, Charles D. (See Frick, Charles E., assignor.)						
Fidler, William, Topeka, Kans. Steam packing device	276,379	Apr. 24	1941	537	23	1582
Fiedler, F. William, assignor to Pullman Door Check Company, Chicago, Ill. Door-check	270,044	Jan. 2	256	71	23	52
Fiederlein, Fredrick, New York, N. Y. Machine for cooling and mixing lard	280,025	June 26	1750	491	23	2443
Fiedler, Emil J. (See Rummel and Fiedler.)						
Field, Albert D., Columbus, Ohio. Curtain-pole	277,253	May 8	927	248 249	23	1791
Field, Albert D., assignor of one-half to L. T. Strader, Columbus, Ohio. Packing-case for cornices	269,927	Jan. 2	123	37	23	26
Field, Albert D., assignor of one-half to L. T. Strader, Columbus, Ohio. Adjustable cornice	274,444	Mar. 20	1551	425	23	1116
Field, Benjamin P., Babylon, N. Y. Chimney-cap	259,636	Dec. 4	329	91	25	945
Field, Benton J., Leaksville, N. C. Dental impression-cup	274,299	Mar. 20	1357	372	23	1082
Field & Co., J. A. (See Hedges, Isaac A., assignor.)						
Field, Frank W., Springfield, Mass. Envelope or other box	290,223	Dec. 18	1057	297	25	1090
Field, Frederic H., Providence, R. I. Fire-alarm indicator and recorder	288,221	Nov. 13	529	147	25	669
Field, George B., New York, N. Y. Purifying, heating, and condensing apparatus	272,831	Feb. 20	1568	441	23	731
Field, Silas M., and W. Halkyard, assignors to H. A. Church, Providence, R. I. Machine for making roller-chain units. (Reissue)	10,326	May 15	1654	450 451	23	1924
Field, Stephen D., New York, N. Y. Printing-telegraph	274,300	Mar. 20	1358	373	23	1082
Field, Stephen D., New York, N. Y. Printing-telegraph	274,748	Mar. 27	1934	538	23	1191
Field, Stephen D., New York, N. Y. Speaking-telephone	275,178	Apr. 3	392	166	23	1292
Field, Stephen D., New York, N. Y. Electric elevator	275,179	Apr. 3	383	106	23	1292
Field, Stephen D., New York, N. Y. Electrical connector for railway-track circuits	275,180	Apr. 3	385	106	23	1293
Field, Stephen D., New York, N. Y. Receiving-instrument for quadruplex telegraphy	275,181	Apr. 3	386	106	23	1293
Field, Stephen D., New York, N. Y. Printing-telegraph	279,729	June 19	1385	366	23	2373
Field, Stephen D., New York, N. Y. Alarm for printing telegraphs	279,730	June 19	1386	366 367	23	2374
Field, Stephen D., New York, N. Y. Printing-telegraph	279,865	June 19	1542	411	23	2401
Field, Stephen D., New York, N. Y. Dynamo multiple telegraph	288,786	Nov. 20	1256	344 345	25	741
Field, Stephen D., assignor to Commercial Telegram Company, New York, N. Y. Printing-telegraph and transmitter therefor	287,265	Oct. 23	1881	515	25	360
Field, Stephen D., assignor to Commercial Telegram Company, New York, N. Y. Printing-telegraph	287,266	Oct. 23	1883	515	25	360
Field, Stephen D., assignor to Commercial Telegram Company, New York, N. Y. Electric transmitter	287,267	Oct. 23	1883	515	25	360
Field, Stephen D., assignor to Commercial Telegram Company, New York, N. Y. Controlling printing-circuits of printing-telegraphs	290,556	Dec. 18	1500	414	25	1166
Field, Stephen D., assignor to Commercial Telegram Company, New York, N. Y. Printing-telegraph	290,557	Dec. 18	1502	414	25	1166
Field, Stephen D., assignor to Commercial Telegram Company, New York, N. Y. Printing-telegraph	290,635	Dec. 18	1602	439 440	25	1182
Field, Stephen D., assignor to Western Union Telegraph Company, New York, N. Y. Dynamo-telegraphy	282,294	July 31	2470	681	24	452
Field, Stephen D., assignor to Western Union Telegraph Company, New York, N. Y. Dynamo-telegraphy	282,295	July 31	2476	681	24	452
Field, Stephen D., assignor to Western Union Telegraph Company, New York, N. Y. Dynamo-telegraphy	282,296	July 31	2478	682	24	453

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Field, Stephen D., assignor to Western Union Telegraph Company, New York, N. Y. Dynamo-electric machine for printing-telegraphs.....	282,297	July 31	2482	682	24	454
Field Tack Company, Albert. (See Packard, Henry R., assignor.)						
Field Tack Company, Albert. (See Packard and Wilber, assignors.)						
Field, Wallace L., West De Pere, Wis. Machine for trussing barrels.....	283,476	Aug. 21	1218	{ 342 343 }	24	732
Field, Wallace L., West De Pere, Wis. Machine for finishing barrels.....	283,477	Aug. 21	1219	343	24	732
Fieldhouse, Joseph, Keighley, county of York, England. Changeable last.....	283,587	Aug. 21	1350	377	24	756
Fielding, Daniel M., Decatur, Ill. Bench-plane.....	277,556	May 15	1292	347	23	1860
Fields, George F., et al. (See Pfautz, Daniel M., assignor.)						
Fieser, John B. (See Neff, Enders, and Fieser.)						
Fiestor, John C., assignor to J. Shaaber, Reading, Pa. Weather-strip.....	285,024	Sept. 18	1074	300	24	1102
Fiestor, John U., Cambridge, Ohio. Bed-spring.....	279,731	June 19	1387	387	23	2374
Fife, James T., Corning, and L. E. Mercer, Lenox, Iowa; said Fife assignor to said Mercer. Bee-hive.....	271,197	Jan. 23	1693	449	23	337
Fife, Kinsey, and J. N. Pickenpau, Morgantown, W. Va. Car-stove.....	287,268	Oct. 23	1885	516	25	360
Fifield, John W. D., North Brookfield, Mass. Machine for the manufacture of crimping- forms.....	281,856	July 24	1918	524	24	353
Fifield, John W. D., North Brookfield, assignor to A. H. Batcheller, Boston, Mass. Last.....	288,934	Nov. 20	1433	394	25	774
Firge, Augustus, No. 14 Baker Street, county of Middlesex, England. Water-wheel.....	271,824	Feb. 6	289	79	23	492
Fildes, Samuel. (See Drew, William H., assignor.)						
File, John C., assignor of one-half to J. B. Belcher, Charlotte, Mich. Felt boot.....	279,482	June 12	1092	301	23	2316
Filkins, James L., Waterville, N. Y. Hop-drier.....	285,246	Sept. 18	1337	376	24	1148
Fillebrown, Luther W., Piqua, Ohio. Combined harrow and cultivator.....	273,697	Mar. 6	585	156	23	934
Pillis, George N., New York, N. Y. Watchman's time-recorder.....	273,351	Mar. 6	147	41	23	859
Fillmore, James A., Minneapolis, Minn. Spring-balance shade.....	281,460	July 17	1434	392	24	264
Filson, Jacob H., et al. (See Wright and Bechter, assignors.)						
Filson, Samuel J., Maysville, Ky. Car-coupling.....	274,749	Mar. 27	1936	539	23	1191
Finch, Edward B., New York, N. Y. Top for stoves.....	286,536	Oct. 9	942	254	25	182
Finch, James B., San José, Cal. Arithmetical chart.....	275,475	Apr. 10	806	218	23	1372
Finch, James P. (See Conner and Finch.)						
Finch, Robert S., Cincinnati, Ohio. Fire-alarm.....	285,983	Oct. 2	253	71	25	48
Finck, Nicholas. (See Morris and Finck.)						
Findlay, Charles F. (See Miller and Findlay.)						
Findlay, Charles F., and D. J. Miller, Chicago, Ill. Traction-rope railway.....	281,256	July 17	1150	{ 317 318 }	24	216
Findlay, James, Toronto, Ontario, Canada. Rail-dog.....	285,352	Sept. 18	1454	409	24	1169
Findlay, John, Montreal, Quebec, Canada. Car wheel and axle.....	285,984	Oct. 2	254	72	25	49
Finlay, Leonard, Little Rock, Ark. Car-truck.....	282,510	Aug. 7	40	12	24	507
Finger, Carl W., Wilkes-Barre, Pa. Reversing and expansion valve-gear.....	288,787	Nov. 20	1261	345	25	741
Fink, Jacob, and T. B. Branson, assignors to G. Bernhard, Defiance, Ohio. Commode.....	290,983	Dec. 25	2064	568	25	1269
Finkensieper, Charles, et al. (See Lindner, Ferdinand, assignor.)						
Finly, James R., Delphi, assignor to R. Coble, Carroll County, Ind. Hame-fastener.....	276,903	May 1	563	146	23	1722
Finn, Clark. (See Finn, Henry H. and C.)						
Finn, Henry H. and C., Elkdale, Pa. Hoe.....	285,604	Sept. 25	1767	500	24	1232
Finn, John L., Elvria, Ohio. Lightning-arrester.....	273,049	Feb. 27	1855	520	23	787
Finn, John L., Elvria, assignor of one-half to J. F. Ryder, Cleveland, Ohio. Oil-tank pro- tector.....	290,558	Dec. 18	1503	415	25	1166
Finn, Peter J. (See Donahoe and Finn.)						
Finney Electric Light & Telegraph Company. (See Finney, Joseph R., assignor.)						
Finney, Henry E., Las Vegas, N. Mex. Tor. Device for medical treatment of the male uri- nary organs.....	281,043	July 10	867	241	24	160
Finney, Joseph R., Pittsburg, assignor to himself and T. B. Kerr, Allegheny city, Pa. Electric vehicle.....	270,186	Jan. 2	420	122	23	86
Finney, Joseph R., Pittsburg, assignor to himself and T. B. Kerr, Allegheny city, Pa. Electric mallet.....	270,187	Jan. 2	422	122	23	86
Finney, Joseph R., assignor to Finney Electric Light & Telegraph Company, (limited,) Pittsburg, Pa. Electric-arc lamp.....	271,576	Jan. 30	2173	626	23	431
Finney, Joseph R., assignor to Finney Electric Light and Telegraph Company, (limited,) Pittsburg, Pa. Electric-arc lamp.....	275,182	Apr. 3	389	107	23	1293
Finney, Joseph R., assignor to Finney Electric Light and Telegraph Company, (limited,) Pittsburg, Pa. Electric-arc lamp.....	275,183	Apr. 3	390	107	23	1294
Finney, Joseph R., Pittsburg, assignor to himself and T. B. Kerr, Allegheny, Pa. Prop- elling cars by electricity.....	285,353	Sept. 18	1454	410	24	1169
Finnigan, John J., Selma, Ala. Safety oil-tank.....	290,559	Dec. 18	1505	415	25	1167
Finsterer, John, Philadelphia, Pa. Chamber-pot and cover.....	283,588	Aug. 21	1350	377	24	756
Fine Proof Building Company of New Jersey. (See Mecker, Frederick W., assignor.)						
Firm, Joseph L., Jersey City, N. J. Plate-rack for stereotype-blocks.....	283,876	Aug. 28	1701	479	24	831
Firman, Leroy B., assignor to Western Electric Company, Chicago, Ill. Central-office ap- paratus for telephones.....	283,334	Aug. 14	1038	291	24	693
Fischer, Albert, Detroit, Mich. Car-coupling.....	275,814	Apr. 17	1244	342	23	1454
Fischer, Ernst, Halle-on-the-Saale, Prussia, Germany. Pen-holder.....	278,697	June 5	27	8	23	2129
Fischer, Eugen, assignor to Farbwerke, vormals Meister, Lucius & Brünig, Höchst-on- the-Main, Germany. Production of paranitrobenzylidene chloride.....	278,926	June 5	387	.....	23	2189
Fischer, Eugen, assignor to Farbwerke, vormals Meister, Lucius & Brünig, Höchst-on- the-Main, Germany. Manufacture of the nitro-leuco base of rosaniline.....	283,766	Aug. 28	1574	.....	24	810
Fischer, Franz J., Hamilton, Ohio. Guide for ice plows and markers.....	287,428	Oct. 30	2085	566	25	404
Fischer, George, Quincy, Ill. Refrigerator.....	274,750	Mar. 27	1937	539	23	1192
Fischer, Nicholas, Cincinnati, Ohio. Flying target.....	281,183	July 10	1046	289	24	192
Fischer, Nicholas, Cincinnati, Ohio. Ball-trap.....	281,356	July 17	1273	353	24	238
Fischer, Otto, Munich, Bavaria, Germany. Preparing oxyquinoline.....	270,045	Jan. 2	257	.....	23	52
Fischer, Otto, Munich, assignor to Farbwerke, vormals Meister, Lucius & Brünig, Höchst- on-the-Main, Germany. Preparing oxyhydro-ethyl chinoline.....	273,498	Mar. 6	326	.....	23	890
Fischer, Otto, Munich, assignor to Farbwerke, vormals Meister, Lucius & Brünig, Höchst- on-the-Main, Germany. Preparation of oxyhydro-methyl chinoline.....	276,796	May 1	343	.....	23	1686
Fischer, Wilhelm, Leipsic, Saxony, Germany. Piano-forte.....	275,759	Apr. 10	1165	319	23	1433
Fischer, Wilhelm M., New York, N. Y. Filtering apparatus.....	290,019	Dec. 11	807	237	25	1036
Fischer, William M., New York, N. Y. Candle-holder for Christmas-trees.....	270,771	Jan. 16	1171	335	23	243
Fischl, Josef. (See Klein, Josef, assignor.)						
Fish, Alexander J., Chicago, Ill. Device for ornamenting cake.....	279,555	June 19	1187	328	23	2339
Fish, Arthur L., San Francisco, Cal. Machine for pulverizing ores, &c.....	287,633	Oct. 30	2387	644	25	463
Fish, Charles, Manchester, N. H. Side-spring vehicle.....	287,918	Nov. 6	162	47	25	536
Fish, Frank P. (See Carscadin and Fish.)						
Fish, George W., Peconica, Ill. Check-hook for harness.....	270,406	Jan. 9	701	207	23	146



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Fish, Joseph G. (See Gibson and Fish.)						
Fish, Myron. (See Bright, Richard A., Jr., assignor.)						
Fish, Sidell E., Greenport, N. Y. Dental impression-cup	273,833	Mar. 13	768	208	23	974
Fish, Simon W., Hicksville, Ohio. Portable fence	225,882	Oct. 2	132	38	25	26
Fishel, Emanuel, Salem, N. C. Vegetable-cutter	225,985	Oct. 2	254	72	25	49
Fisher, Albert L. (See Snyder, David, assignor.)						
Fisher, Alfred A., and A. Hart, assignors to Pacific Tucking and Manufacturing Company, San Francisco, Cal. Tuck attachment for sewing-machines	278,422	May 29	2376	649	23	2063
Fisher, Alvin L. (See Whitaker, Richard, assignor.)						
Fisher, Amos B., Caribou, Me. Saw-filing machine	290,875	Dec. 25	1912	527 528	25	1245
Fisher, Asahel H., assignor of one-half to W. C. Turner, Philadelphia, Pa. Friction-compressor for dredging-machines, &c.	285,883	Oct. 2	133	38	25	26
Fisher, Bernard, deceased; H. Wich, administratrix, and assignor to C. Wich, Baltimore, Md. Vapor-burner	282,820	Aug. 7	412	116	24	573
Fisher, Bevil A., St. James, Mo. Car-coupling	285,247	Sept. 18	1337	376	24	1148
Fisher, Charles A. (See Wright and Fisher.)						
Fisher, Cicero, Temperance Hall, Tenn. Fish-trap	279,556	June 19	1188	329	23	2339
Fisher, Clark, Trenton, N. J. Vise	282,975	Aug. 14	590	166	24	612
Fisher, Clark, Trenton, N. J. Railway-tie	285,986	Oct. 2	255	72	25	49
Fisher, Clark, Trenton, and E. R. Sollday, Lambertville, N. J., assignors to Union Mills Paper Manufacturing Company, New Hope, Pa. Apparatus for making paper felt, wadding, or lining	286,287	Oct. 9	647	172	25	138
Fisher, Edward D. (See Hall, Albert T., assignor.)						
Fisher, Edward D., Wooster, Ohio. Metal hame-fastening	288,322	Nov. 13	662	183	25	631
Fisher, Edward D., assignor of one-half to G. B. Miller, Wooster, Ohio. Horse-collar-throat	288,562	Nov. 13	972	267	25	685
Fisher, Edward F., Strawn, assignor to himself and J. E. Davis, Bloomington, Ill. Nut-lock	283,092	Aug. 14	736	206	24	638
Fisher Electric Company. (See Bain, Foree, assignor.)						
Fisher, Enos, Adamsborough, Ind. Sled-brake	280,165	June 26	1902	535	23	2471
Fisher, George A., New York, assignor to Abendroth Brothers, Port Chester, N. Y. Ash-chute	273,499	Mar. 6	327	89	23	890
Fisher, George F., St. John, New Brunswick, Canada. Lantern	278,927	June 5	387	106	23	2189
Fisher, Israel. (See Gassett and Fisher.)						
Fisher, Israel, Medford, assignor to New England Electric Manufacturing Company, Boston, Mass. Dynamo-electric generator	280,301	June 26	2074	584	23	2502
Fisher, Jesse. (See Kaylor and Fisher.)						
Fisher, John W. (See Lowe, Thomas, assignor.)						
Fisher, Joseph H., Deerfield, Ill. Car-door lock	279,732	Nov. 19	1358	387	23	2374
Fisher, Joseph H., Deerfield, Ill. Car-door lock	288,988	Nov. 27	1502	416	25	794
Fisher, Lucius G., Jr. (See Altenbrand, Henry, assignor.)						
Fisher, Noble A., Sacramento, Cal. Moving street-cars on curves	289,904	Dec. 11	669	186	25	1010
Fisher, Timothy L., Arlington, Mass. Easel	278,116	May 22	1954	535	23	1982
Fisher, W. Frank B., Springfield, Ohio. Cut-off for conductors	289,621	Dec. 11	559	157	25	991
Fisher, William C., assignor of one-half to C. E. and F. Fuller, Boston, Mass. Circuit-closer for burglar-alarms	279,483	June 12	1093	302	23	2316
Fisher, William D., Chicago, Ill. Sofa-bed	273,352	Mar. 6	149	41	23	859
Fisher, William L., Bay City, Mich. Car-coupling	283,991	Aug. 28	1841	519	24	858
Fisherback, Augustus, Marion, Ind. Sulky-plow	283,877	Aug. 28	1701	480	24	832
Fisherberg, George W., Allegheny, Pa. Spring bed-bottom	275,476	Apr. 10	807	218	23	1372
Fishkill, Manufacturing Company. (See Everett, Sidney J., assignor.)						
Fishman, Milford, Washington, D. C. Drawers, overalls, and pantaloons	283,992	Aug. 28	1842	519 520	24	858
Fishwick, James, Mainville, Ohio. Hand crimping-tool	271,052	Jan. 23	1513	436	23	309
Fishwick, Richard. (See Lee, Joseph, assignor.)						
Fisk, Clark & Flagg. (See Flagg, Thomas J., assignor.)						
Fisk & Co., D. B. (See Maynard, Henry O., assignor.)						
Fisk, George C., Dansville, N. Y. Anti-incrustation attachment for boilers	285,248	Sept. 18	1338	377	24	1148
Fisk, George S., and H. K. Vergason, Binghamton, N. Y.; said Vergason assignor to said Fisk. Bee-hive	273,674	Mar. 6	558	148	23	929
Fisk, James. (See Ash and Fisk.)						
Fisk, John D., Hartford, Conn. Revolving guard for locomotive cow-catchers	288,788	Nov. 20	1262	345	25	742
Fisk, Redford W., Strong City, Kans. Truck	290,020	Dec. 11	808	227	25	1036
Fiske, Bradley A., New York, N. Y. Stock-indicator	285,805	Oct. 2	27	9, 10	25	7
Fiske, Bradley A., Newport, R. I., assignor to B. Hecht, New York, N. Y. Pencil or crayon holder	272,948	Feb. 27	1740	486	23	765
Fiske, Bradley A., and S. D. Mott, New York, N. Y. Insulator	286,801	Oct. 16	1284	347	25	248
Fiske, Henry G., Springfield, Mass. Fastening for electric-circuit wires	271,825	Feb. 6	290	80	23	492
Fiske, Jeremiah H., Medway, Me. Lifting-jack	273,050	Feb. 27	1856	520	23	787
Fiske, Joseph E., Jamestown, N. Y. Bolting-regulator	276,169	Apr. 24	1673	462	23	1537
Fitch, Arden S. (See Eichling and Fitch.)						
Fitch, Byron S. (See Fitch, Calvin H., assignor.)						
Fitch, Calvin H., Middletown Springs, Vt., assignor of one-half to B. S. Fitch, Richmond, Va. Spring bed-bottom	274,925	Apr. 3	48	13	23	1234
Fitch, Charles H., New Haven, Conn. Return-flue boiler	270,212	Jan. 9	461	134	23	101
Fitch Electric Lighting and Construction Company. (See Fitch, Frederick K., assignor.)						
Fitch, Ezra C., New York, N. Y. Watch-case	277,865	May 15	1650	450	23	1923
Fitch, Ezra C., assignor to Robbins & Appleton, New York, N. Y. Watch-case	289,340	Nov. 27	1927	535	25	872
Fitch, Frederick K., New York, N. Y., assignor to Fitch Electric Lighting and Construction Company, of New York. Dynamo-electric machine	285,249	Sept. 18	1339	377	24	1149
Fitch, Henry, Jr. (See Morse, E. Flut, assignor.)						
Fitch, Henry D., Lebanon, Ky. Apparatus for making gas	271,231	Jan. 30	1732	501	23	353
Fitch, Lauren M., assignor of one-half to M. M. Davis, Rome, N. Y. Buckboard-wagon	270,879	Jan. 16	1294	373	23	267
Fitch, Nancy M., assignor to S. Fitch, Auburn, N. Y. Kiln for firing pottery, &c.	281,625	July 17	1610	440	24	293
Fitch, Sarah H., et al. (See Fitch, William E., assignor.)						
Fitch, Stearns. (See Fitch, Nancy M., assignor.)						
Fitch, W. & E. T. (See Beecher, Thomas, assignor.)						
Fitch, W. & E. T. (See Northrup, George B., assignor.)						
Fitch, Wheeler W., Honeyoy Falls, N. Y. Car-coupling	277,698	May 15	1453	392	23	1888
Fitch, William E., assignor to F. C. Howlett and S. H. Fitch, Syracuse, N. Y. Water or air pillow	283,767	Aug. 28	1574	445	24	811
Fitch, William L., assignor to D. H. Fletcher, trustee, Chicago, Ill. Air-supply to the feed-water for steam-boilers	285,884	Oct. 2	134	38	25	26

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Fitchburg Steam Engine Company. (See Fosdick, Frederick, assignor.)						
Fitt, Frederick, Chaux-de-Fonds, Switzerland. Detachable watch-escapement.....	281,757	July 24	1792	489	24	331
Fitt, Frederick, Chaux-de-Fonds, Switzerland. Full-plate watch and time-piece movement.....	281,758	July 24	1794	{ 489 490 }	{ 24 }	331
Fittion, James. (See Ludlow, Samuel W., assignor.)						
Fitts, Benaiah, Worcester Mass. Three-way valve.....	272,421	Feb. 20	1057	297	23	639
Fitts, Benaiah, and J. F. Wilson, Worcester, Mass. Rotary meter.....	281,257	July 17	1152	319	24	217
Fitts, George W., Philadelphia, Pa. Spring-motor.....	271,232	Jan. 30	1734	502	23	354
Fitts, Leverett E. (See Foster, William G., assignor.)						
Fitz, John, <i>et al.</i> (See Harvey, John, assignor.)						
Fitzberger, John. (See Fitzberger, Thomas F. and J.)						
Fitzberger, Thomas F. and J., Baltimore, Md. Metallic roofing.....	277,254	May 8	928	249	23	1792
Fitz-Gerald, Desmond G., Brixton, county of Surrey, England. Incandescent electric lamp.....	286,916	Oct. 16	1432	393	25	273
Fitz Gerald, Walter H., assignor of one-half to W. M. Dwyer, Chicago, Ill. Pitcher-stand.....	282,875	Aug. 7	481	135	24	585
Fitz Gerald, Walter H., and G. C. Smith, Chicago, Ill. Dust-proof watch-case.....	287,919	Nov. 6	163	47	25	536
Fitzgerald, Anna M., executrix. (See Fitzgerald, John.)						
Fitzgerald, John, deceased, Brooklyn, N. Y.; A. M. Fitzgerald, executrix. Grinding-mill.....	285,777	Sept. 25	1993	564	24	1270
Fitzgerald, Michael J., Fort Wingate, N. Mex. Ter. Gage-cock.....	289,637	Dec. 4	330	92	25	946
Fitzgerald, Rufus, Nashua, N. H. Machine for cutting holes through ice.....	286,599	Oct. 16	1030	279	25	203
Fitzgerald, Walter S., Boston, Mass. Skiving-machine.....	287,813	Nov. 6	28	9	25	512
Fitzgibbons, Patrick, Oswego, N. Y. Steam-boiler.....	274,301	Mar. 20	1360	373	23	1083
Fitzgibbons, Patrick, Oswego, N. Y. Steam-boiler.....	290,762	Dec. 25	1774	490	25	1221
Fitzhugh, Benjamin G., Frederick, Md. Fare-collector for passenger-cars.....	289,341	Nov. 27	1928	{ 535 536 }	{ 25 }	872
Fitzpatrick, Anne M. (See Fitzpatrick, Michael, assignor.)						
Fitzpatrick, James B., Wheeling, W. Va. Lifter for cooking utensils.....	280,596	July 3	311	87	24	56
Fitzpatrick, Michael, assignor to A. M. Fitzpatrick, St. Louis, Mo. Brick-making machine.....	272,224	Feb. 13	794	221	23	589
Fitzroy, Alfred, Brooklyn, N. Y. Safety appliance for elevators.....	289,905	Dec. 11	670	187	25	1010
Fitzsimmons, Laurence, Allegheny, Pa. Dumping-car.....	273,051	Feb. 27	1857	231	23	787
Fitzsimmons, Michael, <i>et al.</i> (See Vincent, John, Jr., assignor.)						
Fix, James M., Bird's Landing, Cal. Gang-plow.....	295,885	Oct. 2	135	38	25	27
Flach, Arthur B., New York, N. Y. Safety-gate. (Reissue).....	10,342	June 19	1587	444	23	2409
Flad, Frederick, Philadelphia, Pa. Cigar-tip cutter.....	276,964	May 1	564	147	23	1723
Flad, Henry, St. Louis, Mo. Apparatus for sprinkling streets.....	288,222	Nov. 13	531	148	25	609
Flagg, George H. P., trustee. (See Coy, Frederick W., assignor.)						
Flagg, J. Walter, Worcester, Mass. Automatic cash-carrier.....	283,768	Aug. 28	1575	445	24	811
Flagg, Joseph W., Worcester, Mass. Automatic cash-carrier.....	274,302	Mar. 20	1361	373	23	1083
Flagg, Joseph W., Worcester, Mass. Automatic cash-carrier.....	277,892	May 22	1688	460	23	1936
Flagg, Lafayette, Bunker Hill, Ind. Snap for harness.....	281,857	July 24	1921	525	24	353
Flagg, Thomas J., assignor to Fisk, Clark & Flagg, New York, N. Y. Scarf-shield.....	288,169	Nov. 6	463	129	25	588
Flaumang, Mathias, Newark, N. J. Camera.....	271,443	Jan. 30	2009	579	23	403
Flammang, Mathias, Newark, N. J. Plate-holder for photographic cameras.....	271,826	Feb. 6	291	80	23	492
Flammang, Mathias, Newark, N. J. Photographic camera.....	278,788	June 5	152	45	23	2148
Flammang, Mathias, Newark, N. J. Plate-holder for photographic cameras.....	280,166	June 26	1903	536	23	2472
Flammang, Mathias, Newark, N. J. Stand for photographic cameras.....	282,182	July 31	2348	647	24	429
Flammang, Mathias, Newark, N. J. Photographic camera.....	283,589	Aug. 21	1351	378	24	757
Flamminger, Fred, and C. O. Sobinski; said Sobinski assignor to G. Frey, St. Louis, Mo. Index-tab.....	277,836	May 15	1615	440	23	1917
Flanders, Albert W. (See Bonett, Gilfillan, and Flanders.)						
Flanders, Frederick. (See Woodward, Stephen, assignor.)						
Flanders, James, Augusta, Me. Automatic piling device for printing-presses.....	273,052	Feb. 27	1858	521	23	787
Flandors, Peter, Lowell, Mass. Stave-machine.....	270,772	Jan. 16	1172	335	23	244
Flanders, Timothy B. (See Buttrick and Flanders.)						
Flanigan, George B., Kansas City, Mo. Hog-hoisting apparatus.....	272,422	Feb. 20	1059	{ 297 298 }	{ 23 }	639
Flanigan, Mark, <i>et al.</i> (See Hinden, Mathias J., assignor.)						
Flannagan, John D., assignor of one-half to B. V. Sowders, Kosse, Tex. Feed-governor for cotton-gins.....	279,367	June 12	954	265	23	2294
Flannery, D. F. (See Reidy, Maurice A., assignor.)						
Flannery, Joseph, Philadelphia, Pa. Furnace.....	270,773	Jan. 16	1173	336	23	244
Flaschoen, Charles I., Paris, France. Manufacture of medicated food.....	287,429	Oct. 30	2086	25	25	405
Flather, Mark, Nashua, N. H. Hand reaming-machine.....	273,976	Mar. 13	941	259	23	1003
Flathers, William M., Sumner, Minn. Plow.....	287,814	Nov. 6	29	9, 10	25	512
Fleck, John, Louisville, Ky. Life-saving apparatus for privy-vaults.....	270,295	Jan. 9	556	163	23	118
Fleisher, Moyer, Philadelphia, Pa. Tank.....	284,402	Sept. 4	298	84	24	954
Fleming, Caughy S., Shelbyville, Ind. Hinge for toilet-glasses and mirrors.....	290,021	Dec. 11	809	227	25	1036
Fleming, John A., Hampstead, county of Middlesex, England. Preparation or production of insulating materials or articles.....	284,289	Sept. 4	162		24	931
Fleming, John E., Chicago, Ill. Oil-stove.....	273,717	Mar. 13	610	164	23	946
Fleming, Jonathan, Madison, Ind. Road-scraper.....	279,368	June 12	956	{ 265 266 }	{ 23 }	2294
Fleming, Joseph B. (See Longhead and Fleming.)						
Fleming, Robert S. (See Dobyne and Fleming.)						
Fleming, Thomas, South Bend, Ind. Lock for top boxes of wagons.....	272,832	Feb. 20	1570	442	23	731
Fleming, Thomas, assignor of one-half to J. C. Paxson, South Bend, Ind. End-gate.....	271,198	Jan. 23	1695	489	23	338
Fleming, William B. (See Haskell and Fleming.)						
Flemming, John H., Dundee, Mich. Thrill-coupling.....	274,751	Mar. 27	1939	539	23	1192
Flemmiken, Theodore M., deceased, (W. McGregor, administrator,) assignor to N. C. Thompson, Rockford, Ill. Cultivator.....	273,673	Mar. 6	556	148	23	999
Fletcher, Charles, Providence, R. I. Machine for combing wool, &c.....	271,325	Jan. 30	1852	537	23	374
Fletcher, Charles, Brooklyn, N. Y. Silk-spinning machine.....	286,802	Oct. 16	1285	{ 347 348 }	{ 25 }	248
Fletcher, D. H., trustee. (See Fitch, William L., assignor.)						
Fletcher, Elmer, Brooklyn, N. Y. Automatic swinging stand and rest.....	285,119	Sept. 18	1187	333	24	1121
Fletcher, Frank T. (See Clark, David A., assignor.)						
Fletcher, Frederick V., Brooklyn, N. Y. Guard for closing the hinge-crevices of doors.....	274,303	Mar. 20	1363	373	23	1083
Fletcher, George E., Lampasas, Tex. Wind-engine.....	275,032	Apr. 3	202	54	23	1260
Fletcher, Gertrude N., Indianapolis, Ind. Library-table.....	283,356	Aug. 21	1112	314	24	713
Fletcher, James S., Chicago, Ill. Motor.....	277,893	May 22	1689	461	23	1936
Fletcher, John P., New York, N. Y. Rotary engine.....	289,822	Dec. 11	560	157	25	991
Fletcher, John W. (See Garver and Varian, assignors.)						
Fletcher, Joseph, Livermore, Cal. Cigar and cigarette holder.....	282,183	July 31	2349	647	24	429
Fletcher, Robert H., Brooklyn, N. Y. Valve-gear.....	286,803	Oct. 16	1287	348	25	248



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Fletcher, Samuel J., San Francisco, Cal. Suspension-hook .....	279,236	June 12	774	213	23	2265
Fletcher, Thomas P., Lawrence, Kans. Vegetable and fruit canning machine .....	276,380	Apr. 24	1942	538	23	1583
Fletcher, Thomas P., Lawrence, Kans. Corn husker .....	287,269	Oct. 23	1856	516	25	361
Fletcher, William H. (See Krings, Friedrich P., assignor.) .....						
Fletter, Henry, assignor of one-half to D. Lilienfeld, Kalamazoo, Mich. Nut-lock .....	277,474	May 15	1191	320	23	1244
Fletter, Henry, assignor of one-half to G. De La Bar, Kalamazoo, Mich. Non-freezing hydraut .....						
Fleury, Georges, Reunnes, France. Apparatus for purifying alcoholic liquors .....	287,815	Nov. 6	31	10	25	513
Flewelling, Gifford, and G. J. Harris, Hampton, New Brunswick, Canada. Machine for sawing match-cards .....	286,126	Oct. 2	424	116	25	78
Flewelling, Gifford, and G. J. Harris, Hampton, New Brunswick, Canada. Match-sawing machine .....	272,675	Feb. 20	1376	386 387	23	696
Fliekinger, Henry F., Bucyrus, Ohio. Railway cross-tie .....	290,560	Dec. 18	1506	415	25	1167
Fliekinger, William J., Columbiana, Ohio. Window-pole for curtains .....	283,230	Aug. 14	904	252	24	668
Flinn, William H., Nashua, N. H. Door lock .....	285,886	Oct. 2	137	39	25	27
Flinn, William H., Nashua, N. H. Key-fastener .....	272,037	Feb. 13	563	152	23	550
Flinn, William H., Nashua, N. H. Key-fastener .....	279,930	June 26	1630	457	23	2423
Flinn, William H., Nashua, N. H. Key-fastener .....	290,876	Dec. 25	1913	528	25	1245
Flint, Alvah S. (See Martin and Flint.) .....						
Flint, Benjamin F., Cincinnati, Ohio. Time-lock .....	276,381	Apr. 24	1943	538	23	1583
Flint, Benjamin F., Cincinnati, Ohio. Time-lock .....	276,382	Apr. 24	1946	538	23	1583
Flint, Benjamin F., Cincinnati, Ohio. Time-lock .....	276,383	Apr. 24	1947	538 539	23	1583
Flint, Edward, Jr., assignor to American Bell Telephone Company, Boston, Mass. Electric annunciator .....	283,590	Aug. 21	1353	378	24	757
Flint, Edward, Jr., Boston, assignor to himself, C. Williams, Jr., Somerville, Mass., and J. K. Dunbar, San Antonio, Tex. Plug for electrical switch-boards .....	279,557	June 19	1188	329	23	2339
Flint, Ezra R., Adrian, Mich. Step-ladder .....	271,619	Feb. 6	44	11	23	448
Flooke, Robert, Newark, N. J. Bag or satchel lock .....	287,114	Oct. 23	1691	463	25	327
Flooke, Robert, Newark, N. J., assignor to R. Neumann & Co., New York, N. Y. Satchel-lock .....	279,733	June 19	1389	387	23	2374
Floeker, Frank J., Allegheny City, Pa. Siphon for vessels .....	290,561	Dec. 18	1507	416	25	1167
Flood, James H., and H. F. Knoder, Cardington, Ohio. Car-coupling .....	288,789	Nov. 20	1263	346	25	742
Flood, Richard J., and J. Richardson, Pittsburg, Pa. Bung for barrels .....	270,942	Jan. 23	1382	399	23	288
Flora, Orlando V., Madison, Ind. Ladder .....	285,605	Sept. 25	1768	500	24	1232
Florence Manufacturing Company. (See Estabrook, Alanson C., assignor.) .....						
Florsheim, Simon, <i>et al.</i> (See Gardner, Marshall, assignor.) .....						
Flos, Charles, New York, N. Y. Attachment of window-shades to rods which are used with their free ends .....	286,191	Oct. 9	506	139	25	104
Flott, George W., and J. Overacker, Danforth, Ill. Corn-planter check-rower .....	289,906	Dec. 11	671	187	25	1011
Flower, James, Detroit, Mich. Pump-valve .....	276,170	Apr. 24	1673	462 463	23	1537
Flower, Richard C. (See Willis, Henry T., assignor.) .....						
Flowers, William J., Rondo, Mo. Cultivator .....	284,403	Sept. 4	209	84	24	954
Floyd, Hallock, assignor of one-half to G. W. Champ, Dublin, Ind. Saw-buck .....	274,304	Mar. 20	1363	374	23	1024
Floyd, Hallock, assignor to Dublin Agricultural Company, Dublin, Ind. Feed-cutter .....	288,170	Nov. 6	464	129	25	588
Fluhart, Zacheus F. (See Sealamer, John, assignor.) .....						
Flummerfelt, Daniel A., Delaware Station, N. J. Hand-planter .....	273,977	Mar. 13	942	259	23	1003
Flynn, George F., Pantego, N. C. Double barrow .....	275,374	Apr. 10	666	178	23	1348
Flynn, Robert D., Danville, Va. Crate for transportation of window and plate glass .....	271,827	Feb. 6	293	80	23	492
Flynn, William R., Bordentown, N. J. Combined sewing-machine cover and chair .....	278,117	May 22	1954	535	23	1982
Flynn, William V., assignor of one-half to O. C. King, Morristown, Tenn. Lifting-jack and spike and stump puller .....	277,894	May 22	1690	461	23	1936
Foakes, Edward, assignor to G. Hopkins, Cardiff, England. Car-brake .....	273,053	Feb. 27	1860	522 523	23	787
Fobes, Anna P., Syracuse, N. Y. Invalid-bed .....	270,046	Jan. 2	257	74	23	52
Fockler, Charles. (See Hopkins and Fockler.) .....						
Foerster, Emanuel, New York, N. Y. Insertible diamond saw-tooth .....	273,054	Feb. 27	1862	523	23	788
Foerster, Emanuel, New York, N. Y. Inserting diamonds in steel saw-teeth, bits, &c. ....	279,369	June 12	958	266	23	2295
Foerster, Friedrich W., Burlington, Iowa. Reversible plow .....	283,387	Aug. 21	1113	314 315	24	713
Fogarty, Thomas B., Brooklyn, N. Y. Process of and apparatus for making ammonia .....	288,323	Nov. 13	663	183 184	25	631
Fogarty, Thomas B., Brooklyn, N. Y. Process of and apparatus for manufacturing ammonia .....	288,324	Nov. 13	668	184	25	631
Fogg, Charles F., <i>et al.</i> (See Clark, Albert M., assignor.) .....						
Fogg, George S. (See Hall and Fogg.) .....						
Fogg, Leonard C., assignor of one third to W. H. H. Hinds, Kennebunkport, Me. Feathering paddle-wheel .....	279,558	June 19	1189	329	23	2340
Fogle, K. Bruce. (See Benson and Fogle.) .....						
Foglesong, Washington, Dayton, Ohio. Collar-stuffing machine .....	275,624	Apr. 10	994	269	23	1404
Foglesong, Washington, Dayton, Ohio. Machine for blocking horse-collars .....	283,878	Aug. 28	1703	420	24	832
Folant, Jacob, assignor of one-half to J. A. Noble, Rolling Prairie, Ind. Vehicle-axle .....	288,563	Nov. 13	972	267 268	25	685
Foldberg, Thomas. (See Black, David F., assignor.) .....						
Foley, James, Brooklyn, N. Y. Cistern attachment for water-closets .....	282,876	Aug. 7	482	135	24	585
Foley, James, assignor to F. Adee, Brooklyn, N. Y. Water-closet .....	272,539	Feb. 20	1202	335	23	665
Foley, Patrick, assignor to F. Phinney, Boston, and W. A. Frost, Cambridgeport, Mass. Shoe .....	282,184	July 31	2350	647	24	429
Foley, William T., Southington, Conn. Chain .....	274,752	Mar. 27	1940	539	23	1192
Folk, Moses, <i>et al.</i> (See Hill, James F., assignor.) .....						
Follansbee, George S., Charlestown, Mass. Drop-wire for warping-machines .....	278,327	May 29	2255	618	23	2042
Follansbee, George S., Charlestown, Mass. Mechanical movement .....	283,591	Aug. 21	1354	378	24	757
Follett, Charles H. (See Dowling, Robert H., assignor.) .....						
Follett, Edward P., Rochester, N. Y. Sheet-metal can .....	277,255	May 8	929	249	23	1792
Folmer, John, assignor of one-half to J. M. Davis, Pomeroy, Ohio. Corn planter and drill combined .....	289,342	Nov. 27	1930	536	25	872
Folmer, John F., Philadelphia, Pa. Gland for surface-condenser tubes .....	277,557	May 15	1295	347	23	1860
Folmer, John F., Philadelphia, Pa. Screw-propeller .....	283,592	Aug. 21	1355	378	24	757
Folmer, John J., and C. E. Bradley, San José, Cal. Two-wheeled vehicle .....	284,198	Sept. 4	53	15	24	913
Folsom, Andrew, Warren, assignor to himself and W. D. Hilton, Providence, R. I. Machine for sawing stone .....	274,926	Apr. 3	50	13	23	1234
Folsom, J. Augustus, Boston, Mass. Thill-lug .....	269,843	Jan. 2	30	10	23	8
Folsom, John S. (See Folsom, Nehemiah T., assignor.) .....						
Folsom, Nehemiah T., assignor to J. S. Folsom, Boston, Mass. Dust-pan .....	276,531	Apr. 24	2131	593	23	1615

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Foltz, Moses, <i>et al.</i> (See Ganss, Henry, assignor.)						
Fonda, John, Battle Creek, Mich. Switch-block for railways	287,920	Nov. 6	165	47	25	536
Fontayne, Charles, Jersey City, N. J. Magic lantern	273,055	Feb. 27	1863	523	23	785
Fontneau, Frank. (See Simms and Cody, assignors.)						
Fontneau, Frank, North Attleborough, assignor to J. Etzensperger, Attleborough, Mass. Ornamental chain	281,988	July 24	2077	570	24	381
Foot, Abram L., Fayette, Iowa. Stove grate	286,411	Oct. 9	795	215	25	155
Foot, Edward B., Jr., New York, N. Y. Wonder-camera	273,500	Mar. 6	328	69	23	890
Foot, Edward H., Somerville, Mass. Automatic book-mark	284,404	Sept. 4	300	84	24	954
Foot, Edward N., Northampton, Mass. Metallic button	274,582	Mar. 27	1746	464	23	1156
Foot, Emerson, <i>et al.</i> (See Frishmuth, William, assignor.)						
Foot, George F., Stamford, Conn. Process of and apparatus for preserving food	285,741	Sept. 25	1940	549	24	1262
Foot, J. Howard. (See Bornhardt, Louis, assignor.)						
Foot, J. Howard. (See Tyler, Aaron P., assignor.)						
Foot, James H., Cincinnati, Ohio. Thill-coupling	277,416	May 8	1112	299	23	1824
Foot, Theodore M., Brooklyn, N. Y. Perforator	270,213	Jan. 9	461	134 135 135	23	101
Foot, Theodore M., Brooklyn, N. Y. Perforator for automatic telegraphs	270,774	Jan. 16	1174	336 337 337	23	244
Foot, Theodore M., New York, N. Y. Telegraphy	270,775	Jan. 16	1178	337 338 450	23	245
Forbes, Isaac N., Lawrence County, Dak. Ter. Rotary engine	274,475	Mar. 27	1587	437 438 438	23	1131
Forbes, Isaac N., Lawrence County, Dak. Ter. Rotary engine	274,476	Mar. 27	1594	438 439 439	23	1132
Forbes, Isaac N., Lawrence County, Dak. Ter. Rotary engine	274,477	Mar. 27	1596	440 441 441	23	1132
Forbes, Isaac N., Lawrence County, Dak. Ter. Rotary engine	274,478	Mar. 27	1600	441 442 442	23	1133
Forbes, Isaac N., Lawrence County, Dak. Ter. Rotary engine	274,479	Mar. 27	1607	443 444 445	23	1133
Forbes, Isaac N., Lawrence County, Dak. Ter. Rotary-engine locomotive	274,480	Mar. 27	1610	446 447 448 449	23	1134
Forbes, James W., Cincinnati, Ohio. Manufacture of the extract of malt	288,702	Nov. 20	1152		25	722
Forbes, John, and H. M. Williston, Halifax, Nova Scotia, Canada. Seal-lock	273,267	Mar. 6	28	9	23	839
Forbes, William D., assignor of one-half to R. P. Curtis, Bridgeport, Conn. Screw-threading machine	270,407	Jan. 9	702	207 208	23	146
Forbes, William D., assignor of one-half to R. P. Curtis, Bridgeport, Conn. Screw-threading machine	270,408	Jan. 9	703	208	23	147
Forbes, William D., assignor of one-half to R. P. Curtis, Bridgeport, Conn. Screw-threading machine	270,409	Jan. 9	704	208	23	147
Forbes, William D., assignor of one-half to R. P. Curtis, Bridgeport, Conn. Ratchet-wrench	277,256	May 8	930	249	23	1792
Forbes, William H. (See Osborne, John W., assignor.)						
Forbis, Harbert K., Columbus, Ohio. Protector for the heels of boots or shoes	279,559	June 19	1190	329	23	2340
Force, Douglas S., Kingsville, assignor to H. A. Eastman, Ashtabula, Ohio. Machine for making dowel-pins	271,053	Jan. 23	1514	436	23	309
Force, Joseph M., <i>et al.</i> (See Malick, Wesley, assignor.)						
Ford, Alvin, assignor of one-half to C. B. Coventry, Chicago, Ill. Steam-boiler	272,225	Feb. 13	796	221	23	590
Ford, Charles D., Chicago, Ill. Sleeve-supporter	280,167	June 26	1903	576	23	2472
Ford, Charles M., Bellevue, Ohio. Windmill	272,226	Feb. 13	797	222	23	590
Ford, Clayton W., Findlay, Ohio. Truck	277,699	May 15	1454	392	23	1888
Ford, Clayton W., Findlay, Ohio. Truck	281,481	July 17	1435	392	24	264
Ford, Edward L., Lyons, N. Y. Lining for iron and steel furnaces	279,089	June 5	586		23	2323
Ford, Franklin D., assignor of one-half to J. A. Miller, Providence, R. I. Button-fastener	279,560	June 19	1191	330	23	2140
Ford, George A., assignor to Cleveland Block Company, Cleveland, Ohio. Snatch-block	271,620	Feb. 6	44	11	23	448
Ford, George B. (See Smith, James C., assignor.)						
Ford, George T. (See Eberhard, William, assignor.)						
Ford, J. B. (See Philips, Ferdinand, assignor.)						
Ford, James R., assignor of one-half to S. Q. Ford, Buena Vista, Miss. Motor	281,858	July 24	1921	525	24	353
Ford, John, Portneuf, Portneuf county, Quebec, Canada. Nut-lock	275,898	Apr. 17	1345	370	23	1472
Ford, John C., Pittsburg, assignor to T. B. Kerr, Allegheny, Pa. Wire-fence	287,372	Oct. 23	2014	548	25	384
Ford, John H., Toronto, Ontario, Canada. Fire-escape	285,250	Sept. 18	1340	377	24	1149
Ford, Johnson & Co. (See Vieman, Christian, assignor.)						
Ford, Samuel A., Pittsburg, Pa. Analyzing pig-iron from blast-furnaces	231,044	July 10	869		24	161
Ford, Samuel A., Pittsburg, Pa. Analyzing pig-iron from blast-furnaces. (Reissue.)	10,295	Oct. 23	2050		25	391
Ford, Stephen Q. (See Ford, James R., assignor.)						
Ford, Thomas. (See Bardo and Ford.)						
Ford, Walter J., Concord, Tenn. Automatic air-brake for railway-cars. (Reissue.)	10,298	Mar. 27	2109	586 587	23	1220
Ford, William C., Brooklyn, N. Y. Furnace for steam-boilers, &c.	288,418	Nov. 13	799	217	25	655
Forder, Milton, and T. H. Pendergast, Dassel, Minn. Grain-separator	284,405	Sept. 4	301	84	24	954
Fordham, Henry F., Greenport, N. Y. Ice-machine can	278,527	May 29	2504	664	23	2086
Fordham, Sidney E. (See Tetamore and Fordham.)						
Ford, John A., Bay City, Mich. Pillow-sham holder	282,185	July 31	2350	647	24	429
Foreman, William E., Pierrepont Manor, N. Y. Barrel-adjuster	272,227	Feb. 13	797	222	23	590
Forgie, John, <i>et al.</i> (See Erlanger, Charles, assignor.)						
Forman, William S., <i>et al.</i> (See Runk, Jacob L., assignor.)						
Forney, Adam R., and J. L. Stoever, Annville, Pa. Chain-pump bucket	280,597	July 3	312	87	24	56
Forney, J. Wirt. (See Eichelberger, Abdul W., assignor.)						
Forney, Joseph, Canfield, Ohio. Combined gate latch and hinge	273,501	Mar. 6	329	69	23	890
Forrester, Isaac N., Camden, N. J. Swing	283,388	Aug. 21	1114	315	24	713
Forrester, Isaac N., Camden, N. J., assignor of one-fourth to B. M. Keller, Philadelphia, Pa. Clutch	283,993	Aug. 28	1843	520 13 13	24	858
Forrester, Samuel, Allegheny, Pa. Station-indicator	274,927	Apr. 3	51	14 15	23	1234
Forrester, Samuel, Allegheny, Pa. Device for operating station-indicators	290,562	Dec. 18	1508	416 417	25	1167



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Forsaith & Co., S. C., <i>et al.</i> (See Shedd, William B., assignor.)						
Forsbag, George, Amite City, La. Cotton-gin	277,417	May 8	1113	299	23	1824
Forshee, William S., <i>et al.</i> (See Hey, James H., assignor.)						
Forsman, Calvin J., Columbus, Ohio. Axle-bearing for vehicles	270,214	Jan. 9	464	135	23	101
Forster, Albert G., New York, N. Y. Child's swing	275,899	Apr. 17	1245	370	23	1472
Forster, Benjamin J., Glen William, Ontario, Canada. Atmospheric-air motor	274,305	Mar. 20	1364	374	23	1084
Forster, Ferdinand E., New York, N. Y. Device for indicating shoal water	282,620	Aug. 7	174	52	24	531
Forster, Ferdinand E., New York, N. Y. Thread-mosaic	284,406	Sept. 4	301	85	24	955
Forster, Newton L., Trafalgar, Ontario, Canada. Apparatus for utilizing the ebb and flow of the tide	285,251	Sept. 18	1341	377	24	1149
Forstner, Benjamin, Salem, assignor of one-half to A. C. Gibbs, Portland, Oreg. Spoon boring-bit	280,026	June 26	1751	492	23	2444
Forsyth, Paul T., Memphis, Tenn. Fire-escape	285,606	Sept. 25	1768	501	24	1233
Forsyth, Robert, Chicago, Ill. Metallurgical plant	276,384	Apr. 24	1950	{ 539 540 }	{ 23 23 }	{ 1584 1584 }
Forsyth, William J., Leesburg, Va. Washing-machine	279,734	June 19	1390	388	23	2374
Fort, James V., Philadelphia, Pa. Shutter bower and fastener	287,816	Nov. 6	32	10	25	513
Fortson, Charles J., Washington, Ga. Car-coupling	287,270	Oct. 23	1886	516	25	361
Foschimbaur, Joseph, Chicago, Ill. Bushing for loose pulleys	277,257	May 8	931	250	23	1792
Fosdick, Frederick, Fitchburg, Mass., assignor to Fitchburg Steam Engine Company. Steam-engine valve	279,484	June 12	1094	302	23	2316
Fosdick, Jesse T., Salamanca, N. Y., assignor to C. W. Archer, Ludlow, Ky. Car-replacer	287,528	Oct. 30	2208	599	25	430
Foskett, George W., Winchendon, Mass. Machine for turning round tenons	278,118	May 22	1955	{ 535 536 }	{ 23 23 }	{ 1982 1982 }
Foss, Eli H., Campello, Mass. Fire-kindler	274,184	Mar. 20	1206	332	23	1057
Foss, Lewis T., Boston, Mass. Artificial tooth	275,625	Apr. 10	996	269	23	1404
Foss, Lewis T., Boston, Mass. Artificial tooth	275,626	Apr. 10	997	269	23	1404
Foss, Newman A., Gold Run, Mont. Ter. Iron shutter	270,047	Jan. 2	258	74	23	53
Foster, Abraham G. W., Newnan, Ga. Two-wheeled vehicle	279,931	June 26	1631	457	23	2423
Foster, Charles A., Elkhart, Ind. Two-wheeled vehicle	290,563	Dec. 18	1517	417	25	1168
Foster, Charles D., Philadelphia, Pa. Umbrella for children's carriages	288,703	Nov. 20	1153	317	25	722
Foster, Charles W., (See Salisbury and Foster.)						
Foster, Charles W., New Haven, Conn. Garment-clasp	277,700	May 15	1455	393	23	1888
Foster, Charles W., New Haven, Conn. Corset-clasp	284,730	Sept. 11	707	198	24	1030
Foster, Charles W., and W. W. Dudley, New Haven, Conn. Indian club	275,687	Apr. 10	998	270	23	1404
Foster, Dan P., Waltham, Mass. Pipe or nut wrench	282,298	July 31	2487	653	24	454
Foster, Dan P., Waltham, Mass. Pipe-tongs	286,600	Oct. 16	1032	279	25	204
Foster, Edwin A., assignor to J. Estey & Co., Brattleborough, Vt. Reed-organ	289,638	Dec. 4	330	92	25	946
Foster, Gay W., New York, N. Y. Electro-magnetic engine	277,475	May 15	1191	330	23	1844
Foster Hardware Company. (See Jones, Augustus H., assignor.)						
Foster Hardware Company. (See Miller and Jones, assignors.)						
Foster, Hickman E., assignor of one-half to W. H. Acuff and J. M. Wiswell, Decatur, Ill. Detachable hook	287,115	Oct. 23	1693	464	25	327
Foster, James D., and V. C. Harris, Huntsville, Ala. Space grain-drill and cotton-planter	270,048	Jan. 2	258	75	23	53
Foster, Job C., St. John, Cal. Stock-car	271,695	Feb. 6	133	36, 37	23	463
Foster, John F., San Francisco, Cal. Pencil-clasp	273,268	Mar. 6	29	9	23	839
Foster, John H., (See Atkinson, William B., assignor.)						
Foster, John P. C., New Haven, Conn., assignor of one-half to N. A. Thompson, Boston, Mass. Car	276,017	Apr. 17	1479	408	23	1496
Foster, John S., (See Murphy, Patrick, assignor.)						
Foster, John T., Arlington, N. J., assignor to H. F. Sise, New York, N. Y. Chopping-knife	288,044	Nov. 6	321	90	25	562
Foster, Merriam & Co. (See Merriman, Julius E., assignor.)						
Foster, Oscar S. and W. S. Utica, N. Y. Machine for making spiral springs	280,923	July 10	721	202	24	133
Foster, Samuel L., Philadelphia, Pa. Composite roofing	270,943	Jan. 23	1383	400	23	288
Foster, Stephen E., Minneapolis, Minn. Vehicle-reach coupling	273,056	Feb. 27	1864	523	23	788
Foster, Theodore W., Providence, R. I. Locket	270,296	Jan. 9	556	164	23	118
Foster, Theodore W., Providence, R. I. Locket	273,057	Feb. 27	1864	524	23	788
Foster, Timothy H., Danbury, Conn. Fire-escape	285,806	Oct. 2	29	10	25	7
Foster, Walter K., Stoneham, Mass. Pencil-sharpener	280,564	Dec. 18	1517	417	25	1169
Foster, William F., New York, N. Y. Lacing-hook for gloves	275,628	Apr. 10	998	270	23	1404
Foster, William F., New York, N. Y. Lacing-hook for gloves	276,573	May 1	38	11	23	1634
Foster, William F., New York, N. Y. Lacing gloves	277,558	May 15	1294	348	23	1860
Foster, William F., New York, N. Y. Lacing gloves	277,559	May 15	1295	348	23	1860
Foster, William G., assignor of one-half to L. E. Fitts, Chicago, Ill. Pillow-sham holder	276,574	May 1	39	11	23	1634
Foster, William S., (See Foster, Oscar S. and W. S.)						
Foster, William S., Richford, Vt. Door-bell	279,370	June 12	959	266	23	2295
Foster, William S., Richford, Vt. Gong-bell	280,924	July 10	724	203	24	134
Fotens, John H., Albany, N. Y. Device for marking the location of buttons for shoes	279,735	June 19	1391	388	23	2375
Fongeres, Louis H., and G. W. Blair, Wabash, Ind. Horse-detacher	278,928	June 5	388	106	23	2189
Foulon, Peter J., New York, N. Y. Argand-lamp burner	283,879	Aug. 28	1704	480	24	832
Foulsham, Robert, assignor of one-half to R. J. Ela, Boston, Mass. Ventilator	288,564	Nov. 13	973	268	25	685
Fountain, Vincent, Stapleton, N. Y. Pin-package	271,828	Feb. 6	294	80	23	493
Fonshee, Charles W., (See Wailey, Charles W., assignor.)						
Fonts, Clarence L., San Francisco, Cal. Pump	289,079	Nov. 27	1617	448	25	813
Fonts, M. M., <i>et al.</i> (See Wood, John M., assignor.)						
Fowler Anthony C., Brooklyn, N. Y. Revolving table-top	271,054	Jan. 23	1515	436	23	309
Fowler, Arthur H., Newark, Ohio. Portable base-burning boiler	271,621	Feb. 6	46	11, 12	23	449
Fowler Brothers. (See Holden, Warren, assignor.)						
Fowler, Charles A., New York, N. Y. Gem-setting for jewelry	274,583	Mar. 27	1747	484	23	1157
Fowler, Charles H., Boston, Mass. Speed-indicator	282,067	July 31	2181	599	24	404
Fowler, Charles S., Brooklyn, and L. A. Rockwell, New York, N. Y. Cracker-machine	288,989	Nov. 27	1503	416	25	794
Fowler, Edwin P., Brooklyn, N. Y. Spirally-coiled wire spring	283,880	Aug. 28	1705	481	24	832
Fowler, George H., Taughanock Falls, N. Y. Sulky-plow	277,258	May 8	932	250	23	1792
Fowler, Herbert E., New Haven, Conn. Brush	286,804	Oct. 16	1288	349	25	248
Fowler, Herbert E., assignor to Fowler Plating Company, New Haven, Conn. Making buckle-frames	276,797	May 1	344	92	23	1686
Fowler, Hervey W., Chicago, Ill. Spike	272,676	Feb. 20	1377	387	23	696
Fowler, Hervey W., Chicago, Ill. Rail-spike	279,736	June 19	1392	388	23	2375
Fowler, John W., and D. F. Lewis, Brooklyn, N. Y. Fare register and recorder	271,976	Feb. 6	474	129	23	523
Fowler, John W., and D. F. Lewis, Brooklyn, N. Y. Fare-register	271,977	Feb. 6	478	130	23	524
Fowler, John W., and D. F. Lewis, Brooklyn, N. Y. Fare-register	273,675	Mar. 6	559	{ 148 149 }	{ 23 23 }	{ 929 929 }
Fowler, John W., and D. F. Lewis, Brooklyn, N. Y. Passenger-register	280,925	July 10	724	203	24	134

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Fowler, Joinville F., Alliance, Ohio. Dash-board for vehicles .....	282,511	Aug. 7	42	12	24	507
Fowler, Joseph. (See Arthur, Lee Roy, assignor.)						
Fowler, Joseph A. (See Gregg, William, assignor.)						
Fowler, Joseph C., Galveston, assignor of one-half to S. Taliaferro, Houston, Tex. Car-coupling .....	277,701	May 15	1456	393	23	1888
Fowler, Joseph W. (See Youngman, Charles A., assignor.)						
Fowler, Josiah, St. John, New Brunswick, Canada. Machine for bending springs .....	276,678	May 1	186	48	23	1656
Fowler, Leven H. (See Wright, Fowler, and Shaw.)						
Fowler, Nathaniel C., Boston, Mass., assignor, by mesne assignments, to Indestructible Safe and Fire Proof Company, of West Virginia. Fire-proof compound and sheet .....	288,935	Nov. 20	1433	.....	25	774
Fowler Plating Company. (See Fowler, Herbert E., assignor.)						
Fowler, T. Walter, assignor of one-half to D. W. Glassie, Washington, D. C. Fare-box .....	285,742	Sept. 25	1942	550	24	1363
Fowler, Thaddeus, Seymour, Conn. Spoke-socket .....	286,192	Oct. 9	506	139	25	104
Fowler, William M., Brooklyn, N. Y. Pail, tub, keg, barrel, &c .....	277,560	May 15	1296	348	23	1860
Fowler, William R., Philadelphia, Pa. Mechanical toy hoop .....	289,523	Dec. 4	189	53	25	919
Fowler, William R., assignor, by mesne assignments, to L. J. Myers, Philadelphia, Pa. Endless-belt conveyer .....	274,306	Mar. 20	1366	{ 374 375 }	23	1084
Fowler, William R., Philadelphia, Pa., assignor of one-half to C. L. Perkins, New York, N. Y. Toy .....	285,354	Sept. 18	1459	411	24	1170
Fowler, Willie H., East Hartford, Conn. Vehicle-axle .....	287,921	Nov. 6	166	48	25	536
Fox, Alfred D., New York, N. Y. Flexible chute used in loading and unloading apparatus .....	286,193	Oct. 9	507	140	25	104
Fox, Alfred D., New York, N. Y. Dredging and excavating apparatus .....	286,691	Oct. 16	1152	310	25	224
Fox, Alpheus, Rock Falls, Ill. Corn-planter .....	274,928	Apr. 3	56	15	23	1235
Fox, Amos T. and D. T., Mount Pleasant, Pa. Music-leaf turner .....	279,737	June 19	1393	389	23	2175
Fox, Benjamin F., Philadelphia, Pa. Window-shade roller .....	280,808	July 10	588	164	24	110
Fox, Charles H., Winnebago City, Minn. Hay-loader .....	271,055	Jan. 23	1516	437	23	309
Fox, Daniel T. (See Fox, Amos T. and D. T.)						
Fox, Edward, assignor to P. Reilly, Brooklyn, N. Y. Furnace-door .....	286,692	Oct. 16	1153	{ 310 311 }	25	224
Fox, Edward, Brooklyn, N. Y., assignor to himself and A. Albright, Newark, N. J. Vehicle propelled by electricity .....	281,859	July 24	1922	525	24	354
Fox, George H., Boston, Mass. Fore-end for breech-loading fire-arms .....	278,423	May 29	2379	649	23	2064
Fox, George H., Boston, Mass. Extractor for fire-arms .....	278,424	May 29	2380	{ 649 650 }	23	2064
Fox, George H., Boston, Mass. Making metal tubes .....	285,025	Sept. 18	1076	{ 300 301 }	24	1103
Fox, James S., Woodstock, Vt. Iron fence-post .....	269,244	Jan. 2	31	10	23	8
Fox, James S., Woodstock, Vt. Barbed-wire fastening for iron fence-posts .....	269,245	Jan. 2	32	10	23	8
Fox, Patrick, administrator. (See Jones, Oscar T.)						
Fox, Perley E., Marlow, N. H. Sap-spout .....	283,593	Aug. 21	1356	379	24	758
Fox, Samuel, Toledo, Ohio. Stuffing-box or packing-chamber .....	279,692	June 19	1283	356	21	2456
Fox, St. George L., London, England. Apparatus for measuring electric currents .....	279,371	June 12	959	266	23	2295
Fox, St. George L., London, England. Planté's secondary battery .....	285,807	Oct. 2	30	10	25	7
Fox, Willard H., New Haven, Conn. Spring-pin .....	270,410	Jan. 9	704	209	23	147
Fox, William T., Rochester, N. Y. Air-compressor .....	285,743	Sept. 25	1943	550	24	1263
Fox, William T., assignor to himself and S. Sloan, Rochester, N. Y. Air-pressure apparatus for forcing beer, &c .....	270,944	Jan. 23	1384	400	23	288
Fraikin, John J., Ottawa, Ill. Check-row corn-planter .....	270,049	Jan. 2	259	75	23	53
Fraikin, Edward T., assignor of one-half to M. W. Fraim, Lancaster, Pa. Padlock. (Reissue) .....	10,272	Jan. 16	1298	374	23	268
Fraim, Miller W. (See Fraim, Edward T., assignor.) (Reissue.)						
Fraim, Patrick W., St. Louis, Mo. Smoke-consuming furnace .....	285,887	Oct. 2	137	39	25	27
Fraim, Patrick W., St. Louis, Mo. Smoke-consuming furnace .....	289,343	Nov. 27	1931	536	25	872
Frakes, Thomas A., and M. G. Reinert, New Holland, Ill. Combined seed-drill and rolling cutter .....	272,228	Feb. 13	798	222	23	500
Fraleley, Alexander, assignor to himself and W. D. Malone, Grayson, Ky. Bee-hive .....	290,022	Dec. 11	810	228	25	1036
France, John T., et al. (See Corbin, Elijah H., assignor.)						
Francis, Allan E., Cleveland, Ohio. Machine for making wire clothes-pins .....	276,575	May 1	41	{ 11 12 13 }	23	1634
Francis, George W., Shelbyville, Ind. Flood gate .....	272,872	Feb. 27	1646	461	23	751
Francis, George W., Middletown, Conn. Manufacture of steel castings .....	276,018	Apr. 17	1482	.....	23	1497
Francisco, William H. (See Travis, William C., assignor.)						
Franciscus, William C., Lock Haven, Pa. Machine for coating pills with gelatine .....	276,385	Apr. 24	1952	540	23	1584
Franklyn, Charles G. (See Henderson, James, assignor.)						
Frank, Adolph, Charlottenburg, Prussia, Germany. Manufacturing porous silicious materials to be used as fire-bricks, filters, &c .....	287,817	Nov. 6	32	.....	25	513
Frank, Charles H., Amsterdam, N. Y. Electric fire-alarm and call-bell system .....	281,680	July 24	1684	459	24	312
Frank, D. P., et al. (See Hamblin, Ephraim, assignor.)						
Frank, David, Allentown, Pa. Railway-signal .....	278,231	May 22	2105	{ 579 580 }	23	2008
Frank, Ferdinand, Suisun, Cal. Drawer-pull .....	289,245	Nov. 27	1811	500	25	849
Frank, Himan, Detroit, Mich. Manufacture of glass .....	285,888	Oct. 2	138	39	25	27
Frankel, Alexander C., Newark, N. J. Fastening for satchels, &c .....	277,259	May 8	932	250	23	1793
Frankem, Isaac L., Indianapolis, Ind. Tile hearth or vestibule-floor .....	287,373	Oct. 23	2015	548	25	384
Frankenfield, Charles, Stroudsburg, Pa. Feed-pipe for water-tanks .....	280,809	July 10	589	165	24	111
Frankenfield, Robert F., et al. (See Deal, William M., assignor.)						
Franklin, Benjamin, assignor of one-half to F. E. Morse, Chicago, Ill. Calendar-clock .....	279,143	June 12	677	186	23	2249
Franklin, Edward A., Breunhan, Tex. Glove-holder .....	273,502	Mar. 6	331	89	23	890
Franklin, James C., Lena, Ore. Hasp-lock .....	283,335	Aug. 14	1039	292	24	694
Franklin, Joseph, et al. (See Sheup, James C., assignor.)						
Franks, Orrin G., et al. (See Clark, Levi S., assignor.)						
Frary, Elisha, East New York, N. Y. Combined shovel and ash-sifter .....	287,116	Oct. 23	1694	464	25	327
Frary, James D., Bridgeport, Conn. Scissors .....	275,629	Apr. 10	1001	270	23	1404
Frary, James D., Bridgeport, Conn. Cutlery-blade .....	275,630	Apr. 10	1001	271	23	1405
Frary, James D., Bridgeport, Conn. Manufacture of pocket-cutlery .....	290,023	Dec. 11	811	228	25	1036
Frasch, Herman, Cleveland, Ohio. Process of and apparatus for the fractional distillation of hydrocarbon oils .....	281,045	July 10	869	{ 241 242 }	24	161
Frasch, Herman, Cleveland, Ohio. Furnace for the manufacture of carbon .....	281,046	July 10	872	242	24	161
Frasch, Herman, Cleveland, Ohio. Process of and apparatus for making white lead .....	281,047	July 10	873	242	24	161
Frasch, Herman, Cleveland, Ohio. Making elements for thermal electric generators .....	286,288	Oct. 9	647	.....	25	129
Frasch, Herman, Cleveland, Ohio, assignor to American Chemical Company, West Bay City, Mich. Gaining or crystallizing salt, &c., and apparatus therefor .....	277,418	May 8	1114	299	23	1824



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Frasch, Herman, Cleveland, Ohio, assignor to American Chemical Company, West Bay City, Mich. Manufacture of salt and apparatus for use therein and for other purposes	277,419	May 8	1116	{ 299 300 }	{ 23 24 }	1824
Frasch, Herman, assignor to J. B. Meriam, Cleveland, Ohio. Electric carbon	281,048	July 10	874	243	24	162
Frascr, Alexander, Detroit, Mich. Shingle-machine	270,297	Jan. 9	557	164	23	119
Frascr, Andrew, <i>et al.</i> (See Cummings, Charles, assignor.)						
Frascr, Arthur C., Brooklyn, N. Y. Double-current relay or electro-magnet	266,917	Oct. 16	1433	394	25	273
Frasce, Daniel, assignor to Excelsior Hatch Company, New York, N. Y. Closing and controlling hoistway-covers	278,528	May 29	2505	684	23	2087
Frasce, David R., Chicago, Ill. Furnace-protector	284,830	Sept. 11	825	230	24	1050
Frasce, Edwin J., assignor of one-half to L. W. Boyer, San Francisco, Cal. Case or envelope for putting up cigarettes for the market	276,171	Apr. 24	1674	463	23	1537
Fraser, H. A., <i>et al.</i> (See Charboneau, Pascal B., assignor.)						
Fraser, Harvey, Nepeskun, Wis. Car-coupling	270,215	Jan. 9	465	135	23	102
Fraser, Peter, Hamilton, Ontario, Canada. Spring bed-bottom	283,223	Nov. 13	535	148	25	610
Fraser, Spencer L., Toledo, Ohio. Cover-fastening for packing-receptacles	272,873	Feb. 27	1647	461	23	751
Frash, Christian G., Brooklyn, N. Y. Apparatus for treating wine and other liquids	283,607	Sept. 25	1769	501	24	1233
Fray, John S., Bridgeport, Conn. Tool-handle	282,712	Aug. 7	296	84	24	551
Fraee, James H., and G. M. Culver, Rushville, Ind. Fire-escape	285,744	Sept. 25	1946	550	24	1263
Fraee, James H., and G. M. Culver, Rushville, Ind.; said Culver assignor to said Fraee. End-gate for wagons	281,989	July 24	2078	570	24	381
Frazier, James M., Portland, Oreg. Fish-trap	270,411	Jan. 9	705	209	23	147
Frazier, Elijah, and N. J. Edwards, Winchester, Ind. Post and well auger	284,956	Sept. 11	976	274	24	1078
Frazier, John, Searey, Ark. Steam steering apparatus	271,326	Jan. 30	1853	{ 537 538 }	{ 23 23 }	374
Frazier, John, Searey, Ark. Steam-engine-reversing mechanism	271,327	Jan. 30	1855	538	23	374
Frazier, John, Searey, Ark. Valve-gear for steam-engines	271,577	Jan. 30	2174	626	23	431
Frazier, Joseph W. (See Borchart, Hugo, assignor.)						
Frazier, Joseph W., assignor, by mesne assignments, to Spencer Arms Company, New York, N. Y. Magazine fire-arm	290,636	Dec. 18	1603	{ 440 441 485 486 487 488 }	{ 25 25 }	1183
Frazier, William J., New York, N. Y. Rotary engine	276,235	Apr. 24	1752	{ 486 487 488 }	{ 23 23 }	1551
Frederick, Adam J. (See Ohly, Charles H., assignor.)						
Fredericks, Christian A., Brooklyn, N. Y. Grinding-mill	282,068	July 31	2182	600	24	404
Fredrick, Henry, Newark, N. J. Rotary meter	271,233	Jan. 30	1735	502	23	354
Fredrick, Henry, Newark, N. J. Rotary meter	287,529	Oct. 30	2209	600	25	430
Fredericks, William, and A. Brown, New York, N. Y. Toy revolver	278,005	May 22	1825	498	23	1959
Free, Eli W., Baltimore, Md. Grain and fertilizer spreading attachment for drills	277,260	May 8	933	250	23	1793
Free, Dennis, Chariton, Iowa. Excavating or ditching device for attachment to cars	270,776	Jan. 16	1181	{ 338 339 }	{ 23 23 }	245
Freeland, Charles D., and J. A. Wharry, assignors of one-third to P. N. Staff, Terre Haute, Ind. Fence-post	280,302	June 26	2076	584	23	2502
Freeland, William, Brooklyn, N. Y. Awning	273,503	Mar. 6	331	90	23	891
Freeley, Ella M., New York, N. Y. Artificial Russian leather	285,475	Sept. 25	1610		24	1202
Freeman, Alva M., assignor of one-half to J. B. Overmeyer, Chicago, Ill. Suspenders	287,818	Nov. 6	34	10, 11	25	513
Freeman, Alva M., assignor of one-half to J. B. Overmeyer, Chicago, Ill. Suspender attachment	287,819	Nov. 6	36	11	25	513
Freeman, Arthur B., and M. F. Richardson, Lebanon, N. H. Discal calendar	290,763	Dec. 25	1776	491	25	1221
Freeman, Augustus M., Ocean Grove, N. J. Vibrating propeller	272,949	Feb. 27	1741	486	23	765
Freeman, Charles H. (See Dawson, Artemas L., assignor.)						
Freeman, Charles N., <i>et al.</i> (See Smith, John B., assignor.)						
Freeman, George W., Amherst, Nova Scotia, Canada. Adjustable holder for the sickle-bars of mowers and reapers	273,504	Mar. 6	332	90	23	891
Freeman, George W., assignor of one-half to R. B. Kyle, Gadsden, Ala. Portable hay press	281,990	July 24	2079	570	24	381
Freeman, Henry H., Milton, Ontario, Canada. Lock and latch	290,024	Dec. 11	812	228	25	1036
Freeman, Isaac S., Balsam Lake, Wis. Traction-engine	282,299	July 31	2488	683	24	454
Freeman, Joseph B., White Hart Lane, Tottenham, county of Middlesex, England. White pigment	286,918	Oct. 16	1435		25	273
Freeman, Ralza B., Blossburg, Pa. Leveling device for clocks	277,261	May 8	934	251	23	1793
Freeman & Sons, S. (See Barker, John L., assignor.)						
Freeman, Theodore A., Philadelphia, Pa. Hand-bag or satchel	281,482	July 17	1436	393	24	264
Freeman, Thomas F., Brooklyn, assignor to W. Koch, New York, N. Y. Air-compressor	290,764	Dec. 25	1777	491	25	1222
Freeman, Thomas R., <i>et al.</i> (See Allen, Samuel F., assignor.)						
Freeman, Thomas R., assignor of two-thirds to C. H. R. Biester and J. S. Toppan, Chicago, Ill. Lubricator	286,289	Oct. 9	648	172	25	128
Freeman, Thomas R., assignor to himself and J. B. Vandaworker, Sioux Falls, Dak. Ter. Machine for bending metal	288,936	Nov. 20	1434	394	25	774
Freeman, Walter F. (See Perrin, William J., assignor.)						
Freeman, Walter F., assignor of three-fourths to R. F. Shrewder, G. A. Cage, and B. F. Read, Mincola, Tex. Car-coupling	278,789	June 5	154	45	23	2148
Freeman, Walter K., Brooklyn, N. Y., assignor to W. F. Jobbins, East Orange, N. J. Armature for dynamo-electric machines or electric motors	270,777	Jan. 16	1182	{ 339 340 }	{ 23 23 }	245
Freeman, Walter K., Brooklyn, N. Y., assignor to W. F. Jobbins, East Orange, N. J. Secondary electric battery	270,778	Jan. 16	1183	341	23	246
Freeman, Warren P., New York, N. Y., assignor to W. F. Jobbins, East Orange, N. J. Dynamo-electric machine	270,779	Jan. 16	1184	341	23	246
Freeman, Warren P., New York, N. Y., assignor to W. F. Jobbins, East Orange, N. J. Dynamo-electric machine	270,780	Jan. 16	1184	{ 341 342 }	{ 23 23 }	246
Freeman, Warren P., New York, N. Y., assignor to W. F. Jobbins, East Orange, N. J. Armature for dynamo-electric machines	270,781	Jan. 16	1186	342	23	246
Freeman, Warren P., New York, N. Y., assignor to W. F. Jobbins, East Orange, N. J. Armature for dynamo-electric machines	281,049	July 10	875	243	24	162
Freeman, Warren P., assignor to W. F. Jobbins, Brooklyn, N. Y. Indicator for electric lighting systems	287,654	Oct. 30	2388	644	25	463
Freeman, Warren P., assignor to W. F. Jobbins, Brooklyn, N. Y. Electric-arc lamp	289,823	Dec. 11	562	{ 157 158 }	{ 25 25 }	991
Freeman, Warren P., assignor to W. F. Jobbins, Brooklyn, N. Y. Governor for dynamo-electric machines	290,025	Dec. 11	813	229	25	1037
Freeport Machine Company. (See Schofield, Silas C., assignor.)						
Freer, Charles S. (See Riley and Freer.)						
Freer, George N., Blue Earth City, Minn. Buckle	279,237	June 12	774	214	23	2265
Freer, Jacob S., <i>et al.</i> (See Hill, Frederick D., assignor.)						
Frees, Louis C. F., New York, N. Y. Necktie-fastener	282,976	Aug. 14	590	167	24	612

*Alphabetical list of patentees—Continued.*

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Freese, Francis J., Manchester, N. H., assignor to himself and W. E. Bass, Lawrence, Mass. Loom-shuttle .....	276,019	Apr. 17	1483	409	23	1497
Freid, Albert H. (See Freid, Amos J. and A. H.) .....						
Freid, Amos J. and A. H., Dow City, Iowa. Ironing-table .....	272,950	Feb. 27	1742	466	23	765
Fremont Cultivator Company. (See Stahl, Harlow C., assignor.) .....						
French, Alonzo, Philadelphia, Pa. Lamp-supporting device .....	290,026	Dec. 11	814	229	25	1037
French, Andrew, <i>et al.</i> (See Lash, John S., assignor.) .....						
French, Brooks, Fort Wayne, Ind. Recd-organ stop-action .....	279,372	June 12	960	267	23	2295
French, Charles H. (See Morgan and French.) .....						
French, Cicero R. C., Providence, R. I. Screw-tap .....	270,216	Jan. 9	466	136	23	102
French, Cicero R. C., Providence, R. I. Screw-tap .....	275,815	Apr. 17	1245	343	23	1454
French, Cicero R. C., Providence, R. I. Reamer .....	280,368	July 3	36	10	24	8
French, George B., New York, N. Y. Cigar-coloring machine .....	286,412	Oct. 9	796	215	25	155
French, George B., New York, N. Y. Cigar-coloring machine .....	286,413	Oct. 9	797	215	25	155
French, Hamline Q., Pelham Manor, and G. G. Shenton, Brooklyn, N. Y.; said Shenton assignor to said French. Double-acting pump .....	271,829	Feb. 6	295	81	23	493
French, James H., Willimantic, Conn. Fire-kindler .....	270,298	Jan. 9	558	164	23	119
French, James H., Elizabethtown, Ky. Bee-hive .....	281,483	July 17	1436	393	24	265
French, John H., Northampton, Mass. Clothes-rack .....	287,655	Oct. 30	2389	644	25	464
French, Josiah F., Philadelphia, Pa. Handle for files and other tools .....	285,987	Oct. 2	256	72	25	49
French, Josiah F., Philadelphia, Pa. Handle for files and other tools .....	285,988	Oct. 2	257	73	25	49
French, Josiah F., Philadelphia, Pa. File and other tools having tapering tangs .....	285,989	Oct. 2	258	73	25	49
French, Josiah F., Philadelphia, Pa. Tool-handle .....	285,990	Oct. 2	259	73	25	49
French, Josiah F., Philadelphia, Pa. Handle for files and other tools .....	285,991	Oct. 2	260	73	25	49
French, Josiah F., assignor of one-half to J. B. Smith Company, Philadelphia, Pa. File handle .....	281,626	July 17	1611	440	24	294
French, Josiah F., assignor of one-half to J. B. Smith Company, Philadelphia, Pa. Buck-saw .....	281,627	July 17	1612	441	24	294
French, Josiah F., assignor of one-half to J. Barton Smith Company, Philadelphia, Pa. Handle for files and other tools .....	288,045	Nov. 6	322	91	25	562
French, Josiah F., assignor of one-half to J. Barton Smith Company, Philadelphia, Pa. Handle for files and other tools .....	288,046	Nov. 6	323	91	25	562
French, Josiah F., assignor of one-half to J. Barton Smith Company, Philadelphia, Pa. Handle for files and other tools .....	288,047	Nov. 6	324	91	25	562
French, Lyman P., Boston, Mass. Furnace .....	287,656	Oct. 30	2390	645	25	464
French, Samuel E., New York, N. Y. Garment-stretcher .....	283,994	Aug. 28	1844	520	24	859
French, Sharon, Silver Lake, Kans. Cultivator .....	289,824	Dec. 11	563	156	25	992
French Spiral Spring Company. (See Hansell, Walter P., assignor.) .....						
French, William A. (See Eaton, George S., assignor.) .....						
French, William C., Boston, Mass. Sewing-machine .....	276,798	May 1	344	92	23	1686
French, Zachary T., Boston, Mass., assignor to Goodyear & McKay Sewing Machine Company, Hartford, Conn. Lasting-jack or holder for boots and shoes .....	274,091	Mar. 13	1083	298	23	1027
French, Zachary T., assignor to Goodyear & McKay Sewing Machine Company, Boston, Mass. Lasting-jack or holder for boots or shoes .....	281,258	July 17	1154	319	24	217
Frenier, Joseph. (See Scott and Frenier.) .....						
Frenier, Joseph, La Porte, Ind. Vehicle-wheel .....	285,401	Sept. 25	1524	429	24	1187
Frenier, Joseph, La Porte, Ind. Wheel .....	290,224	Dec. 18	1058	297	25	1090
Frentress, Henry N., assignor of two-thirds to C. W. Ware, East Dubuque, Ill. Freight-car door .....	288,565	Nov. 13	974	268	25	685
Freschl, Alfred, Detroit, Mich. Burial-casket .....	278,929	June 5	389	106	23	2189
Frese, Bernard, Chicago, Ill. Plaiting-machine .....	275,760	Apr. 10	1166	320	23	1433
Frese, Bernard, Chicago, Ill. Electric fire-alarm box .....	277,020	May 8	640	167	23	1741
Freundenberg, Max, Ems, Germany. Fume-arrester for chimney-flues .....	276,386	Apr. 24	1953	540	23	1584
Freund, George. (See Reed and Freund.) .....						
Freund, George, Durango, Colo. Cap for firing explosive charges .....	289,768	Dec. 4	490	136	25	971
Frew, Robert, Pittsburg, Pa. Seal-lock .....	274,929	Apr. 3	57	15	23	1235
Frey, Charles, Baltimore, Md. Siphon .....	273,058	Feb. 27	1865	524	23	768
Frey, Gustav. (See Flammger and Sobinski, assignors.) .....						
Frey, Gustav. (See Miller, John S., assignor.) .....						
Frey, John A., Colesville, Md. Can .....	279,738	June 19	1394	389	23	2375
Frey, Joseph J. B., New York, N. Y. Bowl for water-closets .....	275,900	Apr. 17	1346	370 371	23	1473
Frey, Philip R., Western Union, Wis. Car-brake .....	277,476	May 15	1193	320	23	1844
Freyre, Luis, Seville, Spain. Gas-check for breech-loading ordnance .....	270,299	Jan. 9	559	164	23	119
Frichette, Peter, Sheridan, Cal. Machine for straightening or bending rails .....	273,353	Mar. 6	150	42	23	859
Frick, Abraham O. (See Rider, Snyder, and Frick.) .....						
Frick, Abraham O. (See Snyder and Frick.) .....						
Frick, Abraham O. and W. H. Snyder, Waynesborough, Pa. Road-engine .....	273,978	Mar. 13	943	259	23	1003
Frick, Charles E., assignor to himself and C. D. Ficks, Cincinnati, Ohio. Guard for band-pulleys .....	272,677	Feb. 20	1377	387	23	696
Friebel, Richard, Leipsic-Rendnitz, assignor to E. Berger, Rendnik, near Leipsic, Germany. Engraving-machine .....	281,484	July 17	1437	393	24	265
Fried, Edward. (See Erwin, Thomas M., assignor.) .....						
Fried, Joseph, Chicago, Ill. Producing paper ornaments .....	286,693	Oct. 16	1155	311	25	225
Friedemann, August. (See Friedemann, Johann G., assignor.) .....						
Friedemann, Johann G., Waverly, assignor to A. Friedemann, Bremer County, Iowa. Harrow .....	280,303	June 26	2076	585	23	2502
Friedheim, David, New York, N. Y. Fire-escape .....	275,816	Apr. 17	1246	343	23	1454
Friedländer, Henry. (See Friedländer, Jacob and H.) .....						
Friedländer, Jacob and H., Memphis, Tenn. Weighing-scoop .....	273,979	Mar. 13	944	260	23	1003
Friedli, Albert, Berne, Switzerland. Frame for band-saws .....	286,919	Oct. 16	1435	394	25	273
Friedrichs, Ernest H., New York, N. Y. Apparatus for the application of paint or coloring material to artists' academy-boards .....	287,530	Oct. 30	2210	600	25	430
Friedrick, Alphonse, Brooklyn, N. Y. Lead sash-bar .....	271,696	Feb. 6	134	37	23	463
Friedrick, Alphonse, Brooklyn, N. Y. Building lead sash for glazing purposes .....	271,697	Feb. 6	134	37	23	463
Friedrick, Alphonse, Brooklyn, N. Y. Flexible soft-metal sash-bar .....	283,093	Aug. 14	737	207	24	638
Friedrick, Theodore, Ottawa, Ontario, Canada. Combined lock and latch .....	279,932	June 26	1631	458	23	2423
Friend, Augustus F., Gravesend, N. Y. Dredger for shell-fish .....	279,373	June 12	962	267	23	2295
Friend, Herrman, New York, N. Y. Straw braid .....	272,229	Feb. 13	799	222	23	590
Friend, Jesse L., assignor of one-half to U. A. Ager, Perrysburg, Ind. Brick and tile kiln .....	275,477	Apr. 10	807	218 219	23	1372
Fries, William L., Milton, Pa. Horse-collar fastener .....	290,673	Dec. 25	1651	455	25	1198
Frink, George S., <i>et al.</i> (See Bliss, Talmadge, assignor.) .....						
Frink, Herbert J., Chicopee, Mass. Paper calendar-roll .....	285,476	Sept. 25	1611	452	24	1203
Frink, Isaac P., New York, N. Y. Reflector for chandeliers, &c .....	274,930	Apr. 3	58	15, 16	23	1235



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Frink, John H., Detroit, Mich. Duplicate memorandum or sales slip .....	288,048	Nov. 6	325	91	25	563
Frisbee, Edward L., Jr., <i>et al.</i> (See Stever, Jeremiah, assignor.)						
Frisbie, Edward L., Jr. (See Clowes and Frisbie.)						
Frisbie, Henry R., Bridgeport, Conn. Valve .....	275,184	Apr. 3	391	107	23	1294
Frishmuth, William, Philadelphia, Pa., assignor to himself, G. R. Blanchard, and E. Foote, New York, N. Y. Extracting aluminium from corundum, &c. ....	282,621	Aug. 7	177	.....	24	531
Frishmuth, William, Philadelphia, Pa., assignor to himself, G. R. Blanchard, and E. Foote, New York, N. Y. Extracting aluminium from corundum, &c. ....	282,622	Aug. 7	178	.....	24	531
Fritts, Peter C., assignor of one-half to R. I. Grey, Eureka Springs, Ark. Breast-strap protector .....	284,546	Sept. 4	468	133	24	984
Fritz, Louis, Memphis, Tenn. Jacketed vessel .....	288,990	Nov. 27	1504	416	25	794
Frizell, Charles, Boston, Mass. Extension-ladder .....	281,681	July 24	1686	459	24	312
Frohn, Ernest, <i>et al.</i> (See Stürmer, August, assignor.)						
Fromm, William H., Elizabethport, N. J. Hydrant .....	270,782	Jan. 16	1186	342	23	247
Fronheiser, James J., Johnstown, Pa. Blast-furnace .....	282,512	Aug. 7	43	13	24	507
Fronheiser, James J., Johnstown, Pa. Preparing powdered or granulated ores for furnaces .....	287,117	Oct. 23	1694	.....	25	327
Frost, Abel H. (See Ames and Frost.)						
Frost & Co., George. (See Brown, F. Barton, assignor.)						
Frost, Dan H. (See Jasmagy and Frost.)						
Frost, Daniel, and H. Cartwright, Portland, Oreg. Reflecting-mirror attachment for locomotives .....	282,623	Aug. 7	179	52	24	531
Frost, Edward J. (See Lawrence and Frost.)						
Frost, Edward J., Philadelphia, Pa. Gas-engine .....	273,269	Mar. 6	29	9	23	839
Frost, Edward J., Philadelphia, Pa. Apparatus for producing illuminating gas or vapor .....	278,529	May 29	2508	685	23	2087
Frost, Edward J., Philadelphia, Pa. Device for automatically regulating quality of illuminating-vapor .....	282,069	July 31	2184	600	24	404
Frost, Edwin S., Watkins, N. Y. Grain-binder .....	280,461	July 3	159	43, 44	24	29
Frost, Francis S. (See Safford, Mark, assignor.)						
Frost, Francis S., Arlington, Mass. Easel .....	275,631	Apr. 10	1002	271	23	1405
Frost, Harry B., Paterson, N. J. Flier for spinning-frames .....	277,262	May 8	935	251	23	1793
Frost, Henry J., Jr., Wooster, Ohio. Shaft-loop .....	273,505	Mar. 6	333	90	23	891
Frost, Howard B., assignor to O. S. Judd and C. Blakeslee, New Britain, Conn. Sash-fastener .....	270,542	Jan. 9	880	255	23	182
Frost, Stiles, Boston, Mass. Staple .....	274,481	Mar. 27	1619	449	23	1135
Frost, Warren H., Worcester, Mass., assignor of one-half to S. E. Henderson, Cleveland, Ohio. Toy or musical instrument .....	270,543	Jan. 9	881	255	23	182
Frost, William A., <i>et al.</i> (See Foley, Patrick, assignor.)						
Fröthingham, Arthur, Scranton, Pa. Primer for blasting-cartridges .....	273,270	Mar. 6	31	10	23	840
Fruhling, William A., Jr., San José, Cal. Nasal respirator .....	270,655	Jan. 16	1027	295	23	217
Fry, George. (See Elkmann, Fry, and Eapout.)						
Fry, Henry R., Grant County, Ind. Map-case .....	273,059	Feb. 27	1866	524	23	788
Fry, Hugh B., Batesville, Ark. Cotton-cultivator .....	281,259	July 17	1155	319	24	217
Fry, Jacob R., Jr., Springfield, Ohio. Crank-coupling .....	290,565	Dec. 18	1518	418	25	1169
Fry, John, assignor of three-fourths to J. M. Romack, D. G. Glenn, and J. S. Clem, Mount Jackson, Va. Corn-harvester .....	290,627	Dec. 11	815	{ 229 } 230	25	1037
Fry, Phares W., Lancaster, Pa. Window-screen .....	278,006	May 22	1826	498	23	1959
Fryer, Ida J., <i>et al.</i> (See Fryer, Robert M., assignor.)						
Fryer, John O., Chelsea, Mass. Jacquard loom. (Reissue) .....	10,379	Sept. 11	1020	{ 286 } 287	24	1087
Fryer, Robert M., New York, N. Y. Engine .....	283,704	Aug. 21	1484	418	24	783
Fryer, Robert M., assignor to G. D. Leonard and I. J. Fryer, New York, N. Y. Screw-propeller .....	283,336	Aug. 14	1039	292	24	694
Fryer, Robert W. (See Butel, Alexander H., assignor.)						
Fuchs, Ernst, Chicago, Ill. Sifting apparatus .....	282,300	July 31	2489	683	24	454
Fuchs, Henry, St. Louis, Mo. Barb-wire machine .....	278,930	June 5	390	107	23	2190
Fudge, Enoch H., <i>et al.</i> (See Brennan, James R., assignor.)						
Fuessenich, William F., Torrington, Conn. Combined needle-clamp and thread-cutter for sewing-machines .....	284,124	Aug. 28	2030	565	24	889
Fulgham, Jesse P., assignor of one-half to Wayne Agricultural Company, Richmond, Ind. Fertilizer attachment for seeding-machines .....	271,622	Feb. 6	47	12, 13	23	449
Fuller, Abbott F. (See Shinn and Fuller.)						
Fuller, Arthur, <i>et al.</i> (See Bacon, Charles H., assignor.)						
Fuller, Charles E., <i>et al.</i> (See Fisher, William C., assignor.)						
Fuller, Charles E., <i>et al.</i> (See Parker, Theodore H., assignor.)						
Fuller, Charles L. (See Cowles, Milan, assignor.)						
Fuller, Claude V., assignor of one-fourth to F. H. Tinker, New York, N. Y. Table-caster. Fuller, Cornelius, assignor to Somerset Co-operative Foundry Company, Somerset, Mass. Cooking range or stove .....	280,304	June 26	2077	585	23	2502
Fuller, Eben E., Big Lake, assignor of one-half to G. Houghton, Minneapolis, Minn. Bal-ling-press .....	272,131	Feb. 13	686	187	23	570
Fuller Electrical Company. (See Wood, James J., assignor.)	288,937	Nov. 20	1435	395	25	774
Fuller, Eustis R. (See Seagrave and Fuller.)						
Fuller, Frank, <i>et al.</i> (See Fisher, William C., assignor.)						
Fuller, Frank, <i>et al.</i> (See Parker, Theodore H., assignor.)						
Fuller, Frank W., San Francisco, Cal. Automatic belt-shifter for elevators .....	290,674	Dec. 25	1652	455	25	1198
Fuller, George A. (See Perkins, George A., assignor.)						
Fuller, George H. (See Shaw, Albert C., assignor.)						
Fuller, George H., Pawtucket, R. I. Manufacture of jewelers' findings .....	286,601	Oct. 16	1033	279	25	204
Fuller, George P., New Richmond, Wis. Washing-machine .....	284,622	Sept. 11	566	160	24	1006
Fuller, George W., Norwich, Conn. Dynamo-electric machine .....	278,119	May 22	1957	{ 536 } 537	23	1983
Fuller, George W., Norwich, Conn. Dynamo-electric machine .....	278,120	May 22	1960	537	23	1983
Fuller, George W., Norwich, Conn. Dynamo-electric machine .....	278,121	May 22	1963	{ 538 } 539	23	1983
Fuller, George W., Norwich, Conn. Dynamo-electric machine .....	278,122	May 22	1967	{ 539 } 540	23	1984
Fuller, George W., Norwich, Conn. Dynamo-electric machine .....	286,414	Oct. 9	798	216	25	155
Fuller, George W., Norwich, Conn. Armature for dynamo-electric machines .....	286,415	Oct. 9	800	216	25	155
Fuller, George W., Norwich, Conn. Dynamo-electric machine .....	286,416	Oct. 9	801	216	25	156
Fuller, Hiram E., New York, assignor to E. A. Bramhall, Brooklyn, N. Y. Boring-bit .....	283,705	Aug. 21	1486	418	24	783
Fuller, Joseph F., and C. H. Knowlton, Lowell, Mass. Foot-power machine .....	274,185	Mar. 20	1206	332	23	1057
Fuller, L. Eugene, and J. H. Macauley, Chicago, Ill. Sheet-metal can .....	273,060	Feb. 27	1867	524	23	788
Fuller, Levi K., Brattleborough, Vt. Railway-recorder .....	272,230	Feb. 13	799	223	23	590

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Fuller, Levi K., assignor to Estey Organ Company, Brattleborough, Vt. Harmonic coupler for musical instruments	290,984	Dec. 25	2065	568	25	1269
Fuller, Lyssander A., Stoneham, Mass. Sled-propeller	282,302	July 31	2490	684	24	451
Fuller, Merritt B., Sanborn, N. Y. Combined hand corn-planter and fertilizer-distributor	270,581	Jan. 16	928	268	23	199
Fuller, Samuel S., and R. Salvadge, Stratford, Ontario, Canada. Automatic car-brake	286,127	Oct. 2	424	116	25	79
Fuller, Spencer H., Lewiston, Me. Watch-check	284,023	Sept. 11	568	160	24	1006
Fuller, Warren C., Yarmouth, Mass. Surge-reliever	272,874	Feb. 27	1649	461	23	751
Fuller, Willard M., New York, assignor to C. Pyle, Brooklyn, N. Y., and D. Eldridge, New Brunswick, N. J. Car-heater	274,753	Mar. 27	1941	540	23	1192
Fuller, Willard M., New York, assignor of one-half to F. S. Burr and J. B. Richmond, Brooklyn, N. Y. Pulverizing machinery for ores, &c	278,232	May 22	2107	580	23	2008
Fulmer, Edward, Mount Olive, Ala. Securing cultivator and harrow teeth	287,531	Oct. 30	2211	600	25	430
Fulton, Alfred, assignor of one-third to P. Peterson, Chicago, Ill. Car-coupling	277,837	May 15	1616	441	23	1917
Fulton, David, Hutchinson, Minn. Ditching-plow	275,375	Apr. 10	666	178	23	1342
Fulton, Harmon H. (See Olsen and Fulton.)						
Fulton, Harmon H., and O. R. Olsen, assignors to Indianapolis Machine and Bolt Works, Indianapolis, Ind. Pulley	278,425	May 29	2381	650	23	2064
Fulton, Harmon H., and O. R. Olsen, assignors to Indianapolis Machine and Bolt Works, Indianapolis, Indiana. Pulley	282,513	Aug. 7	44	13	24	508
Fulton, John M., assignor of two-thirds to J. H. McCahan and E. E. Richards, Roanoke, Ind. Stand for holding wrapping-paper and paper bags	289,825	Dec. 11	564	158	25	992
Fulton, Louis B., Pittsburg, Pa. Ejector and injector	280,733	July 3	477	135	24	85
Fulton, Louis B., Pittsburg, Pa. Ejector	281,050	July 10	876	244	24	162
Fulton, Louis B., Pittsburg, Pa. Gage-cock. (Reissue)	10,398	Oct. 30	2575	692	25	499
Fulwiler, James A., Lexington, Ill. Rag-joining knife	288,991	Nov. 27	1506	416	25	704
Fulwiler, James A., Lexington, Ill. Nut-lock	290,028	Dec. 11	816	230	25	1037
Funk, Carl A., et al. (See Weller, Wance, and Roesch, assignors.)						
Funk, Frank, Beverly, Ill. Agricultural boiler	286,805	Oct. 16	1289	349	25	249
Funk, Frank, Beverly, Ill. Wagon-bed lifting-jack	286,806	Oct. 16	1290	349	25	249
Funk, Frank, Beverly, Ill. Tank for watering stock	290,675	Dec. 25	1653	456	25	1198
Funk, Lewis S., Troy, Pa. Washing-machine	283,094	Aug. 14	738	207	24	639
Funk, Wilson R., Cleves, Ohio. Automatic uncoupler	286,920	Oct. 16	1436	394	25	273
Funk, Charles. (See Bergqvist, John, assignor.)						
Funkhouser, John S. (See Saunders and Funkhouser.)						
Furbee, Thomas J., Bishop Creek, Cal. Car-truck	287,374	Oct. 23	2015	548	25	384
Furbish, Isaiah M., Augusta, Me. Screw-driver	277,561	May 15	1297	348	23	1860
Furbish, Zachary T. (See Mallott and Furbish.)						
Furbush, James W., Lynn, Mass. Button-hole sewing-machine	276,387	Apr. 24	1953	541	23	1585
Furey, Cyrus R., assignor of one-half to J. H. Barnhart, Logansport, Ind. Breast-strap slide and hook	284,547	Sept. 4	469	133	24	984
Furlong, James E. (See Furlong, Simon E. and J. E.)						
Furlong, James M., Rochester, N. Y. Churn-power	276,799	May 1	346	92	23	1687
Furlong, Simon E. and J. E., Woburn, Mass. Mechanism for straightening and keeping straight hand knives and saws	284,957	Sept. 11	977	275	24	1078
Furman, Alouzo B., Strattonville, assignor to himself and J. E. Dean, Reynoldsville, Pa. Wagon-jack	274,584	Mar. 27	1747	485	23	1157
Furman, John A., Newark, N. J. Process of and apparatus for molding hollow articles from celluloid and other compounds of pyroxyline	282,451	July 31	2687	737	24	489
Furman, Oliver P., assignor of one-half to W. B. Taylor, Canisteo, N. Y. Shipping-package	274,754	Mar. 27	1942	540	23	1192
Furman, Samuel M., assignor of one-half to W. H. Lewis, Henderson, Ky. Surgical bandage	283,478	Aug. 21	1221	343	24	732
Furnace, Peter J., et al. (See Brunell, Mineheart, assignor.)						
Furnace, Victor A., et al. (See Brunell, Mineheart, assignor.)						
Furnas, Robert W., Indianapolis, Ind. Ice-cream freezer	280,734	July 3	479	135	24	85
Furness, George, and J. Robertshaw, Manchester, county of Lancaster, England. Curtain-roller	286,194	Oct. 9	509	140	25	104
Furney, Elliott E., assignor to G. B. Allen, St. Louis, Mo. Capstan	290,029	Dec. 11	817	230	25	1037
Furrer, Joseph, Toledo, Ohio. Artificial leg	277,562	May 15	1298	349	23	1860
Furst & Bradley Manufacturing Company. (See Bradley, Byron C., assignor.)						
Furst & Bradley Manufacturing Company. (See Hagne, Charles A., assignor.)						
Fuson, William T., assignor of one-half to A. Walliker, Griswold, Iowa. Attachment for beds	277,563	May 15	1299	349	23	1861
Fussell, Mordecai T., New York, N. Y. Non-heat-conducting envelope for ice-cream, &c	271,698	Feb. 6	135	37	23	463
Fussell, William L., Philadelphia, Pa. Umbrella and parasol	288,566	Nov. 13	975	268	25	686
Fusz, Paul A. (See Barrett, Robert, assignor.)						
Fye, Theodore H. (See Belknap and Fye.)						
Fyfe, Alexander, and T. Rawson, Paterson, N. J. Pump	285,402	Sept. 25	1525	429	24	1187
Gaar, Scott & Company. (See Campbell, Howard, assignor.)						
Gable, Frederic S., Glen Rock, Pa. Mechanism for converting motion	290,566	Dec. 18	1519	418	25	1169
Gabus, Emile H., Stryker, Ohio. Crosscut-saw	271,076	Jan. 23	1517	437	23	309
Gabus, Emile H., Stryker, Ohio. Saw	277,021	May 8	644	168	23	1742
Gactjo, John, Fort Wayne, Ind. Foot-railing for counters	285,403	Sept. 25	1526	430	24	1187
Gaffoy, John F. and G. W. Cook, New Haven, Conn. Rifle-sight	290,225	Dec. 18	1059	297	25	1090
Gage, Chapman E., assignor to himself and J. L. Knudtson, Whitehall, Wis. Grain-screen	287,657	Oct. 30	2393	645	25	465
Gage, Ira B., Dowagiac, Mich. Sheaf-carrier	282,303	July 31	2491	684	24	455
Gage, James E. (See Farrington, James M., assignor.)						
Gage, James L., assignor of one-half to N. Mears, Chicago, Ill. Wood-cutting machine	272,038	Feb. 13	564	152	23	550
Gage, John. (See Bridges, David A., assignor.)						
Gage, Morgan L., Vassar, Mich. Attachment for emptying tea-chests	280,168	June 26	1004	536	23	2472
Gage, Parker W., trustee. (See Tomlinson and Balch, assignors.)						
Gager, Oliver A., Brooklyn, N. Y. Oval or circular dish made from ceramic material or glass	275,033	Apr. 3	203	54	23	1260
Gaillard, E. Neilson, New York, N. Y. Speaking-tube	285,120	Sept. 18	1188	333	24	1122
Gaines, James P., Kuttawa, Ky. Car-coupling	270,412	Jan. 9	706	209	23	148
Gainford, Thomas. (See Plummer and Gainford.)						
Gairaud, Louis, Santa Clara, Cal. Tree-planter	283,594	Aug. 21	1357	379	24	758
Gairaud, Louis, Santa Clara, Cal. Land-marker	287,118	Oct. 23	1696	464	25	327
Galashan, William A. (See Gass and Galashan.)						
Galbraith, Archimedes, Amadore, Mich. Felly-tightener	270,413	Jan. 9	707	209	23	148
Galbraith, Archimedes, Amadore, Mich. Tire-tightener	281,425	July 17	1448	394	24	265
Gale, Curtis J., et al. (See Van Slyke, James M., assignor.)						
Gale, Horatio, Albion, Mich. Horse hay-rake	290,411	Dec. 18	1292	362	25	1131



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Galentine, Elias C., assignor of one-half to T. B. Lee, Bourbon, and D. L. Dickinson, Plymouth, Ind. Car-coupling	279,485	June 12	1095	302	23	2316
Galivan, David, and J. C. Manning, Buffalo, N. Y. Fire-escape	285,808	Oct. 2	31	11	25	8
Gallagher, Patrick, New York, N. Y. Machine for scrubbing floors	271,830	Feb. 6	296	81	23	493
Gallagher, John S., assignor to himself and M. C. Millar, Washington, D. C. Roller-skate	287,820	Nov. 6	36	11	25	514
Gallaher, Lorinda, Wheeling, W. Va. Hoop-skirt	277,263	May 8	925	251	23	1793
Gallaher, Lorinda, Wheeling, W. Va. Fruit-jar	278,530	May 29	2509	685	23	2087
Gallahue, Alpheus C., Rhinebeck, N. Y. Valve-gear for steam-engines	275,376	Apr. 10	668	178	23	1348
Galland, Benham, Gold Hill, Nev. Cabinet steam-bath	270,564	Jan. 9	906	261	23	156
Gallat, Thiebaut, Cincinnati, Ohio. Catch-basin	279,374	June 12	963	267	23	2296
Gallentine, Abraham D., Marion, Ind. Combined register and ventilator	282,977	Aug. 14	591	167	24	612
Galley, James G., Forest Gate, county of Essex, England. Furnace fire-bar	270,582	Jan. 16	929	269	23	199
Gallinant, Adolphe, Roslyn, N. Y. Car-buffer	278,328	May 29	2256	618	23	2042
Gallinant, Adolphe, Roslyn, N. Y. Regulator for controlling the descent of elevator-cars	287,922	Nov. 6	166	48	25	536
Gallis, Rudolph P., Hartford, Conn. Combined instrument for leveling, surveying, &c.	272,231	Feb. 13	801	223	23	591
Galloway, Charles J., and J. H. Beckwith, Manchester, county of Lancaster, England. Governor for steam-engines	289,246	Nov. 27	1812	501	25	849
Galloway, James W., Bolton, county of Lancaster, England. Forcing and mixing pump	275,632	Apr. 10	1003	271	23	1405
Galloway, John, New York, N. Y. Stenographic machine	288,419	Nov. 13	800	217	25	655
Gallup, John W., Denison, Tex. Manufacture of artificial stone	290,765	Dec. 25	1778	.....	25	1222
Gallup Novelty Works. (See Gallup and Churchill, assignors.)						
Gallup, William H., and L. Churchill, assignors to Gallup Novelty Works, Troy, N. Y. Shirt-waist	289,639	Dec. 4	331	92, 93	25	946
Gallup, William H., and L. Churchill, assignors to Gallup Novelty Works, Troy, N. Y. Shirt-waist	289,640	Dec. 4	333	93	25	946
Gally, Merritt, New York, N. Y. Mechanical musical instrument	279,933	June 26	1633	458 } 459 }	23	2493
Gally, Merritt, New York, N. Y. Mechanical musical instrument	282,877	Aug. 7	483	136	24	586
Gally, Merritt, New York, N. Y. Stop-movement for printing, embossing, and power presses	287,821	Nov. 6	38	12	25	514
Galny, Augustus, Galveston, Tex. Abdominal supporter	284,831	Sept. 11	826	230	24	1051
Galpen, Horace. (See Livermore, Edward, assignor.)						
Galster, Gabriel J. W., New York, N. Y. Apparatus for cutting forms from a layer or layers of fibrous or other material	288,049	Nov. 6	326	92	25	563
Galt, Thomas A., et al. (See Johnson, William H., assignor.)						
Galvin, John. (See Galvin, Thaddeus and J.)						
Galvin, John W., Portsmouth, Ohio. Mold for casting	284,407	Sept. 4	304	85	24	955
Galvin, Thaddeus, Detroit, Mich. Water-gaze	279,144	June 12	681	186	23	2249
Galvin, Thaddeus and J., Detroit, Mich. Valve	283,479	Aug. 21	1222	344	24	732
Galwey & Bainbridge. (See Sturgeon, Thomas, assignor.)						
Gamble, Henry E., assignor of one-half to O. H. Mann, Evanston, Ill. Thill-coupling	288,992	Nov. 27	1507	417	25	794
Gamble, John E., East Liverpool, Ohio. Brick-kiln	273,354	Mar. 6	152	42, 43	23	860
Gamble, William, et al. (See Aldrich, Wales, assignor.)						
Gamblee, Jeuleos, and J. F. Haring, Cresskill, assignors to themselves and J. H. Huyler, Tenafly, N. J. Car-axle	273,506	Mar. 6	334	90	23	891
Gamewell Fire Alarm Telegraph Company. (See Wood, Frank B., assignor.)						
Gameze, Sampson, Birmingham, county of Warwick, assignor to W. B. Robinson, Wheat Bridge Mills, New Brompton, England. Manufacture of fabrics for surgical and medical dressing	282,624	Aug. 7	180	.....	24	532
Gandolfo, Joseph, New York, N. Y. Apparatus for manufacturing bicarbonate of soda	279,145	June 12	682	187	23	2249
Gandy, Cornelius T., Bridgeton, N. J. Fifth-wheel plate	281,357	July 17	1274	354	24	238
Gandy, Felix T., Rubens, Kans. Harrow	284,832	Sept. 11	827	230	24	1051
Gandy, Lewis C., Humboldt, Nebr. Grading-machine	288,420	Nov. 13	802	218	25	655
Gandy, Manrice, Liverpool, county of Lancaster, England. Sewing-machine	272,625	Aug. 7	182	53	24	532
Gano, John A., Cincinnati, Ohio. Furnace for locomotive and other boilers	274,482	Mar. 27	1620	449	23	1135
Gano, John A., Cincinnati, Ohio. Furnace for locomotive and other boilers. (Reissue)	16,396	Oct. 23	2051	557	25	391
Gano, Nathan L., Fernandina, Fla. Saw-tooth swage	280,598	July 3	312	87	24	56
Ganss, Henry, assignor of one-half to L. Loewns and M. Foltz, New York, N. Y. Muff	272,380	Feb. 13	993	277	23	624
Ganss, Jacob, Brooklyn, assignor to himself and J. Blackwood, New York, N. Y. Alarm mechanism for clocks	277,702	May 15	1458	393	23	1888
Ganster, George P., Reading, Pa. Clock and watch spring	286,417	Oct. 9	802	217	25	176
Ganster, George P., Reading, Pa. Apparatus for winding clocks by air-currents	286,418	Oct. 9	803	217	25	156
Ganster, George P., Reading, Pa. Clock-escapement	286,419	Oct. 9	805	217	25	156
Ganster, George P., Reading, Pa. Time mechanism for lighting and extinguishing illuminating-lamps	289,826	Dec. 11	566	158	25	992
Gantert, Hermann A., San Francisco, Cal. Water-heater	278,123	May 22	1969	540	23	1984
Gants, William H. (See Milne and Gants.) (Reissue.)						
Ganzhorn, Philip, Washington, Ill. Stirrup for riding-saddles	281,861	July 24	1925	526	24	354
Garbutt, Cameron W. (See Stephenson, M. Elmer, assignor.)						
Garceau, Gideon, Holyoke, Mass. Spool-clutch for paper-machines	274,483	Mar. 27	1622	450	23	1135
Garceau, Trofle. (See Therrien, Louis C., assignor.)						
Garcelon, Charles C., and W. A. Woods, Santa Cruz, Cal. Rotary engine	280,027	June 26	1752	492	23	2444
Garceft & Nisius P. (See Bloch, Baruch, assignor.)						
Gard, William E., Baltimore, Md. Lead-pencil case	276,800	May 1	347	93	23	1687
Gardair, Félix, and T. Gladysz, Marseilles, France. Manufacture of anhydrous alumina	282,878	Aug. 7	484	.....	24	586
Gardam, Frederick W., et al. (See Gardam, Joseph, assignor.)						
Gardam, Joseph, assignor of two-thirds to F. W. and W. Gardam, Brooklyn, N. Y. T-square	285,404	Sept. 25	1527	430	24	1188
Gardam, William, et al. (See Gardam, Joseph, assignor.)						
Gardanier, George W., Brooklyn, N. Y. Polarized relay for quadruplex telegraphs	275,185	Apr. 3	392	107	23	1294
Gardanier, George W., Brooklyn, N. Y. Duplex and multiplex telegraphy	280,028	June 26	1753	492	23	2444
Gardanier, George W., New York, N. Y. Duplex and quadruplex telegraph	283,905	Aug. 28	1845	520 } 521 }	24	859
Garden City Fan Company, et al. (See Green, William W., assignor.)						
Gardiner, Charles B., Raynham, assignor of one-half to Leeds, Robinson & Co., Boston, Mass. Match-making machine	270,783	Jan. 16	1187	343	23	247
Gardiner, Charles B., Raynham, assignor of one-half to Leeds, Robinson & Co., Boston, Mass. Match-card	280,810	July 10	590	165	24	111
Gardiner, Charles O., assignor to P. P. Mast & Company, Springfield, Ohio. Grain-drill	271,445	Jan. 30	2010	580	23	403
Gardner, William L., Seymour, Ind. Screw show-case	273,834	Mar. 13	769	208	23	974
Gardner, Adrian K. (See Maltby and Gardner.)						
Gardner, Albert M. (See Barber, D. Fletcher, assignor.)						
Gardner, Alfons G., New Orleans, La. Finger-exercising device for pianists	272,951	Feb. 27	1742	487	23	765
Gardner, Fred. W., Chicago, Ill., and M. B. Mills, Detroit, Mich. Coal hod or scuttle	271,699	Feb. 6	136	38	23	463

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Gardner, Frederick A., assignor of one-half to R. Dunbar & Son, Buffalo, N. Y. Oiler for machinery .....	280,029	June 26	1754	493	23	2444
Gardner, Frederick N. (See Woodbridge, James E., assignor.) .....						
Gardner, George F., <i>et al.</i> (See Lennon, Sayres N., assignor.) .....						
Gardner Governor Company. (See Gardner, Robert W., assignor.) .....						
Gardner, John, assignor to Winchester Repeating Arms Company, New Haven, Conn. Punching and drawing press .....	271,831	Feb. 6	297	81	23	493
Gardner, John, assignor to Winchester Repeating Arms Company, New Haven, Conn. Holder for packing cartridges .....	285,992	Oct. 2	261	74	25	50
Gardner, Joseph W., Shelburne Falls, Mass. Knife .....	280,599	July 3	313	87	24	56
Gardner, Marshall, assignor to T. H. Ball, H. Prenzlauner, and S. Florsheim, Chicago, Ill. Machine for crimping and preparing elastic fabrics .....	290,030	Dec. 11	820	231	25	1038
Gardner, Perry G., Jr., J. W. Le Roy, and G. K. Tinker, North Adams, Mass. Electrical conductor .....	271,832	Feb. 6	299	81	23	493
Gardner, Robert W., assignor to Gardner Governor Company, Quincy, Ill. Governor .....	287,822	Nov. 6	40	12	25	514
Gardner, Rufus D. (See Cross, Freeman H., assignor.) .....						
Gardner, Schuyler S., Chicago, Ill. Rotary plow .....	285,809	Oct. 2	33	11, 12	25	8
Gardner, Spencer, Adderbury, England. Ratchet-drill .....	273,676	Mar. 6	562	149	23	930
Gardner, William, London, England. Breech-loader .....	281,862	July 24	1926	526	24	354
Gardner, William, London, England. Breech-loading fire-arm .....	285,993	Oct. 2	263	74	25	50
Gardner, William F., Baltimore, Md. Time-controlling system .....	287,015	Oct. 23	1563	{ 431 432 }	25	301
Gareis, Frank, Buffalo, N. Y. Bung for racking-barrels .....	272,039	Feb. 13	566	153	23	550
Garfield, Albert G., Chicago, Ill. Halter .....	286,602	Oct. 16	1033	280	25	204
Garfield, Charles L., Albany, N. Y. Extinguishing fires .....	283,996	Aug. 28	1849	521	24	859
Garfield, John B., Elyria, Ohio. Clothes-line hook .....	281,260	July 17	1156	319	24	217
Garfield Manufacturing Company. (See Stender, Charles F. G., assignor.) .....						
Garigues, Samuel S., <i>et al.</i> (See Eddy, Romulus A., assignor.) .....						
Garland, Howard P., San Quentin, Cal. Bag-sewing machine .....	283,095	Aug. 14	739	207	24	639
Garland, James, Philadelphia, Pa. Saw-set .....	282,304	July 31	2492	684	24	455
Garland, James, and J. Kenyon, Lynchburg, Va. Lubricating journal-bearings .....	274,755	Mar. 27	1943	540	23	1193
Garland, James, and J. Kenyon, Lynchburg, Va. Car-axle box .....	278,698	June 5	28	8	23	2129
Garland, Milton H., Everett, Mass. Filling cans .....	284,408	Sept. 4	305	85	24	955
Garner, George W. (See Hopkins, Joseph W., assignor.) .....						
Garner, Allen, Mobile, Ala. Device for hacking trees in gathering turpentine .....	273,061	Feb. 27	1868	525	23	788
Garretson, Albert D., Buffalo, N. Y. Current-motor .....	282,769	Aug. 28	1577	445	24	811
Garretson, Albert D., assignor to C. H. Habberkorn, Detroit, Mich. Caster-wheel .....	283,626	Aug. 7	185	54	24	532
Garretson Ruffler Company. (See Garretson, Thomas B., assignor.) .....						
Garretson Ruffler Company. (See Grotz, Charles, assignor.) .....						
Garretson, Thomas B., assignor to Garretson Ruffler Company, Oskaloosa, Iowa. Ruffing attachment for sewing-machines .....	272,423	Feb. 20	1060	298	23	640
Garrett, Davis, assignor of one-half to A. Gordon, Pittsburg, Pa. Manufacturing head-light reflectors .....	282,879	Aug. 7	485	136	24	586
Garrett, Henry, assignor of one-half to W. W. Mosby, Richmond, Mo. Lifting-jack .....	273,507	Mar. 6	334	91	23	691
Garrett, Jackson B., Eagle Springs, assignor of one-half to M. Surratt, Waco, Tex. Car-coupling .....	284,624	Sept. 11	568	161	24	1006
Garrett, William, Cleveland, Ohio. Rolling-mill plant .....	289,524	Dec. 4	190	53, 54	25	920
Garrick, Thomas, Providence, R. I. Check hook or terret .....	275,817	Apr. 17	1246	343	23	1455
Garrigues, Frank L., Newark, N. J. Necktie-fastening .....	287,119	Oct. 23	1697	464	25	328
Garrigus, Lewis C. (See Wood, William B., assignor.) .....						
Garrison, David, <i>et al.</i> (See Donoghue, William, assignor.) .....						
Garrison, William F., assignor to Guild & Garrison, Brooklyn, N. Y. Vacuum-pump .....	280,600	July 3	314	88	24	56
Garsed, Robert P., Brooklyn, N. Y. Floor-scrubbing machine .....	282,713	Aug. 7	297	84	24	551
Garsed, Joshua, Philadelphia, Pa. Machine for reeling yarns, &c .....	280,601	July 3	315	88	24	56
Garsed, Robert P., Norristown, Pa. Car-signal .....	276,801	May 1	348	93	23	1687
Garsed, Robert P., Norristown, Pa. Buffer .....	278,007	May 22	1826	499	23	1959
Garsed, Robert P., Norristown, Pa. Pumping mechanism for supplying railway-tanks .....	282,070	July 31	2186	600	24	404
Garsed, Robert P., Norristown, Pa. Pneumatic door-bell .....	282,186	July 31	2351	648	24	429
Garsed, Robert P., Norristown, Pa. Pump .....	285,477	Sept. 25	1612	452	24	1203
Garsed, Robert P., Norristown, Pa. Air-pump .....	289,641	Dec. 4	333	93	25	946
Garsed, Robert P., Norristown, Pa. Time-signal and train-indicator .....	290,766	Dec. 25	1778	491	25	1293
Garst, Stephen H., Greenville, Ohio. Sulky-plow .....	273,508	Mar. 6	335	91	23	891
Garstang, Richard, St. Louis, Mo. Rendering-tank .....	271,703	Feb. 6	137	38	23	464
Garstang, Richard, St. Louis, Mo. Steam-boiler .....	281,051	July 10	877	244	24	162
Garth, Walter G., Lodebar, Va. Wagon-jack .....	276,236	Apr. 24	1756	488	23	1551
Gärtner, Adolph, Jersey City, N. J., assignor to himself and C. O. Baese, New York, N. Y. Lock-hinge .....	280,462	July 3	163	44	24	30
Gärtner, Albert. (See Dillon and Gärtner.) .....						
Gärtner, Charles A., Jersey City, N. J. Stereoscope .....	283,997	Aug. 28	1850	522	24	850
Gartner, John, Dallas, Tex. Screw-propeller .....	274,307	Mar. 20	1368	375	23	1084
Gartrell, Mary G., Indianola, Iowa. Top-extension step-ladder .....	272,540	Feb. 20	1203	336	23	665
Garside, Joseph H., assignor of two-thirds to W. F. Aull and E. Martin, Pittsburg, Pa. Dumping-car .....	280,735	July 3	480	136	24	85
Garver, David L., Hart, Mich. Fire-escape .....	279,080	Nov. 27	1618	448	25	813
Garver, Samuel H., Decatur, Ill. Portable straw-stacker .....	283,224	Nov. 13	536	149	25	610
Garver, Wesley B., and E. Varian; said Varian assignor to said Garver, and said Garver assignor of one-half to J. W. Fletcher, Philadelphia, Pa. Tent-frame .....	288,938	Nov. 20	1437	396	25	774
Garvie, George D., New York, N. Y. Sewing-machine .....	271,978	Feb. 6	464	131	23	524
Garvin & Co., E. E. (See Bergh, Bror F., assignor.) .....						
Gaskell, Holbrook, Jr. (See Carey, Gaskell, and Hurter.) .....						
Gaskell, Holbrook, Jr., and F. Hurter, Widnes, county of Lancaster, England. Manufacture of bicarbonate of soda .....	276,020	Apr. 17	1484	409	23	1497
Gaskill, Harvey F., Lockport, N. Y. Steam pumping-engine .....	281,261	July 17	1156	319	24	218
Gaskill, Harvey F., Lockport, N. Y. Steam-motor engine .....	282,071	July 31	2187	601	24	405
Gaskill, Harvey F., Lockport, N. Y. Geared pumping-engine .....	289,838	Dec. 11	571	{ 159 160 }	25	993
Gaskins, Hiram. (See Spencer, George N., assignor.) .....						
Gass, William G., and W. A. Galashan, Philadelphia, Pa. Mechanical movement .....	273,509	Mar. 6	337	91	23	892
Gass, William G., and W. A. Galashan, Philadelphia, Pa. Friction-clutch .....	275,186	Apr. 3	394	108	23	1294
Gasser, Edward, West Troy, N. Y. Hoisting apparatus .....	273,635	Mar. 13	770	209	23	974
Gassett, Oscar, Boston, Mass. Electric locking mechanism for switch and signal levers .....	283,231	Aug. 14	905	{ 252 253 }	24	668
Gassett, Oscar, Boston, Mass. Railway signal locking apparatus .....	283,232	Aug. 14	907	253	24	669
Gassett, Oscar, Boston, Mass. Railway signal apparatus .....	289,827	Dec. 11	568	159	25	993



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Gassett, Oscar, Boston, Mass., assignor to Union Switch and Signal Company, Hartford, Conn., and Pittsburg, Pa. Electro-pneumatic railway-signal	276,021	Apr. 17	1486	409	23	1497
Gassett, Oscar, and I. Fisher, Boston, Mass., assignors to Union Switch and Signal Company, Pittsburg, Pa. Electric interlocking switch and signal	276,138	Apr. 17	1632	450	23	1522
Gast, L., <i>et al.</i> (See Waugh, Johnson S., assignor.)						
Gaston, George H., and C. H. Grant, Fowlerville, Mich. Whiffletree	285,121	Sept. 18	1188	333	24	1122
Gaston, Oliver B., Elizabeth, N. J. Safety device for elevators	288,325	Nov. 13	670	184	25	632
Gatehouse, Tom E., Camberwell, county of Surrey, England. Incandescent electric lamp	284,409	Sept. 4	306	85	24	955
Gates, George S., Athol, Mass. Harness-trace	289,403	Dec. 4	37	11	25	893
Gates, George W., assignor to C. B. Judd, Grand Rapids, Mich. Carpet-sweeper	284,833	Sept. 11	827	231	24	1051
Gates, George W., assignor of two-thirds to A. B. Watson and J. A. McKee, Grand Rapids, Mich. Carpet-sweeper	285,745	Sept. 25	1948	551	24	1263
Gates, Lewis A. (See Brown and Gates.)						
Gates, Philetus W., Chicago, Ill. Stone breaking and crushing machine	279,146	June 12	683	187	23	2250
Gates, Philetus W., Chicago, Ill. Stone breaker and crusher	279,147	June 12	685	187	23	2250
Gates, Philetus W., assignor to Gates & Scoville Iron Works, Chicago, Ill. Stone-breaking machine	272,233	Feb. 13	804	224	23	592
Gates, Ryerson D., Chicago, Ill. Pulverizing-machine	270,217	Jan. 9	467	136 137	23	102
Gates, Ryerson D., Chicago, Ill. Pulverizing-machine	286,290	Oct. 9	650	173	25	128
Gates, Ryerson D., Chicago, Ill. Pulverizing-machine	287,658	Oct. 30	2333	645	25	465
Gates, Ryerson D., Chicago, Ill. Pulverizing-machine	288,050	Nov. 6	328	92	25	563
Gates & Scoville Iron Works. (See Gates, Philetus W., assignor.)						
Gates, Thomas, assignor of one-half to H. C. Cannon and J. W. Adams, Belfast, Tenn. Car-coupling	287,759	Oct. 30	2530	682	25	490
Gates, Virgil A., and M. Levi, Charleston, W. Va. Street-pavement	285,746	Sept. 25	1949	551	24	1263
Gathmann, Louis, Chicago, Ill. Mill-disk dress	274,116	Mar. 20	1125	310	23	1042
Gathmann, Louis, Chicago, Ill. Manufacture of flour from grain	278,531	May 29	2510		23	2088
Gathmann, Louis, Chicago, Ill. Machine for cleaning split grain	283,480	Aug. 21	1224	344 345	24	733
Gathright, Albert P., assignor of one-half to W. C. Potts, Nicholson, Ga. Machine for sharpening gin-saws	290,031	Dec. 11	821	231 232	25	1038
Gatling Gun Company. (See Accles, James G., assignor.)						
Gatton, Benjamin H., Bath, Ill. Grain-car door	289,247	Nov. 27	1812	501	25	849
Ganchot, Paul E., Paris, France, assignor to Volpp, Schwarz & Co., Friedberg, Germany. Machine for grinding drinking glasses, goblets, &c	284,834	Sept. 11	828	231 232	24	1051
Ganer, Friedrich A., Hamburg, Germany. Horseshoe	270,784	Jan. 16	1190	343	23	247
Ganne, Charles J. B., Brooklyn, N. Y. Fishing-tackle	272,232	Feb. 13	803	224	23	591
Gans, Henry B., Jr. (See Mark, Henry J., assignor.)						
Gans, Henry B., Jr., St. Louis, Mo. Box-matcher machine	288,567	Nov. 13	976	269	25	686
Gause, James E., Brownsville, Tenn. Steam-whistle	286,420	Oct. 9	806	218	25	156
Gause, Thomas A., Moss Point, Miss. Umbrella-holder	278,124	May 22	1970	540	23	1984
Gause, William, Fort Wayne, Ind. Reaping-machine	274,931	Apr. 3	60	16, 17	23	1236
Gause, William, Fort Wayne, Ind. Pitman-connection for mowers, &c	286,603	Oct. 16	1034	280	25	204
Gauss, William T. (See Worthington, James K., assignor.)						
Gavard, Adonis N., and H. Millon, Paris, France. Cartridge-case for needle-guns	276,022	Apr. 17	1490	410	23	1498
Gavitt, Lorenzo D., Los Angeles, Cal. Cultivator-blade	283,880	Aug. 7	486	136	24	586
Gay, David G., Pleasant Hill, Oreg. Buckle	279,148	June 12	685	187	23	2250
Gay, Edgar A., <i>et al.</i> (See Shamp, George W., assignor.)						
Gay, Edgar A., Buffalo, N. Y. Boiler for heating buildings	273,718	Mar. 13	611	164	23	946
Gay, Frederick, assignor to Gay, Kimball & Gay, Rutland, Vt. Button	283,233	Aug. 14	909	253	24	669
Gay, Joshua G., Ottawa, Ill. Two-wheeled vehicle	272,678	Feb. 20	1378	387	23	696
Gay, Kimball & Gay. (See Gay, Frederick, assignor.)						
Gay, William A., assignor of one-half to J. Otto, Buffalo, N. Y. Boiler-flue scraper	274,756	Mar. 27	1944	541	23	1193
Gay, William A., Tonawanda, assignor of one-half to J. Otto, Buffalo, N. Y. Ozone-generator	287,760	Oct. 30	2532	682	25	490
Gay, William B. S. (See Kauffer and Serson, assignors.)						
Gaylord, Edward L., Bridgeport, Conn. Machine for planing the beveled ends of moldings	286,421	Oct. 9	807	218 219	25	156
Gaylord, Edward L., Bridgeport, Conn. Picture-mat-cutting machine	286,422	Oct. 9	808	219	25	157
Gaylord, Edward L., Bridgeport, Conn. Machine for cutting moldings	286,423	Oct. 9	809	219 220	25	157
Gaylord, Frederick L. (See Peck and Gaylord.)						
Gaynor & Fitzgerald, <i>et al.</i> (See Gaynor, Thomas F., assignor.)						
Gaynor, Thomas F., New Haven, assignor to L. Strauss, Middleton, and Gaynor & Fitzgerald, New Haven, Conn. Corset-clasp	288,171	Nov. 6	464	130	25	583
Gaytté, Léon. (See Arnaud and Gaytté.)						
Gazaille, Henry, Manchester, N. H., assignor of one-half to F. A. Edwards, Lawrence, Mass. Pneumatic cash-transmitter	279,090	June 5	586	160	23	2223
Geach, John B. (See Hart and Geach.)						
Gear, Giles, Cleveland, Ohio. Guard for excluding air from ice-chambers	271,623	Feb. 6	48	13	23	449
Gearing, Charles, assignor of seven-eighths to S. Harper, Pittsburg, Pa., H. P. Cooke, L. M. Hosca, and C. F. Hesser, Cincinnati, Ohio. Steam-boiler or other furnace	276,576	May 1	44	13	23	1635
Geary, Bailey W., Brockton, Mass. Die for cutting shoe-uppers	279,375	June 12	963	267	23	2296
Geary, John, assignor of one-half to G. Marx, Philadelphia, Pa. Safety-pocket	274,092	Mar. 13	1084	298	23	1028
Gebby, John, Jr., Bellefontaine, Ohio. Railway-switch	281,486	July 17	1438	394	24	265
Gebhart, John F., New Albany, Ind. Weighing apparatus for carding-engines	273,980	Mar. 13	945	260	23	1004
Gebhart, John F., New Albany, Ind. Feeding mechanism for carding-engines	285,608	Sept. 25	1770	501 502	24	1233
Gedde, Sydney, <i>et al.</i> , executors. (See Henley, William T.)						
Gedney, James W., New York, N. Y. Feed-bag	285,252	Sept. 18	1342	378	24	1149
Gehr, John C. (See Zeller, Thomas B., assignor.)						
Gehrig, Joseph K. (See Prinz, Faustin, assignor.)						
Gehring, Jacob, Ridgeville Corners, Ohio. Combined saw jointer, set, and gage	285,609	Sept. 25	1772	502	24	1233
Gehrke, John F., Plattville, Ill. Seed-planter	276,388	Apr. 24	1956	541 542	23	1585
Gehrke, John F., Plattville, Ill. Sulky-plow	288,993	Nov. 27	1507	417	25	795
Geibel, Jacob, and E. G. Price, Montgomery, Ala. Side-bar vehicle	287,016	Oct. 23	1567	432	25	302
Geier, Joseph, Allegheny, Pa. Fanning machinery	273,719	Mar. 13	612	164	23	946
Geiger, Anton, Buffalo, N. Y. Ice-creeper	282,305	July 31	2493	685	24	455
Geiger, Charles A., Springfield, Ohio. Seeding-machine, cultivator, and harrow	270,414	Jan. 9	709	210	23	148
Geiger, Chauncey B., <i>et al.</i> (See Moore and Jackson, assignors.)						
Geiger, Conrad. (See Schellenberger, Charles G., assignor.)						
Geiger, Conrad J., <i>et al.</i> (See Moore and Jackson, assignors.)						
Geiger, Conrad J. and W. T. Moore, Ashley, Ill.; said Geiger assignor of one-third to said Moore. Fire-escape	290,567	Dec. 18	1520	418	25	1169

## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Geiger, George L., Philadelphia, Pa. Presser-foot door-opener.....	283,770	Aug. 28	1577	446	24	811
Geiger, Jacob, Bucyrus, Ohio. Soldering eaves-troughs.....	271,057	Jan. 23	1518	437	23	309
Geiger, Jacob, Bucyrus, Ohio. Stand for kettles.....	279,238	June 12	775	214	23	2266
Geise, George A. (See Baldwin and Geise.)						
Geisen, Nicholas, Hanover Centre, Ind. Work-rest for wood-turning lathes.....	288,994	Nov. 27	1508	417	25	795
Geishlaker, John P., Hammonton, N. J. Clothes and towel rack.....	275,478	Apr. 10	808	219	23	1372
Geisinger, John. (See Steinmetz, Philipp, assignor.)						
Geisinger, John. (See Steinmetz and Geisinger.)						
Geisler, Robert, assignor to Knauth & Co., Leipzig, Germany. Umbrella and parasol.....	269,846	Jan. 2	33	10, 11	23	9
Geisler, William H., Brooklyn, N. Y. Music-leaf turner.....	273,062	Feb. 27	1869	525	23	789
Geissinger, Freeman J., Philadelphia, Pa. Cornice.....	271,058	Jan. 23	1519	438	23	309
Geissler, William F., Comfort, Tex. Calf-weaner.....	278,532	May 29	2512	685	23	2088
Geist, Herman F., Cleveland, Ohio. Window-screen.....	290,568	Dec. 18	1520	418	25	1169
Gelineau, Charles L., Wehster, Mass. Swing.....	270,656	Jan. 16	1027	295	23	217
Gendron, Peter, Toledo, Ohio. Expanding reamer.....	229,248	Nov. 27	1813	501	25	849
Genin, John B., assignor to one-half to C. N. Hair, Worcester, Mass. Hose-coupling.....	283,771	Aug. 28	1578	446	24	811
Gensch, Charles E., New York, N. Y. Life-preserver.....	282,627	Aug. 7	185	54	24	532
Gentesse, Camille, Montreal, Quebec, Canada. Wringer and mangle for clothes.....	281,358	July 17	1275	354	24	238
Gentile, George, London, county of Middlesex, England. Bedstead.....	275,187	Apr. 3	395	108	23	1294
Gentsler, Michael M., Heildersburg, Pa. Gate.....	286,424	Oct. 9	811	220	25	158
George, Andrew J., Pulaski, and T. B. Turpin, Bloomfield, Iowa. Car-coupling.....	290,569	Dec. 18	1522	419	25	1170
George, Frank. (See Stark and George.)						
George, John S., Bridgeport, Conn. Spring-scale.....	273,720	Mar. 13	613	165	23	946
George, Nathan M., Danbury, Conn. Dust-guard for car-axle boxes.....	285,994	Oct. 2	266	74	25	50
George, Samson W., Chester, N. J. Pump-piston.....	274,308	Mar. 20	1368	375	23	1085
Georges, John J., Washington, D. C. Corn and bunion shield.....	281,487	July 17	1439	394	24	265
Gerard, Alonzo, Austin, Tex. Copy-holder.....	281,759	July 24	1795	490	24	331
Gerard, George L., New Haven, Conn. Truss-pad.....	274,932	Apr. 3	63	17	23	1236
Gerber, Charles, York, Pa. Combined shirt-collar and necktie.....	276,023	Apr. 17	1491	410	23	1498
Gerber, Joseph. (See Williams, Henry B., assignor.)						
Gerdienier, Charles A. (See Dean and Whiting, assignors.)						
Gerdorn, Gregory, West Troy, N. Y. Drying or moisture-extracting apparatus.....	273,721	Mar. 13	614	165	23	947
Gere, Theodore D., Owego, N. Y. Fertilizer-distributor.....	271,833	Feb. 6	300	82	23	491
Gerhard, William. (See Howell, William G., assignor.)						
Gerhanser, George M., Baltimore, Md. Hose-coupling.....	280,169	June 26	1905	536	23	2472
Gerken, Franz, assignor to himself and G. Goliash & Co., Berlin, Germany. Friction-match.....	285,610	Sept. 25	1772	502	24	1233
Gerken, William A. (See Saltzman, George, assignor.)						
Gerlach, Rudolph P., Cleveland, Ohio. Boiler-flue cleaner.....	278,699	June 5	30	8	23	2130
German, Eliza, Fannin County, Tex. Churn.....	284,625	Sept. 11	569	161	24	1007
Gerneyer, William S., assignor to one-half to T. Cornman, Carlisle, Pa. Automatic lubricator.....	280,736	July 3	481	136	24	85
Gerot, Emile, Buffalo, N. Y. Fire-escape.....	281,488	July 17	1440	394	24	265
Gerrard, John. (See Bullock, Lovell D., assignor.)						
Gerritson, Charles S., Waltham, Mass. Car-brake.....	270,300	Jan. 9	559	165	23	119
Gerry, Allston, trustee. (See Rapp, Ahnire H., assignor.)						
Gerry, James H., Somerville, Mass. Gravity-escapement for clocks.....	280,463	July 3	164	44	24	30
Gerson, Isidor I., et al. (See Woodruff, Theodore T., assignor.)						
Gerstendorfer, Albert, et al. (See Toussaint, Christian, assignor.)						
Gerstendorfer, Max, et al. (See Toussaint, Christian, assignor.)						
Gerstner, Jacob, Butler, Pa. Harrow.....	280,602	July 3	318	89	24	57
Gesking, Frederick, Grand Rapids, Mich. Folding table.....	285,995	Oct. 2	267	75	25	50
Gesner, James H., Montreal, Quebec, Canada. Machine for stretching hat-tips.....	277,703	May 15	1460	394	23	1889
Gessner, Ernst, Aue, Saxony, Germany. Cloth-napping machine.....	271,834	Feb. 6	302	83	23	494
Gessner, Friedrich, Magdeburg, Prussia, Germany. Accordion.....	277,264	May 8	938	251	23	1793
Getchell, George W., assignor to one-half to M. Hardy, Brewer, Me. Boiler-feed-regulator.....	274,186	Mar. 20	1207	332	23	1057
Getchell, Seth S., Woonsocket, R. I., assignor to Hopedale Machine Company, Hopedale, Mass. Mechanism for making sheet-metal cans.....	290,325	Dec. 18	1186	332	25	1111
Getleson, Bernard, San Francisco, Cal. Boot.....	289,525	Dec. 4	193	54	25	920
Getty, William B., and D. Bricker, Hicksville, Ohio. Stove-pipe drum.....	274,117	Mar. 20	1126	310	23	1042
Getz, Franklin, Tonawanda, N. Y. Nut-lock.....	275,188	Apr. 3	395	109	23	1295
Geyer, George, Brooklyn, N. Y. Cabbage-cutting machine.....	272,132	Feb. 13	687	187	23	570
Ghaler, Peter C., assignor to one-half to J. W. Shetter, York, Pa. Wax compound.....	274,484	Mar. 27	1623	313	23	1135
Gheen, John S., assignor to M. J. Fine, Washington, D. C. File-case.....	280,570	Dec. 18	1522	419	25	1170
Ghio, Enoch G., et al. (See Lewis, George W., assignor.)						
Gholson, William C., La Grange, Ga. Fence.....	274,118	Mar. 20	1127	311	23	1042
Giant Air Injector Manufacturing Company. (See Bonta, James W., assignor.)						
Giant Powder Company (See Nobel, Alfred, assignor.) (Reissue.)						
Gibb, Walter, Pittsburg, assignor to himself and A. C. Milliken, Millvale Borough, Pa. Rotary steam-engine.....	284,125	Aug. 28	2031	565	24	890
Gibbins, James, Springfield, Mass. Friction-clutch.....	284,731	Sept. 11	708	198	24	1030
Gibbins, James, Springfield, Mass. Clutch.....	289,249	Nov. 27	1814	501	25	850
Gibbon, John, U. S. Army. Railway-switch.....	278,533	May 29	2512	685	23	2088
Gibbon, Thomas H., assignor to one-half to D. Farlin, Albany, N. Y. Railway-rail joint.....	288,704	Nov. 20	1154	317	25	722
Gibbons, David, assignor to one-half to H. H. Mills, Jopka, Ind. Gate.....	270,565	Jan. 9	907	262	23	186
Gibbons, John, assignor to Union Hardware Manufacturing Company, West Troy, N. Y. Fastening device for halters.....	278,931	June 5	391	107	23	2190
Gibbons, John, assignor to Union Hardware Manufacturing Company, West Troy, N. Y. Soldering-iron.....	278,932	June 5	392	107	23	2190
Gibbons, John, assignor to Union Hardware Manufacturing Company, West Troy, N. Y. Strap-fastener for halters.....	279,561	June 19	1191	330	23	2340
Gibbons, John, assignor to Union Hardware Manufacturing Company, West Troy, N. Y. Snap-hook.....	276,965	May 1	564	147	23	1723
Gibbons, John, assignor to Union Hardware Manufacturing Company, West Troy, N. Y. Snap-hook.....	283,337	Aug. 14	1040	292	24	694
Gibbons, John, assignor to Union Hardware Manufacturing Company, West Troy, N. Y. Rope-end fastener.....	286,807	Oct. 16	1291	349	25	249
Gibbons, John, assignor to Union Hardware Manufacturing Company, West Troy, N. Y. Halter-loop fastening.....	286,808	Oct. 16	1291	350	25	249
Gibbons, Michael J., Dayton, Ohio. Straight-way valve.....	273,271	Mar. 6	32	10	23	840
Gibbons, Robinson, Alameda, Cal. Attachment for transits and other surveying-instruments.....	275,034	Apr. 3	204	55	23	1260
Gibbs, Addison C. (See Forstner, Benjamin, assignor.)						
Gibbs, Addison C. (See Hutchinson, Thomas O., assignor.)						
Gibbs, Charles E., Orange, Mass. Shaft.....	285,810	Oct. 2	36	12	25	8
Gibbs, Cyrenus A., Schenectady, N. Y. Bag-holder.....	284,885	Sept. 11	832	233	24	1052
Gibbs, John C., Brooklyn, N. Y. Lighter for loading vessels.....	275,479	Apr. 10	809	219	23	1372



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Gibbs, Mahlon A. (See Murray and Gibbs.)						
Gibbs, Mason, Homer, Mich. Seed-sower.	275,633	Apr. 10	1004	271	23	1405
Gibbs, Nathan A., Norwich, Conn. Check-book.	281,682	July 24	1687	459	24	312
Gibbs, Richard, assignor of one-half to S. O'Neil, Coal Valley, Pa. Post-drawing device.	290,637	Dec. 18	1605	441	25	1183
Gibbs, Silas. (See Hanlon, Leadley, and Gibbs.)						
Gibbs, William, Canton, Ohio. Bracket for curtain-fixtures.	271,446	Jan. 30	2014	581	23	404
Gibbs, William H., and G. W. Suook, Popewell, N. J. Combined railway tie and chair.	274,309	Mar. 20	1370	375	23	1085
Gibbs, William W., New York, N. Y., and J. Y. McClintock, Malden, Mass., assignors to United Gas Improvement Company of Pennsylvania. Process of and apparatus for manufacturing water-gas.	283,234	Aug. 14	910	254	24	669
Gibler, Mary J., Beloit, Wis. Cleaning compound.	275,189	Apr. 3	396		23	1295
Gibney, James N., assignor of one-half to D. S., W. H., and R. U. Bush, Vicksburg, Mich. Window-screen.	289,526	Dec. 4	193	54	25	920
Gibson, Alexander C., Chicago, Ill. Bosom-stretcher and ironing-board.	276,802	May 1	349	93	23	1687
Gibson, George S., et al. (See Bush, Arthur W., assignor.)						
Gibson, James E., assignor of two-thirds to J. C. Purnell and A. B. Waddington, Winona, Miss. Nut-lock.	290,638	Dec. 18	1606	441	25	1183
Gibson, John, Jr., Mottram, county of Chester, and J. Platt, Manchester, county of Lancaster, England. Apparatus for soaping and dyeing textile fabrics.	278,125	May 22	1970	{ 540 } { 541 }	23	1984
Gibson, Joseph H., Lisle, and J. G. Fish, Binghamton, N. Y. Insecticide compound.	286,195	Oct. 9	510		25	105
Gibson, Margaret S., Philadelphia, Pa. Apparatus for toasting bread and broiling meats, &c.	281,683	July 24	1687	460	24	312
Gibson, Murray, Philadelphia, Pa. Composition for the ornamentation of walls and ceilings.	290,226	Dec. 18	1060		25	1090
Gibson, Murray, Philadelphia, Pa. Composition for the ornamentation of walls and ceilings.	290,227	Dec. 18	1061		25	1090
Gibson, Murray, Philadelphia, Pa. Composition for the ornamentation of walls and ceilings.	290,228	Dec. 18	1061		25	1090
Gibson, Robert, et al. (See Hunter, Alphens S., assignor.) (Reissue.)						
Gibson, T. M., et al. (See Williams, Paul W., assignor.)						
Gibson, William, et al. (See Vincent, John, Jr., assignor.)						
Gideon, Francis M., Washington, D. C. Vehicle-wheel.	278,534	May 29	2513	686	23	2088
Giel, Franz S., Brooklyn, assignor of one-half to J. Lederle, Tompkinsville, N. Y. Electric arc lamp.	279,934	June 26	1636	459	23	2424
Giel, Franz S., Brooklyn, assignor of one-half to J. Lederle, Tompkinsville, N. Y. Automatic regulator for dynamo-electric machines.	282,187	July 31	2352	648	24	430
Gier, John, Adair County, Mo. Fence.	276,079	May 1	187	48	23	1656
Giers, John, Middlesbrough-on-Tees, county of York, England. Manufacture of steel.	283,735	Aug. 21	1524	430	24	790
Giersberg, Gustav, and R. Wirth, New York, N. Y. Ornamenting surfaces of walls, ceilings, paper-hangings, &c.	283,595	Aug. 21	1358	379	24	758
Giffard, George W., Odin, Kans. Combined corn-planter and cultivator.	285,889	Oct. 2	139	39, 40	25	27
Gifford, Alenza T., assignor to A. B. Searles, Providence, R. I. Magazine electric lamp.	271,059	Jan. 23	1520	{ 438 } { 439 }	23	310
Gifford, Charles. (See Webber, Elbridge, assignor.)						
Gifford, Ezra N., Cincinnati, Ohio. Car-coupling.	287,017	Oct. 23	1568	{ 432 } { 433 }	25	302
Gifford, George S., assignor to G. H. Curtis, Syracuse, N. Y. Towel-holder.	280,464	July 3	165	45	24	30
Gifford, Harry E., New Bedford, Mass. Funnel.	279,739	June 19	1395	389	23	2376
Gifford, John Z., New York, N. Y. Hoop-flaring machine.	287,659	Oct. 30	2395	645	25	465
Gignoux, Charles C. (See Seybold, Frederick J., assignor.)						
Gilain, Achille, Embresin, Belgium. Evaporating or drying apparatus.	277,704	May 15	1460	394	23	1889
Gilberts, James, Jamestown, N. Y. Fruit-jar.	271,328	Jan. 30	1858	539	23	375
Gilberts, James, Jamestown, N. Y. Fruit-jar.	282,188	July 31	2354	649	24	430
Gilbert & Barker Manufacturing Company. (See Hovey, Charles F., assignor.)						
Gilbert, Charles A., Glenn's Falls, N. Y. Making shirts.	276,532	Apr. 24	2132	593	23	1615
Gilbert, Charles A., Glenn's Falls, N. Y. Neckband shaper for bosom-boards.	277,705	May 15	1462	394	23	1889
Gilbert Clock Company, William L. (See Woodruff, Owen, and Beecher, assignors.)						
Gilbert & Co., H. S. (See Slanghenhau, John N., assignor.)						
Gilbert, Donn A. (See Bennett, Eli J., assignor.)						
Gilbert, Edward H., Ware, and T. H. Greenwood, Hardwick, Mass. Feed-winding regulator for spinning-mules.	271,447	Jan. 30	2014	581	23	404
Gilbert, Frank, Cleveland, Ohio, assignor of one-half to C. W. Tritt and J. McNeal, Union City, Ind. Axle for two-wheeled vehicles.	284,626	Sept. 11	570	161	24	1007
Gilbert, Frederic, assignor to Société Anonyme des Appareils Automatiques pour Accrocher et Décrocher les Wagons de Chemins de Fer, Paris, France. Car-coupling.	285,253	Sept. 18	1342	378	24	1149
Gilbert, George, Philadelphia, Pa. Cutting-machine.	271,835	Feb. 6	304	83	23	494
Gilbert, George A. (See Gilbert, Henry J., assignor.)						
Gilbert, George A. (See Gilbert, Henry J. and G. A.)						
Gilbert, George S., assignor of one-third to T. M. Broderick, Baltimore, Md. Attachment for boiler-furnaces.	283,338	Aug. 14	1041	292	24	694
Gilbert, Henry J. and G. A., Racine, Wis. Sieve for roller-mills.	275,190	Apr. 3	396	109	23	1295
Gilbert, Henry J., assignor of one-half to G. A. Gilbert, Racine, Wis. Roller-mill.	276,237	Apr. 24	1757	489	23	1551
Gilbert, Henry J., assignor of one-half to G. A. Gilbert, Racine, Wis. Roller-mill.	276,238	Apr. 24	1757	489	23	1552
Gilbert, Henry J., assignor to Stout, Mills & Temple, Dayton, Ohio. Roller-mill.	280,170	June 26	1906	537	23	2472
Gilbert, James L., Hoboken, Ala. Plow.	290,932	Dec. 11	892	232	25	1038
Gilbert, John T., Mendota, Ill. Wagon-jack.	286,021	Oct. 9	653	173	25	128
Gilbert, John W. (See Johnston, Browne, Starr, and Gilbert.)						
Gilbert, John W., and E. T. Starr, assignors to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Galvanic battery.	281,262	July 17	1157	320	24	218
Gilbert, John W., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental-engine hand-piece.	287,761	Oct. 30	2533	682	25	491
Gilbert, Leon'or G. (See Ortmann and Gilbert.)						
Gilbert, Montrose H., Smithville, Ohio. Stock-car.	274,585	Mar. 27	1748	485	23	1157
Gilbert, Oliver F., Jamestown, Dak. Ter. Traction-wheel.	273,035	Apr. 3	205	55	23	1260
Gilbert, Thomas, London, England. Sight for small fire-arms.	289,081	Nov. 27	1618	448	25	814
Gilbert, William F., Derby, assignor of one-half to E. L. Bryant, Ansonia, Conn. Fastening for corset-clasps.	287,660	Oct. 30	2395	646	25	465
Gilberts, Catharina, San Francisco, Cal. Mining-knife.	279,643	June 19	1234	357	23	2357
Gilday, William A., and T. M. Heckman, Philadelphia, Pa. Grip or clutch to be used on endless-cable ways.	289,527	Dec. 4	194	55	25	920
Gildemeier, Charles A., Philadelphia, Pa. Grip-staff or gripper.	279,566	Mar. 27	1751	485	23	1157
Giles, Charles K., Chicago, Ill. Anti-magnetic shield for watches.	284,642	Dec. 4	335	94	25	946
Giles, Isaac W., South Abington, and T. F. Giles, Abington, Mass. Wrench.	277,265	May 8	938	252	23	1794
Giles, J. Edwin, Hazleton, Pa. Dynamo-electric machine.	281,032	July 10	873	{ 244 } { 245 }	24	162
Giles, J. Edwin, Hazleton, Pa. Armature for dynamo-electric machines.	288,051	Nov. 6	330	92	25	563
Giles, J. Edwin, Hazleton, Pa. Underground conduit for electric conductors.	288,790	Nov. 20	1265	346	25	742
Giles, J. Edwin, Hazleton, Pa. Regulator for dynamo-electric machines.	290,412	Dec. 18	1293	363	25	1131

*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. G.	Vol.	Page.
Giles, John E., Hazleton, Pa. Dynamo or magneto electric machine .....	287,661	Oct. 30	2396	646	25	466
Giles, Thomas F. (See Giles, Isaac W. and T. F.)						
Gilfillan, Thomas. (See Bonett, Gilfillan, and Flanders.)						
Gilgour, John, Columbus, Ind. Nut-lock .....	277,706	May 15	1463	394	23	1889
Gill, Asher B., Philadelphia, Pa. Station-indicator .....	281,684	July 24	1689	400	24	312
Gill, Henry C., Madison, Ohio. Crown-terret for harness .....	279,149	June 12	686	188	23	2250
Gill, Joseph P., New York, N. Y. Process of and apparatus for manufacturing heating-vapor .....	275,634	Apr. 10	1005	272	23	1405
Gill, Joseph P., New York, N. Y. Process of and apparatus for manufacturing lighting or heating vapors .....	275,635	Apr. 10	1008	272	23	1406
Gill, Joseph P., New York, N. Y. Process of and apparatus for manufacturing gases and vapors for heating and illuminating purposes .....	275,636	Apr. 10	1010	273	23	1406
Gill, Joseph P., New York, N. Y. Process of and apparatus for manufacturing gas .....	275,761	Apr. 10	1109	320	23	1433
Gill, Joseph P., New York, N. Y. Reducing ores .....	284,126	Aug. 28	2032	321	24	890
Gill, Joseph P., New York, N. Y. Apparatus for the manufacture and application of gases and vapors .....	283,998	Aug. 28	1852	522	24	860
Gill, Joseph P., New York, N. Y. Process of and apparatus for the treatment of iron and steel .....	283,999	Aug. 28	1860	523	24	860
Gill, Joseph P., New York, N. Y. Process of and apparatus for producing non-corrodible surfaces on iron and steel .....	284,000	Aug. 28	1864	524	24	861
Gill, Joseph P., New York, N. Y. Surface of iron and steel .....	284,001	Aug. 28	1866	525	24	861
Gill, Joseph P., New York, N. Y. Process of and apparatus for manufacturing and delivering gases and vapors .....	284,002	Aug. 28	1867	526	24	861
Gill, Joshua S. (See Hedges and Gill.)						
Gill, Thomas, assignor to himself and H. A. Hood, Waltham, Mass. Fastening clicks to watch-plates .....	275,762	Apr. 10	1172	321	23	1434
Gill, Thomas J. (See Hedges and Gill.)						
Gilleland, James G., Palmyra, Mich. Animal-trap .....	288,225	Nov. 13	537	149	25	611
Gilleland, James G., and J. Ziegele, Palmyra, Mich. Mole-trap .....	280,811	July 10	591	165	24	111
Gilleland, John A., et al. (See Ingram, Milo E., assignor.)						
Gillen, Patrick H. (See Riley, William, assignor.)						
Gillender, Augustus T., New York, N. Y. Wall match-safe .....	274,310	Mar. 20	1371	376	23	1085
Gillespie, Alfred J., Atlantic, Iowa. Stringing pianos .....	275,818	Apr. 17	1247	343	23	1455
Gillespie, James, West Point, Ohio. Odometer .....	290,767	Dec. 25	1780	492	25	1222
Gillespie, James E., Warwick, N. Y. Hose-reel .....	275,637	Apr. 10	1014	274	23	1407
Gillespie, James E., assignor to Fabric Fire Hose Company, Warwick, N. Y. Manufacture of rubber-lined hose .....	275,638	Apr. 10	1015	275	23	1407
Gillet, Charles F., Springfield, Ill. Rubber overshoe .....	280,603	July 3	319	89	24	57
Gillet, Etienne, et al., trustees. (See Marchand, Charles, assignor.)						
Gillett, Eugene E., Western Union, Wis. Sulky-harrow .....	274,311	Mar. 20	1371	376	23	1085
Gillett, William A., Union City, Pa. Scaffold .....	279,740	June 19	1396	390	23	2376
Gillette, William H., Hartford, Conn. Time-stamp .....	289,404	Dec. 4	38	11	25	893
Gilliard, John. (See Alexander, Alexander G., assignor.)						
Gillig, John, Virginia City, Nev. Lantern .....	273,272	Mar. 6	33	10	23	840
Gilliland, Ezra T., Indianapolis, Ind. Armature for magneto-electric machines .....	270,945	Jan. 23	1385	400	23	288
Gilliland, Ezra T., Indianapolis, Ind. Automatic shunt for magneto-electric generators .....	272,234	Feb. 13	806	224	23	592
Gilliland, James F., Indianapolis, Ind. Gear-wheel .....	284,290	Sept. 4	104	46	24	932
Gilliland, James F., Indianapolis, assignor to D. E. Stone, A. B. Meyer, Marion County, and J. H. Zeller, Harmony, Ind. Cylinder for rotary armatures .....	276,024	Apr. 17	1491	410	23	1498
Gillis, William K. (See Merritt, Henry W., assignor.)						
Gillmore, Freeman C., Chicago, Ill. Car-seal .....	281,863	July 24	1928	527	24	355
Gilman, Charles C., Eldora, Iowa. Housing and insulation of electrical wires underground .....	288,629	Nov. 20	1060	391	25	707
Gilman, Charles C., Eldora, Iowa, assignor, by mesne assignments, to Gilman Porous Terra Cotta Company, New York, N. Y. Fire-proof composition. (Reissue.) .....	10,419	Dec. 11	1008	.....	25	1073
Gilman, Charles C., Eldora, Iowa, assignor, by mesne assignments, to Gilman Porous Terra Cotta Company, New York, N. Y. Fire-proof composition. (Reissue.) .....	10,420	Dec. 11	1008	.....	25	1073
Gilman, Edwin H., Montpelier, Vt. Driving-bit .....	281,991	July 24	2080	571	24	381
Gilman Porous Terra Cotta Company. (See Gilman, Charles C., assignor.) (Reissue.)						
Gilman, William W., San Francisco, Cal. Paper-file holder .....	283,596	Aug. 21	1359	379	24	758
Gilmartin, Arthur, et al. (See O'Malley, Thomas M., assignor.)						
Gilmer, Dan H., Findlay, Ohio. Dental engine .....	278,933	June 5	393	103	23	2190
Gilmore, Isaac C. H., Rosendale, Mo. Coffee-pot .....	270,415	Jan. 9	710	210	23	148
Gilmore, Robert J., Providence, assignor to P. L. Belden, North Providence, R. I. Button-fastener .....	281,992	July 24	2080	571	24	381
Gilmore, Robert J., Providence, assignor to P. L. Belden, North Providence, R. I. Button .....	283,235	Aug. 14	912	254	24	669
Gilmore, Thomas, et al. (See Carson, Robert J., assignor.)						
Gilpin, Joseph F., assignor to Ansonia Brass and Copper Company, Ansonia, Conn. Manufacture of insulated electric conductors .....	281,864	July 24	1929	527	24	355
Gilroy, Thomas F., New York, N. Y. Glass-beveling machine .....	271,836	Feb. 6	306	83	23	494
Gilson, John. (See Burch and Gilson.)						
Gilson, Lorenzo G., Fort Scott, Kans. One-hand plane .....	288,226	Nov. 13	538	149	25	611
Ginger, James S., St. Louis, Mo. Harness-loop .....	279,741	June 19	1396	390	23	2376
Gingras, Timothy, Buffalo, N. Y. Mechanism for manufacturing washers .....	270,301	Jan. 9	560	165	23	119
Gingras, Timothy, Buffalo, N. Y. Leather washer .....	281,700	July 24	1796	490	24	331
Gingras, Timothy, Buffalo, N. Y. Fly-net .....	285,620	Sept. 18	1078	301	24	1103
Ginn, Wesley C., Syracuse, N. Y. Cake-beater .....	290,033	Dec. 11	823	232	25	1038
Ginna & Co. (See Hipperling, William, assignor.)						
Ginther, Frederick C., Bedford, Iowa. Refrigerator .....	275,639	Apr. 10	1016	274	23	1407
Gintz, Henry, Akron, Ohio. Bung-hole protector .....	270,050	Jan. 2	261	75	23	53
Gipe, John A., Detroit, Mich. Spring bed-bottom .....	273,063	Feb. 27	1871	525	23	789
Girard, Jean B., St. Aimé, Quebec, Canada. Bicycle .....	281,489	July 17	1441	395	24	266
Girardey, Camille E. (See Spear, Thomas J., assignor.)						
Girling, William, Minneapolis township, Hennepin county, Minn. Mechanism for attaching knitted fabrics to woven fabrics, &c. ....	288,326	Nov. 13	670	185	25	632
Girrens, Nicholas, Buffalo, N. Y. Saw .....	288,791	Nov. 20	1266	346	25	742
Gish, Charles L. (See O'Connor and White, assignors.)						
Gissinger, Samuel, Pittsburg, Pa. Horse-collar .....	276,577	May 1	46	13	23	1635
Gissinger, Samuel, assignor of one-half to J. R. Large, Pittsburg, Pa. Nut-lock .....	285,122	Sept. 18	1189	333	24	1122
Githens, George M., Brooklyn, N. Y. Draft-regulator .....	270,302	Jan. 9	561	165	23	119
Githens, George M., Brooklyn, N. Y. Steam-damper regulator .....	285,478	Sept. 25	1613	453	24	1203
Glackin, Edward J. (See Glackin, James J., Jr., and E. J.)						
Glackin, James J., Jr., and E. J., Chicago, Ill. Can-soldering machine .....	278,329	May 29	2258	618	23	2042



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Gladney, Shadrack. (See Berry and Gladney.)						
Gladwin, Porter A., Boston, Mass. Vise	287,271	Oct. 23	1887	516	25	361
Gladysz, Thaddé. (See Gardair and Gladysz.)						
Glaessner, Arthur F., Meriden, Conn. Hanging lamp	272,235	Feb. 13	807	224	23	592
Glaser, Friedrich C. (See Liebreich and Michaelis, assignors.)						
Glass, Henry, Golconda, Ill. Process of and apparatus for aging liquors	287,272	Oct. 23	1888	517	25	361
Glass, Seymour, and G. H. Noble, Clintonville, Wis. Window-screen	284,410	Sept. 4	308	86	24	955
Glassie, Daniel W. (See Fowler, T. Walter, assignor.)						
Glasson, Frederick, New York, N. Y. Animal-trap	290,034	Dec. 11	824	232	25	1039
Glatstaine, Morris, New York, N. Y. Nursing-bottle	279,935	June 26	1637	459	23	2424
Glazier, George W., Salem, assignor of one-half to A. G. Potter, Lynn, Mass. Machine for pasting paper boxes, &c	280,604	July 3	319	89, 90	24	57
Glazier, George W., Salem, assignor of one-half to J. B. Rollins, Lynn, Mass. Box-pasting machine	288,172	Nov. 6	466	130	25	588
Glazier, Ira W., Millbury, Mass., assignor of one-half to C. O. Thompson, New York, N. Y. Tension device for sewing-machines	270,188	Jan. 2	424	123	23	86
Gleason, Albert H., Wabash, Ind. Rotary engine	290,035	Dec. 11	825	233	25	1039
Gleason, Charles E., Willimantic, Conn. Flier for spinning-machines	288,052	Nov. 6	330	93	25	564
Gleason, John M., assignor of one-half to J. H. McDermott, Lowell, Mass. Fan attachment for sewing-machines	285,479	Sept. 25	1614	453	24	1203
Gleason, Lorenzo D., and R. A. Holt, Lebanon, Mo. Animal-shears	287,018	Oct. 23	1570	433	25	303
Gleason, Orville T., Temple, Me. Velocipede	289,907	Dec. 11	672	187	25	1011
Gleason, Patrick, Wausau, Wis. Vibrating propeller	285,480	Sept. 25	1615	453	24	1204
Gleason, Samuel J., Peoria, Ill. Billiard-cue	278,934	June 5	394	108	23	2190
Gleason, Sanford B., Baltimore, Md. Wire mattress	274,312	Mar. 20	1372	376	23	1085
Gleason, William, Rochester, N. Y. Tool-stock for iron-planers	280,812	July 10	592	165	24	111
Glen Cove Manufacturing Company. (See Duryea and Grimm, assignors.)						
Glendale Elastic Fabric Company. (See Green and Smith, assignors.)						
Glendillen, Elijah, Owen Sound, Ontario, Canada. Horse hay-rake	289,082	Nov. 27	1619	449	25	814
Glenn, Charles F., East Brady, Pa. Shirt	275,191	Apr. 3	397	109	23	1295
Glenn, David G., et al. (See Fry, John, assignor.)						
Glenn, David H. (See Herring, Elijah R., assignor.)						
Glenn, George K., assignor of one-half to Hall & Bidwell, Woodland, Cal. Self-regulating windmill	275,036	Apr. 3	205	55	23	1261
Gleason, William H., Quincy, Mass. Crane or derrick	272,236	Feb. 13	808	225	23	592
Glidden, Charles W., Lynn, assignor to McKay and Bigelow Heeling Machine Association, Boston, Mass., J. W. Brooks, trustee. Last	278,426	May 29	2382	650	23	2065
Glidden, Darwin H., Brooklyn, Wis. Harrow-sulky	289,405	Dec. 4	39	12	25	894
Glidden, Greenleaf, assignor of one-half to H. S. Black, Buchanan, Mich. Combined hand plow, planter, and cultivator	273,229	Feb. 27	2083	585	23	826
Glines, Humphrey M., East Boston, Mass. Car-brake	282,714	Aug. 7	298	84	24	551
Glines, Sylvester. (See Jones and Glines.)						
Glisson, Abram, Rutherford, Tenn. Fertilizer-distributor	278,126	May 22	1971	541	23	1985
Globotschnig, Felix, Bologna, Italy, assignor of one-half to M. Muller, Jr., Vienna, Austria. Treating the plant genista to obtain fibers	284,291	Sept. 4	164		24	932
Gloekler, Bernard. (See Armstrong, John, assignor.)						
Glossier, Thomas J., Meigs, Ga. Planing and sawing machine	287,019	Oct. 23	1571	433	25	303
Glover, Benjamin P. (See Parker, Charles B. and O. B., assignors.)						
Glover, Carlos W., Boston, Mass. Machine for felting and sizing hat-bodies, &c	279,376	June 12	964	268	23	2296
Glover, Carlos W., Boston, Mass. Roller for felting hat-bodies	282,881	Aug. 7	486	136 } 137 }	24	586
Glover, Carlos W., Boston, Mass. Roller for felting hat-bodies	284,411	Sept. 4	308	86	24	955
Glover, Eli S., Battle Creek, Mich. Combined pocket knife and rule	273,981	Mar. 13	946	260	23	1004
Glover, Elmer E., Terre Haute, Ind. Brake	282,452	July 31	2688	737	24	489
Glover, Frank W. T., assignor to Western Leather Manufacturing Company, Chicago, Ill. Leather box	288,227	Nov. 13	539	149	25	611
Glover, Horatio N., et al., trustees. (See Chase, Edward M., assignor.)						
Gmelhin, Paul, New York, N. Y. Upright-piano case	286,425	Oct. 9	811	220	25	158
Gnadinger, John, Jr., Paris, Ky. Try-box and indicator for spirit-cisterns	270,416	Jan. 9	711	210	23	148
Gobeille, Joseph L., assignor of one-half to W. M. Gobeille, Cleveland, Ohio. Jointer for dressing angles for joints	280,813	July 10	593	166	24	111
Gobeille, William M. (See Gobeille, Joseph L., assignor.)						
Gobin, Leon A., New York, N. Y. Machine for grading and cleaning coffee	287,823	Nov. 6	42	12	25	515
Goble, Hiram F., Kalamazoo, Mich. Fire-escape	284,627	Sept. 11	571	161	24	1007
Goddard, Calvin L., New York, N. Y. Picker or opener for fibrous materials	288,327	Nov. 13	673	185	25	632
Goddard, Calvin, assignor to Edison Electric Light Company, New York, N. Y. Junction for electrical conductors	287,532	Oct. 30	2211	600 } 601 }	25	430
Goddard, Calvin, assignor to Edison Electric Light Company, New York, N. Y. Safety-catch for electric circuits	287,533	Oct. 30	2213	601	25	431
Goddard, Charles V., Brooklyn, N. Y. Button	283,772	Aug. 28	1580	446	24	812
Goddard, Sextus P., Worcester, Mass. Reducing corn in the stalk and separating the kernels	290,571	Dec. 18	1524	419	25	1170
Goddard, Silas W. (See Layng, George, assignor.)						
Goddard, William, Chester, Ill. Elevator	275,037	Apr. 3	206	56	23	1261
Goddu, Louis, Winchester, Mass. Button	289,829	Dec. 11	572	160	25	993
Goddu, Louis, Winchester, Mass. Button	289,830	Dec. 11	573	160	25	993
Goddu, Louis, Winchester, Mass., assignor to McKay Metallic Fastening Association. Hand tacking or nailing apparatus	287,375	Oct. 23	2016	549	25	384
Goddu, Louis, Winchester, Mass., assignor to G. McKay, Newport, R. I., and J. W. Brooks, Cambridge, Mass., trustees. Nailing-machine	288,421	Nov. 13	803	218	25	656
Goddu, Louis, Winchester, Mass., assignor to G. McKay, Newport, R. I., and J. W. Brooks, Cambridge, Mass., trustees. Nailing-machine	288,422	Nov. 13	805	218	25	656
Goddu, Louis, Winchester, Mass., assignor to G. McKay, Newport, R. I., and J. W. Brooks, Cambridge, Mass., trustees. Nailing-machine	288,423	Nov. 13	806	218	25	656
Goddu, Louis, Winchester, Mass., assignor to G. McKay, Newport, R. I., and J. W. Brooks, Cambridge, Mass., trustees. Nailing-machine	288,424	Nov. 13	807	219	25	656
Goddu, Louis, Winchester, Mass., assignor to G. McKay, Newport, R. I., and J. W. Brooks, Cambridge, Mass., trustees. Nailing-machine	288,425	Nov. 13	809	219	25	657
Godfrey, Fred N., Oldtown, Me. Skid	271,837	Feb. 6	307	84	23	495
Godfrey, Henry C., Boston, Mass. Dust-pan	277,266	May 8	939	252	23	1794
Godfrey, James, Pittsburg, Pa. Fire-escape	273,722	Mar. 13	614	165	23	947
Godley, George F., Philadelphia, Pa. Car-axle box	288,705	Nov. 20	1155	317	25	723
Godley, George F., and H. B. Whittaker, assignors of one-third to G. W. Weart, Philadelphia, Pa. Spring-motor	278,427	May 29	2383	650 } 651 }	23	2065
Godley, William, and J. Boldon, Pittsburg, Pa. Die for forming twist-drills	285,996	Oct. 2	267	75	25	51

*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Godshalk, Edward H., Philadelphia, Pa. Fur-cutting machine	275,640	Apr. 10	1017	274	23	1408
Godshalk, Edward H., Philadelphia, Pa. Former for dress-trimmings, &c.	257,662	Oct. 30	2398	646	25	466
Godwin, James T., assignor of one-half to A. L. Woodworth, Norfolk, Va. Dumping-car	287,663	Oct. 30	2398	646	25	466
Goebel, Christian H., Philadelphia, Pa. Bedstead-fastening	270,051	Jan. 2	262	75	23	54
Goebel, Christian H., Philadelphia, Pa., assignor to American Sectional Electric Under-ground Company, of New Jersey. Conduit for electric wires	290,413	Dec. 18	1295	363	25	1131
Goebel, Christian H., Philadelphia, Pa., assignor to American Sectional Electric Under-ground Company, of New Jersey. Underground conduit for electric wires	290,414	Dec. 18	1296	363	25	1131
Goebel, Christian H., Philadelphia, Pa., assignor to American Sectional Electric Under-ground Company, of New Jersey. Underground conduit for electric wires	290,415	Dec. 18	1297	363	25	1131
Goebel, Christian H., Philadelphia, Pa., assignor to American Sectional Electric Under-ground Company, of New Jersey. Underground conduit for electric wires	290,416	Dec. 18	1298	364	25	1132
Goeden, Peter, Chicago, Ill. Flower-pot holder	277,125	May 8	777	204	23	1765
Gochring, Jacob, Davenport, Iowa. Rotary engine	275,819	Apr. 17	1248	344	23	1455
Goehring, John. (See Schutte and Goehring.)						
Goepel, Paul. (See Lanfer, Christian F., assignor.)						
Goessmann, Charles A., St. Louis, Mo. Child's carriage	269,928	Jan. 2	124	37	23	26
Goetchius, Eugenia A. (See Goetchius, George H., assignor.)						
Goetchius, George H., assignor to E. A. Goetchius, Little Falls, N. Y. Cheese-vat	281,053	July 10	880	245	24	162
Goettel, John, and E. T. Slayton, St. Paul, Minn. Car-coupling	276,025	Apr. 17	1402	410	23	1498
Goff, Darius, Pawtucket, R. I. Fibrous batting	271,624	Feb. 6	50	13	23	449
Goff, Darius, Pawtucket, R. I. Fibrous absorptive pad	271,625	Feb. 6	51	13	23	449
Goff, Francis C., Englewood, Ill. Burial-case	289,643	Dec. 4	335	94	25	946
Goff, George P. (See Hendley, William, assignor.)						
Goff, George W., assignor to East Hampton Bell Company, East Hampton, Conn. Sleigh-bell attachment	280,305	June 26	2078	585	23	2503
Goff, James M. (See Meason, Charles W., assignor.)						
Goff, Mortimer, assignor of one-half to F. H. Hill, Chicago, Ill. Burial-case	282,072	July 31	2188	601	24	405
Goff, Richard, St. John's, Newfoundland. Veneer-press	273,723	Mar. 13	615	165 166	23	947
Goff, Tilmson G., assignor of one-half to R. D. Brecknell, Springfield, Ohio. Self-closing gate	284,836	Sept. 11	833	233	24	1052
Goffney, William L., Newburg, N. Y. Automatic elevator-gate	290,326	Dec. 18	1187	333	25	1111
Gokey, Frank F., assignor of one-half to J. C. Platt, Winooski, Vt. Automatic advertising device	279,936	June 26	1638	459 460	23	2424
Gokey, Moses A. (See Batcheller, Lucien B., assignor.)						
Gold, Edward E., New York, N. Y. Gas-stove	281,685	July 24	1690	460	24	313
Gold, Joseph S., Columbus, Ohio. Clothes-drier	272,424	Feb. 20	1061	298 299	23	640
Gold, Samuel F., Englewood, N. J. Steam-radiator	288,995	Nov. 27	1509	417	25	795
Goldberg, Henry. (See Parke, Richard, assignor.)						
Goldberg, Henry. (See Parke and Goldberg.)						
Goldberg, Max, Milwaukee, Wis., assignor of one-half to W. S. Cooper, Philadelphia, Pa. Apparatus for administering medicated vapors	279,091	June 5	588	160	23	2224
Goldsberry, William H., Cedar Rapids, Iowa. Folding square and scale-bolder	285,405	Sept. 25	1528	430	24	1188
Golden, Fendol S., Atlanta, Ga. Wagon-brake	270,946	Jan. 23	1386	400	23	288
Golden Gate Concentrator Company. (See Tobey and Thayer, assignors.)						
Goldey, Charles P., New York, and W. H. Goldey, Brooklyn, N. Y. Archery apparatus	273,510	Mar. 6	338	91, 92	23	892
Goldey, William H. (See Goldey, Charles P. and W. H.)						
Goldie, William. (See Durell and Goldie.)						
Goldie, William, West Bay City, Mich. Extinguishing device for lamp-burners	277,477	May 15	1194	321	23	1844
Goldie, William, West Bay City, Mich. Railway-spike	278,428	May 29	2186	651	23	2065
Golding, Asa G., New York, N. Y. Salt-cellar or spice-box	270,189	Jan. 2	425	123	23	87
Golding, John F., et al. (See Boyer, Joseph, assignor.)						
Golding, William H., Boston, Mass. Composing-stick	278,700	June 5	31	9	23	2130
Golding, William H., Chelsea, Mass. Type-case	287,430	Oct. 30	2087	567	25	405
Goldsborough, Arthur T., Washington, D. C. Bench-plane	284,732	Sept. 11	709	198	24	1030
Goldsborough, Richard A., et al. (See Upham, Artemas B., assignor.)						
Goldsmith, Frederick E., Jacksonborough, Ohio. Thill-coupling	273,064	Feb. 27	1872	526	23	789
Goldsmith, Gustavus A., et al., executor. (See Reckendorfer, Joseph.)						
Goldsmith, John S., New York, N. Y. Street-sweeping machine	269,847	Jan. 2	34	11	23	9
Goldsmith, Louis. (See Hamilton, Emery M., assignor.)						
Goldsmith, Max. (See Hensch, Rudolph, assignor.)						
Goldstein, Julius, assignor to S. Goldstein, Waterloo, Iowa. Salt-feeding device	281,993	July 24	2081	571	24	381
Goldstein, Siegfried. (See Goldstein, Julius, assignor.)						
Gollasch & Co., G. (See Gerken, Franz, assignor.)						
Gollings, Ellick H., Lewiston, Idaho Ter., assignor to himself and C. H. Smith, Chicago, Ill. Amalgamating apparatus	287,431	Oct. 30	2088	567	25	405
Gomes, William H. (See Gordon, Edgar T., assignor.)						
Gondolo, Paul, Paris, France, assignor to Gondolo Tannin Company, Huntingdon, Pa. Clarifying tannin extracts	283,881	Aug. 28	1707		24	832
Gondolo Tannin Company. (See Gondolo, Paul, assignor.)						
Gozon, Paul E., New York, N. E. Manufacture of lead-pencils	277,707	May 15	1463	395	23	1889
Gontier, Guillaume, Cognac, France. Ratchet-wrench	290,036	Dec. 11	827	233	25	1039
Gonzales, Manuel, Jacksonville, Fla., assignor to J. W. Tufts, Medford, Mass. Machine for shaving ice	281,686	July 24	1694	461	24	313
Good, John, Brooklyn, N. Y. Machine for oiling and softening hemp and other vegetable fibers	280,814	July 10	595	166	24	111
Good, Robert J., Terre Haute, Ind. Guard for street-cars	277,564	May 15	1300	349	23	1861
Good, Robert J., assignor of one-half to J. Riehl, St. Louis, Mo. Roller-mill	289,083	Nov. 27	1621	449	25	814
Goodale, William W., Lowell, Mass. Tidy-fastener	2-8,996	Nov. 27	1510	418	25	795
Goodall, Francis M. (See Christy, Thomas J., assignor.)						
Goode, William C., King's Mountain, N. C. Washing-machine	282,514	Aug. 7	44	13	24	508
Goodell Company. (See Oaks, William A. C., assignor.)						
Goodell, George W., Beardstown, Ill. Process of and apparatus for blocking ice	275,192	Apr. 3	398	109 110	23	1295
Goodell, George W., Beardstown, Ill. Blocking ice	286,604	Oct. 16	1036	280	25	204
Goodell, Henry C., Atchison, Kans. Non-conducting covering	274,313	Mar. 20	1373	376	23	1085
Goodell, Henry C., Atchison, Kans. Boiler-covering	274,933	Apr. 3	64	17	23	1236
Goodell, Henry C., Atchison, Kans. Refrigerator	282,882	Aug. 7	487	137	24	586
Goodell & Waters. (See Feyh, Henry, assignor.)						
Goodell & Waters. (See Vernon, William G., assignor.)						
Goodenough, William E., Newark, N. J. Extension photograph-frame	270,785	Jan. 16	1190	343	23	247
Goodfellow, James, assignor to J. E. Mulford, New York, N. Y. Fare-register	283,706	Aug. 21	1487	419	24	783



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Goodfellow, James T., Philadelphia, Pa. System of laying subterranean lines of electric wires	272,833	Feb. 20	1568	{ 442 443	23	731
Goodfellow, John H., Troy, N. Y. Implement for attaching buttons	290,181	Dec. 11	991	280	25	1070
Goodfellow, John H., assignor to Goodfellow Manufacturing Company, Troy, N. Y. Button-fastening staple	273,724	Mar. 13	616	166	23	947
Goodfellow, John H., Troy, N. Y. assignor to Heaton Button Fastener Company, Providence, R. I. Implement for setting buttons	286,537	Oct. 9	943	254	25	182
Goodfellow, John H., Troy, N. Y. assignor to Heaton Button Fastener Company, Providence, R. I. Instrument for setting buttons	288,228	Nov. 13	540	150	25	611
Goodfellow, John H., Troy, N. Y. assignor to Heaton Button Fastener Company, Providence, R. I. Tool for attaching buttons to shoes	288,229	Nov. 13	542	150	25	611
Goodfellow Manufacturing Company. (See Goodfellow, John H., assignor.)						
Goodhart, Alexander, and G. Hemminger, Carlisle, Pa. Harrow	270,417	Jan. 9	712	211	23	149
Goodin, James L., Montgomery, Tex. Cotton-buncher	270,786	Jan. 16	1191	344	23	248
Goodknight, I. H. & T. M., et al. (See Atkinson, Henry C., assignor.)						
Goodloe, W. Cassius. (See Ely, Charles M., assignor.)						
Goodman, Burkard. (See Clough, William R., assignor.)						
Goodman, Henry, et al. (See Martinez, Rafael, assignor.)						
Goodman, Henry, assignor of one-half to D. P. Kane, St. Louis, Mo. Revolver	274,093	Mar. 13	1085	299	23	1028
Goodman, Henry, assignor of one-half to D. P. Kane, St. Louis, Mo. Lock for fire-arms	288,939	Nov. 20	1438	396	25	774
Goodman, Henry, assignor of one-half to D. P. Kane, St. Louis, Mo. Pulley	290,572	Dec. 18	1525	420	25	1170
Goodman, Isaac. (See Parke and Goldberg, assignors.)						
Goodner, George W., Chicago, Ill. Syringe	289,528	Dec. 4	196	55	25	921
Goodrich, Abram, Auburn, N. Y. Freight-car	288,792	Nov. 20	1267	347	25	743
Goodrich, Benjamin F., Akron, Ohio. Belting	270,303	Jan. 9	562	165	23	120
Goodrich, Charles H., Stoneham, Mass. Machine for finishing cocks or valves	270,052	Jan. 2	263	76, 77	23	54
Goodrich, Fred. (See Parnall, Alf N. and G. A., assignors.)						
Goodrich, Harry C., Chicago, Ill. Sewing-machine presser-foot	270,947	Jan. 23	1387	401	23	288
Goodrich, Harry C., Chicago, Ill. Truck-creaser for sewing-machines	275,820	Apr. 17	1249	344	23	1455
Goodrich, Harry C., Chicago, Ill. Center-board	276,026	Apr. 17	1493	411	23	1498
Goodrich, Harry C., Chicago, Ill. Ruffling attachment for sewing-machines	284,628	Sept. 11	572	162	24	1007
Goodrich, Herman B. (See Stinson, Harlan P., assignor.)						
Goodrich, James T. (See Lewis, Leroy S., assignor.)						
Goodrich, Perry F., assignor of one-fourth to D. Salisbury, San Francisco, Cal. Engine	270,418	Jan. 9	713	211	23	149
Goodridge, James F., Boston, assignor of one-half to J. E. Russell, Leicester, and A. Pope, Boston, Mass. Faro-box	272,952	Feb. 27	1743	487	23	766
Goodridge, John C., Jr., New York, N. Y. Repairing structures with béton or concrete	271,234	Jan. 30	1736	502	23	354
Goodridge, John C., Jr., New York, N. Y. Electric-wire duct	278,233	May 22	2108	581	23	2008
Goodridge, John C., Jr., New York, N. Y. Apparatus for erecting and supporting colossal structures	289,644	Dec. 4	338	{ 94 95 96	25	947
Goodsell, Benjamin H., C. Adamson, and C. O. Hering, Philadelphia, Pa. Electrically-heated mirror	281,224	July 10	1099	302	24	201
Goodspeed, George N. (See Sanderson, Charles M., assignor.)						
Goodwin, Adam, et al. (See Rinehart, Thomas M., assignor.)						
Goodwin, Caleb, Hyde Park, Ill. Combined pen holder and cleaner	283,389	Aug. 21	1115	315	24	713
Goodwin, Henry L., New York, N. Y. Rotary vegetable-cutter	271,701	Feb. 6	137	38	23	464
Goodwin, John E., Memphis, Tenn. Seed planter	282,715	Aug. 7	299	85	24	552
Goodwin, John M., Sharpsville, Pa. Profile-paper, &c	270,657	Jan. 16	1028		23	217
Goodwin, John M., Sharpsville, Pa. Track-laying device	279,092	June 5	588	{ 160 161	23	2224
Goodwin, Landon R., assignor to Adjustable Cover Company, New York, N. Y. Book-binding	286,694	Oct. 16	1156	311	25	925
Goodwin, Levi H., Cincinnati, Ohio. Driving chain or belt	279,742	June 19	1397	390	23	2376
Goodwin, Levi H., Cincinnati, Ohio. Wheel for wheelbarrows	281,865	July 24	1929	527	24	355
Goodwin, Louis D., Manchester, N. H. Transmitting motion	273,982	Mar. 13	946	260	23	1004
Goodwin, O. B. (See Malcolmson, Thomas, assignor.)						
Goodwin, Octavius B. (See Malcolmson, Thomas, assignor.)						
Goodwin, Seth W. (See King and Goodwin.)						
Goodwin, William F., Stelton, N. J. Rotary valve	278,790	June 5	154	45, 46	23	2149
Goodwin, William H., Boston, assignor of one-half to T. A. Watson, Everett, Mass. Tap	272,425	Feb. 20	1062	299	23	640
Goodyear, Francis W., Springfield, Mass. Mechanical movement	289,645	Dec. 4	340	96	25	947
Goodyear & McKay Sewing Machine Company. (See French, Zachary T., assignor.)						
Goodyear, Stephen W., and M. A. Morris, Waterbury, Conn. Rotary wire-straightener	277,267	May 8	940	252	23	1794
Goodyear's Metallic Rubber Shoe Company. (See Baldwin, Charles S., assignor.)						
Gould, John C., Albany, N. Y. Sliding window for coaches	277,565	May 15	1301	349	23	1861
Gordon, Alexander. (See Garrett, Davis, assignor.)						
Gordon, Charles, Cleveland, Ohio. Lamp-fixture	275,641	Apr. 10	1018	275	23	1408
Gordon, Charles, Cleveland, Ohio. Cuspider	282,306	July 31	2494	685	24	455
Gordon, Charles, Cleveland, Ohio. Cuspider	282,307	July 31	2495	625	24	455
Gordon, Charles, Cleveland, Ohio. Spilltoon	287,534	Oct. 30	2214	601	25	431
Gordon, Cyrus D., Grand Crossing, Ill. Manufacturing linseed-oil	275,642	Apr. 10	1019		23	1408
Gordon, Ebenezer, New York, N. Y. Dynamo and magneto electric machine	271,979	Feb. 6	485	131	23	524
Gordon, Edgar T., New York, assignor to W. H. Gomes, Brooklyn, N. Y. Manufacturing turning-lathes	281,263	July 17	1159	320	24	218
Gordon, Edward F., and H. Hobbs, Concord, N. H. Steam-generator	271,329	Jan. 30	1859	539	23	375
Gordon, Edward F., and H. Hobbs, Concord, N. H. Steam-radiator	271,330	Jan. 30	1861	539	23	375
Gordon, Fred. W., Pittsburg, Pa. Apparatus for charging blast-furnaces	290,037	Dec. 11	898	234	25	1039
Gordon, Fred. W., assignor, by mesne assignments, to himself and J. P. Witherow, Pittsburg, Pa. Cinder-car	274,587	Mar. 27	1752	486	23	1152
Gordon, Fredrick W., assignor, by mesne assignments, to himself and J. P. Witherow, Pittsburg, Pa. Hot-blast stove	278,234	May 22	2109	581	23	2003
Gordon, George C., Mountsville, W. Va. Millstone-driver	283,597	Aug. 21	1360	380	24	758
Gordon, George W., Sutton, Ky. Hand corn-sheller	274,588	Mar. 27	1753	486	23	1158
Gordon, George W. and W. H., Detroit, Mich. Adjustable window-screen	282,716	Aug. 7	301	85	24	552
Gordon, Irving S., et al. (See Thompson, William H., assignor.)						
Gordon, James E. H., Kensington, county of Middlesex, England. Dynamo-electric machine	284,292	Sept. 4	165	{ 46 47 48	24	932
Gordon, James F., Rochester, N. Y. Grain-binder	283,096	Aug. 14	740	{ 207 208	24	639
Gordon, James F., Rochester, N. Y. Grain-harvesting machine	283,097	Aug. 14	742	{ 208 209	24	639
Gordon, Oscar L. (See Scott and Gordon.)						
Gordon, Perkins A., Milan, Ohio. Stove-truck	286,292	Oct. 9	654	174	25	129

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Gordon, Robert H., Reading, Pa. Apparatus for treating molten iron .....	287,273	Oct. 23	1889	517	25	361
Gordon, Robert W. (See Russell and Gordon.)						
Gordon, Solomon J. (See Ambuhl, Jacob, assignor.)						
Gordon, Solomon J. (See Boynton, Edward S., assignor.)						
Gordon, Upton M., et al. (See Miller, Frank, assignor.)						
Gordon, William, Boston, Mass. Sole-protector .....	276,803	May 1	350	93	23	1687
Gordon, William, Boston, Mass. Hcel-filing machine .....	285,997	Oct. 2	268	75	25	51
Gordon, William, Boston, Mass. Sole and heel edge burnishing machine .....	286,128	Oct. 2	428	117	25	79
Gordon, William C., Langham Hotel, county of Middlesex, England. Electric fire-alarm apparatus .....	287,664	Oct. 30	2399	647	25	466
Gordon, William H. (See Gordon, George W. and W. H.)						
Gordon, William H., and P. J. Boost, Detroit, Mich. Cheese-safe .....	272,875	Feb. 27	1650	462	23	751
Gordon, William H., and P. J. Boost, Detroit, Mich. Cheese-safe .....	274,119	Mar. 20	1128	311	23	1042
Gore, Charles E., and J. Eisele; said Eisele assignor to B. F. Masten, Lafayette, Ind. Brake-shoe .....	270,583	Jan. 16	931	269	23	199
Gore, Charles E., Lafayette, Ind., assignor of one-half to S. E. Ogden, Columbus, Ohio. Water-jacket for metallurgic furnaces .....	283,098	Aug. 14	745	209 210	24	639
Gore, Henry A., Goshen, Ind., assignor of one-half to De A. Dickinson, Grant, Iowa. Staple-puller .....	277,420	May 8	1120	300	23	1825
Gorham, Annie L., Boston, Mass. Ornamentation of ceramics .....	276,389	Apr. 24	1958	542	23	1585
Gorham, John M., Cleveland, Ohio. Wash-board protector .....	285,254	Sept. 18	1343	378	24	1150
Gorla, Camillo J., East St. Louis, Ill. Fence-post .....	277,708	May 15	1465	395	23	1890
Gorla, Camillo J., East St. Louis, Ill. Fence-post .....	287,923	Nov. 6	168	48	25	537
Gormly, Patrick, and L. Bridge, Philadelphia, Pa. Steam-radiator .....	270,053	Jan. 2	265	77	23	54
Gorrell, Albert, assignor of one-half to G. Carl, Shreve, Ohio. Shock-compressor .....	285,255	Sept. 18	1345	379	24	1150
Gorringe, Henry H., New York, N. Y. Apparatus for elevating and distributing dredged and other materials .....	275,643	Apr. 10	1020	275	23	1408
Gorton, Alonzo H., O. C. Patchell, and W. E. Gorton, Corning, N. Y. Railway-frog .....	287,274	Oct. 23	1891	517	25	362
Gorton, Charles, Philadelphia, Pa. Steam-generator .....	280,605	July 3	322	90	24	57
Gorton, Charles, Philadelphia, Pa. Steam-generator .....	280,606	July 3	323	90	24	57
Gorton, William E. (See Gorton, Patchell, and Gorton.)						
Gorton, Wilson L., Plano, Ill. Calendar .....	273,725	Mar. 13	618	166	23	947
Gosnell, Andrew J., Terre Haute, Ind. Dredging-bucket .....	283,598	Aug. 21	1361	380	24	758
Gosnell, Andrew J., assignor to himself and P. N. Staff, Terre Haute, Ind. Grappling device .....	272,953	Feb. 27	1744	487	23	766
Goss, Charles E., Lynn, assignor to himself and W. H. Goss, Brooklyn, N. Y. Attachment for shoe-lasts .....	279,377	June 12	968	268	23	2296
Goss, Joseph, assignor to Monitor Works, Beloit, Wis. Barbed fence .....	282,453	July 31	2688	738	24	439
Goss, William H. (See Goss, Charles E., assignor.)						
Goss, William H., Boston, Mass. Packing-case for holding bananas during transportation .....	276,027	Apr. 17	1496	411	23	1498
Gossett, William J., Liberty, Tenn., assignor of one-half to J. J. Williams and S. D. Bass. Car-coupling .....	278,235	May 22	2110	581	23	2009
Gosshorn, William, Waterloo, Pa. Gate .....	285,611	Sept. 25	1774	502	24	1234
Gosweiler, Jacob, Cleveland, Ohio. Crank .....	283,099	Aug. 14	747	210	24	640
Gotchall, William O., Garfield, Ill. Elevator for corn-shellers .....	288,426	Nov. 13	810	219	25	657
Gottheimer, Henry, Brooklyn, N. Y. Apparatus for checking and controlling horses .....	289,406	Dec. 4	40	12	25	894
Gottschalk, Daniel, Dunkirk, N. Y. Eaves-trough hanger .....	288,793	Nov. 20	1268	347	25	743
Gottschall, Oscar M., trustee. (See Edwards, Edgar A., assignor.)						
Goubert, Auguste A., Jersey City, N. J. Centrifugal machine .....	274,187	Mar. 20	1209	332 333	23	1057
Goubert, Auguste A., Jersey City, N. J. Centrifugal machine .....	280,465	July 3	166	45	24	30
Goudie, David R., London, Ontario, Canada. Child's money bank or box .....	282,978	Aug. 14	592	167	24	613
Gould, Appleton, Bangor, Me. Device for converting motion .....	276,028	Apr. 17	1497	412	23	1498
Gould, Fayette, New York, N. Y. Speaking-tube attachment .....	272,541	Feb. 20	1204	336	23	665
Gould, Forrest B., Boston, Mass. Microscopic photographic transparency .....	271,838	Feb. 6	308	84	23	495
Gould, Forrest B., Boston, Mass. Locket .....	277,022	May 8	645	168	23	1742
Gould, Herbert I., Providence, R. I. Hoop-skirt .....	290,676	Dec. 25	1655	456	25	1199
Gould, Herbert I., Providence, R. I. Hoop-skirt .....	290,677	Dec. 25	1656	457	25	1199
Gould, James, Lexington, Mass. Fertilizer .....	277,023	May 8	646	168	23	1742
Gould, John C., Chicago, Ill. Mouse-trap .....	280,369	July 3	37	10	24	9
Gould, Joshua P., Bangor, Me. Eaves-trough .....	280,373	July 3	483	136	24	86
Gould, Lyman, Norwich, Conn. Circular sawing machine .....	287,275	Oct. 23	1891	518	25	362
Gould, Lyman, Norwich, Conn. Sawing and gaining machine .....	290,327	Dec. 18	1188	333	25	1112
Gould, Orange P., Elmira, N. Y. Clothes-wringer .....	281,866	July 24	1930	527	24	355
Gould, Robert S., East Orange, N. J. Angle-joint for curtain-poles .....	275,480	Apr. 10	811	219	23	1373
Gould, Robert S., East Orange, N. J. Extension-bracket for curtain-poles .....	275,481	Apr. 10	811	220	23	1373
Gould, Simeon L., Gardiner, Me. Automatic pulp-extractor .....	277,268	May 8	942	252 253	23	1794
Gould, William B. (See Wayland, James, assignor.)						
Gould, William F., Stuart, Iowa. Railway-rail cushion and joint .....	280,030	June 26	1755	493	23	2445
Gould, William F., Stuart, Iowa. Railway-rail joint .....	285,406	Sept. 25	1529	430	24	1188
Goulton, Benjamin, Kaco, Wanganora, New Zealand. Saw-handle .....	270,419	Jan. 9	714	211	23	149
Gourdiat, Jude and L., Carare, France. Machine for stretching or tentering woven fabrics .....	280,031	June 26	1756	494	23	2445
Gourdiat, Laurent. (See Gourdiat, Jude and L.)						
Gourdiat, Laurent, Tarare, France. Apparatus for dyeing textile fabrics .....	290,678	Dec. 25	1658	457	25	1199
Gourdiere, Henry, New York, N. Y. Horseshoe .....	273,677	Mar. 6	564	149	23	930
Gourley, Seymour E., et al. (See Lattimer, Francis, assignor.)						
Gowan, George, Shell Lake, Wis. Circular sawing machine .....	288,173	Nov. 6	468	130	25	589
Gowan, James H., assignor of part to A. O. Hall, G. H. Peeke, and W. P. Black, Chicago, Ill. Car-wheel boring and truing machine .....	285,123	Sept. 18	1191	334	24	1122
Gowan, James H., assignor to W. P. Black, Chicago, Ill. Car-wheel-truing machine .....	287,762	Oct. 30	2537	683	25	491
Gowdey, John, Janesville, Wis. Fire-escape .....	280,306	June 26	2078	585	23	2503
Gowdy, Ryan, Shelbyville, Ill. Straw-stacker .....	285,747	Sept. 25	1950	551	24	1264
Gowing, George, San Francisco, Cal. Sewing-machine for sewing carpets and other heavy fabrics .....	287,276	Oct. 23	1892	519	25	362
Goy, William, assignor to A. Goy-Golay, Brassus, Switzerland. Stop-watch .....	278,127	May 22	1972	541	23	1985
Goy-Golay, A. (See Goy, William, assignor.)						
Goyne, Arthur H., et al. (See Goyne, Charles A., assignor.)						
Goyne, Charles A., assignor to himself, F. H., T. R., and A. H. Goyne, Ashland, Pa. Operating valves of steam-pumps .....	289,250	Nov. 27	1816	502	25	850
Goyne, Francis H., et al. (See Goyne, Charles A., assignor.)						
Goyne, Thomas R., et al. (See Goyne, Charles A., assignor.)						
Grace, Harry R., assignor to T. B. Hagstoz and C. N. Thorpe, Philadelphia, Pa. Advertising-card .....	279,866	June 19	1544	431	23	2401



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Grace, William, assignor of one-half to C. H. Mitchell, Chicago, Ill. Door-hanger.....	281,054	July 10	881	245	24	163
Gracey, Charles, Contention, Ariz. Ter. Amalgamating-pan.....	284,293	Sept. 4	169	48	24	932
Grader, George W., Marblehead, Mass. Baling and packing away cotton.....	281,490	July 17	1442	395	24	266
Graef, Charles H. (See Hackenberg, Julius, assignor.)						
Graeter, Henry A., Wooster, Ohio. Flour-bolt.....	273,836	Mar. 13	772	209	23	974
Graff, Christian, Upper St. Clair, Pa. Lock for milk-cans.....	284,412	Sept. 4	309	86	24	956
Gräff, Wilhelm. (See Schwintzer and Gräff.)						
Grafton, Edwin W., Chicago, Ill. Spring bed-bottom.....	287,120	Oct. 23	1697	465	25	328
Grafton, Henry, London, county of Middlesex, England. Tipping truck.....	274,314	Mar. 20	1375	377	23	1086
Grafton, William, Cuero, Tex. Insect-destroyer.....	290,877	Dec. 25	1915	528	25	1245
Graham, Andrew, assignor of one-half to J. C. Harwood and A. N. Minor, Clarion, Iowa. Wagon end-gate.....	274,757	Mar. 27	1946	541	23	1193
Graham, Daniel M., Boston, Mass. Apparatus for vaporizing and burning petroleum.....	276,578	May 1	46	14	23	1635
Graham, Daniel M., Chicago, Ill. Steam-boiler.....	286,695	Oct. 16	1157	311	25	225
Graham, Daniel M., Chicago, Ill. Steam-generator.....	287,824	Nov. 6	43	13	25	515
Graham, Daniel M., Chicago, Ill. Chimney for furnaces.....	290,573	Dec. 18	1526	420	25	1170
Graham, Dugald. (See McDonald, Hugh, assignor.)						
Graham, Irving H., Hopewell Junction, N. Y. Baking-pan.....	272,679	Feb. 20	1379	388	23	696
Graham, James A., London, county of Middlesex, England. Treating certain vegetable fibrous substances for the production of fiber for spinning, paper-making, &c.....	280,171	June 26	1907	.....	23	2472
Graham, James A., London, county of Middlesex, England. Covering iron with lead.....	280,466	July 3	168	.....	24	31
Graham, James B. (See Harper, John W., assignor.)						
Graham, James S. (See Hornbeck, Lorenzo D., assignor.)						
Graham, John, Chicago, Ill. Water-faucet.....	272,040	Feb. 13	567	153	23	550
Graham, John, Chicago, Ill. Lubricator.....	283,481	Aug. 21	1226	345	24	733
Graham, John, Chicago, Ill. Cut-off valve.....	283,773	Aug. 28	1581	446	24	812
Graham, John, Chicago, Ill. Cut-off for service-pipes.....	283,774	Aug. 28	1583	447	24	812
Graham, John W. (See Park and Graham.)						
Graham, Joseph P., Chester, Ky. Bilge-water ejector.....	271,060	Jan. 23	1523	439	23	310
Graham, William A., Carlisle, Pa. Brick-machine.....	289,769	Dec. 4	490	136	25	971
Graham, William H., Pittsburg, Pa. Device for arresting dust from ashes.....	281,867	July 24	1931	528	24	355
Grahser, Michael, Chicago, Ill. Velocipede.....	287,825	Nov. 6	43	13	25	515
Grainger, Charles J., Houston, assignor of one-half to J. W. Dibrell, Galveston, Tex. Removable can-top.....	290,985	Dec. 25	2067	569	25	1269
Gramke, Carl F. A., Stettin, Prussia, Germany. Grain purifier and separator.....	274,589	Mar. 27	1753	486	23	1158
Grandy, I. B., et al. (See Zinsmaier and Burt, assignors.)						
Grandy, Pierre J., Margaux, France. Harness.....	290,038	Dec. 11	830	234	25	1039
Granger, John, assignor of one-half to H. S. Smith, Jr., New Orleans, La. Machine for cleaning cotton and other fibers.....	271,578	Jan. 30	2176	626	23	431
Granger, Alvan P., Denver, Colo. Ore-separator.....	269,848	Jan. 2	35	12	23	9
Granger, Arthur O. (See Collins and Granger.)						
Granger, Arthur O., and J. H. Collins, Jr., assignors to A. O. Granger & Co., Philadelphia, Pa. Process of and apparatus for manufacturing gas.....	287,277	Oct. 23	1895	519	25	363
Granger & Co., A. O. (See Granger and Collins, assignors.)						
Granger, Dennis W., Franklin, N. Y. Guard for cattle.....	270,054	Jan. 2	266	77	23	54
Granger, Lewis, and E. F. Sibley, Armada, Mich. Fruit-drier.....	278,701	June 5	31	9	23	2130
Granger, Sumner C., assignor of one-half to J. Snyder, South Chicago, Ill. Apparatus for the manufacture of corn-sirup.....	271,235	Jan. 30	1737	503	23	354
Granite Roofing Company. (See Miner, Henry M., assignor.)						
Grannan, Louis, assignor of one-third to J. K. Rupertus, Philadelphia, Pa. Packing for valve-stems, &c.....	275,193	Apr. 3	399	110	23	1295
Granniss, Charles E., New Haven, Conn. Garment-clasp.....	272,954	Feb. 27	1745	487	23	766
Grant, Charles, Jr., Boston, Mass. Automatic cash and parcel carrier.....	287,278	Oct. 23	1898	519	25	364
Grant, Charles H. (See Gaston and Grant.)						
Grant, Charles V., et al. (See Millholland, Henry, assignor.)						
Grant & Co., Smith. (See Newell and Ladd, assignors.)						
Grant, Daniel. (See Ross and Grant.)						
Grant, David H., Walton, N. Y. Machine for cutting miters.....	290,768	Dec. 25	1781	492	25	1222
Grant, Frank, Chester, Mass. Bit-stock.....	280,607	July 3	324	91	24	58
Grant, Frank S., New York, N. Y. Hypodermatic syringe.....	286,605	Oct. 16	1036	280	25	204
Grant, James C., Newburg, N. Y. Hat-felting machine.....	270,422	Jan. 9	718	212	23	150
Grant, James M., Hartford, Conn. Tension-equalizer for thread-doubling machines.....	283,599	Aug. 21	1362	380	24	759
Grant, John A., Fremont, Ohio. Machine for cutting hoops.....	285,612	Sept. 25	1775	503	24	1234
Grant, Joseph C., New York, assignor to himself, W. W. Dusenberry, Brooklyn, N. Y., and A. E. Parkhurst, Plainfield, N. J. Method of and apparatus for making coffee and other beverages.....	276,579	May 1	47	14	23	1635
Grant, Smith, Lincoln, R. I. Hoisting-bucket.....	275,821	Apr. 17	1252	344	23	1455
Granville, Austyn W. (See Dement and Granville.)						
Grapho Pen Manufacturing Company. (See Hughes and Carwardine, assignors.)						
Grassler, William F., Williamsport, Pa. Car-axle box.....	270,421	Jan. 9	717	212	23	150
Gratz, Lewis C. (See Davis, Augustus B. and N. H., assignors.)						
Gratz, Louis C., et al. (See Davis, Nathan H., assignor.)						
Grau, Heinrich, Cassel, Prussia, Germany. Electro-magnetic motor for clocks.....	279,239	June 12	776	214	23	2266
Graver, Erwin S., Philadelphia, Pa. Car-coupling.....	272,680	Feb. 20	1380	388	23	696
Graves, Anna M., Newark, N. J. Glass-lined metal can.....	274,934	Apr. 3	65	17	23	1236
Graves, Charles G., assignor of one-half to E. Marsh, Onseida, Ill. Creamer.....	274,485	Mar. 27	1623	450	23	1135
Graves, Edward H. and L. L., and G. W. Brotter, Streator, Ill. Hoisting-machine.....	282,979	Aug. 14	592	167	24	613
Graves, Francis C., assignor of one-half to L. B. Plimpton, Hartford, Conn. Stamp-sticker.....	270,948	Jan. 23	1383	401	23	289
Graves, Gilbert S., assignor of one-half to H. Hamlin, Buffalo, N. Y. Starch-separator.....	270,304	Jan. 9	563	166	23	120
Graves, John B., assignor of one-half to W. H. Bennett, Lebanon, Tenn. Dental model.....	270,566	Jan. 9	909	262	23	187
Graves, Louis L. (See Graves and Brotter.)						
Graves, Marshall E., assignor to Shore Spring Bed and Shade Roller Company, Lowell, Mass. Bed-bottom.....	278,330	May 29	2259	619	23	2042
Graves, Ole O., Highland, Dak. Ter. Grain thrasher and separator.....	287,665	Oct. 30	2400	647	25	466
Graves, Oriel M., assignor of one-half to T. L. Graves, Eugene, Oreg. Dental chair.....	284,294	Sept. 4	170	48	24	932
Graves, T. L. (See Graves, Oriel M., assignor.)						
Graves, Willis N., assignor of one-half to Hydraulic Press Brick Company, St. Louis, Mo. Brick-kiln.....	277,421	May 8	1121	300	23	1825
Gravier, Alphonse I., Paris, France. Magneto and dynamo electric machine.....	276,390	Apr. 24	1958	542	23	1585
Gravier, Alphonse I., Paris, France. Regulator for electric-arc lamps.....	278,304	May 22	2214	607	23	2026

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Gray, Adelbert W., assignor, by mesne assignments, to Time Telegraph Company, New York, N. Y. Electric-clock escapement.....	274,445	Mar. 20	1552	425	23	1117
Gray, Charles M., Chicago, Ill., and W. L. Casaday, South Bend, Ind. Cultivator and fertilizer-distributor.....	270,584	Jan. 16	932	269 270	23	200
Gray, Charles W., Minneapolis, Minn. Lathe-chuck.....	286,426	Oct. 9	813	220	25	158
Gray, Christian, Buffalo, N. Y. Punch-holder.....	280,608	July 3	325	91	24	58
Gray, Daniel T., Jersey City, N. J. Filtering apparatus for purifying paraffine, &c.....	281,491	July 17	1444	395	24	266
Gray, Elisha, Highland Park, Ill., and F. L. Pope, Elizabeth, N. J. Signaling apparatus for telephone and telegraph lines.....	284,003	Aug. 28	1877	526 527	24	863
Gray, Gardner B. and W. B., Cardington, Ohio. Gas or vapor engine.....	287,666	Oct. 30	2404	048	25	467
Gray, George, New York, N. Y. Muffled school-slate.....	286,196	Oct. 9	510	141	25	105
Gray, Gorham, Boston, Mass. Forming metal wire.....	276,391	Apr. 24	1961	543	23	1585
Gray, Gorham, Boston, Mass. Telegraph and telephone wire.....	290,769	Dec. 25	1783	492	25	1223
Gray, James C. (See Griffith, William, assignor.)						
Gray, James R., Ayer, assignor to G. Draper & Sons, Hopedale, Mass. Spindle and support or bearing therefor.....	287,279	Oct. 23	1899	519	25	364
Gray, James R., Ayer, assignor to Sawyer Spindle Company, Boston, Mass. Spindle for ring-spinning frames.....	288,230	Nov. 13	544	150	25	612
Gray, James R., Ayer, assignor to Sawyer Spindle Company, Boston, Mass. Bolster for spinning-frame spindles.....	289,084	Nov. 27	1622	449	25	814
Gray, James R., Ayer, assignor to Sawyer Spindle Company, Boston, Mass. Spindle for ring-spinning frames.....	289,344	Nov. 27	1932	537	25	872
Gray, John. (See Cole, Wesley, assignor.)						
Gray, Joseph V., Rushville, Ind. Spring bed-bottom.....	270,949	Jan. 23	1390	401	23	289
Gray, Joshua, Medford, Mass. Railway-signal.....	270,305	Jan. 9	565	166	23	120
Gray, Joshua, Medford, Mass. Dynamo-electric machine.....	285,027	Sept. 18	1080	301 302	24	1103
Gray, Josiah, assignor to himself, W. Hollenbeck, C. B. Sheffer, and J. R. Reed, Chicago, Ill. Railway-switch bridle.....	270,544	Jan. 9	882	256	23	182
Gray, Josiah, and W. Hollenbeck, assignors to themselves, C. B. Sheffer, and J. R. Reed, Chicago, Ill. Railway-switch.....	275,038	Apr. 3	207	56	23	1261
Gray, Leroy, Sycamore, Ill. Beam for shovel-plows.....	283,390	Aug. 21	1115	315	24	714
Gray, Leroy, Sycamore, Ill. Cultivator.....	283,775	Aug. 28	1584	447 448 449	24	812
Gray, Lyman C., Fort Dodge, Iowa. Postal cabinet.....	275,194	Apr. 3	400	110 111	23	1295
Gray, Oliver R., et al. (See Cline, John B., assignor.)						
Gray, Richard, and B. R. Abbott, Bloomington, Ill. Iron pile.....	272,426	Feb. 20	1063	299	23	640
Gray, Richard E., Williamsport, Pa. Car-coupling.....	289,407	Dec. 4	41	12	25	894
Gray, Samuel J., Fort Gratiot, Mich. Railway-guard.....	288,770	Dec. 25	1783	493	25	1223
Gray, Sylvester, Long Island City, N. Y. Refrigerator.....	290,427	Nov. 13	811	219	25	657
Gray, Walter G., assignor to himself and W. H. Burgess, Ringgold, Tenn. Corn-planter.....	287,121	Oct. 23	1698	465	25	328
Gray, William, Romeo, Mich. Hand corn-planter.....	290,574	Dec. 18	1527	420	25	1171
Gray, William B. (See Gray, Gardner B. and W. B.)						
Gray, William D., Milwaukee, Wis. Apparatus for the gradual reduction of grain.....	271,331	Jan. 30	1861	540 541	23	375
Gray, William D., Milwaukee, Wis. Test-plate for roller-mills.....	273,065	Feb. 27	1872	526	23	789
Gray, William D., Milwaukee, Wis. Flour-dressing machine.....	278,702	June 5	32	10	23	2130
Gray, William D., Milwaukee, Wis. Machine for the gradual reduction of grain.....	283,339	Aug. 14	1041	293	24	694
Gray, William H., West Falls, Md. Shingle-sawing machine.....	278,128	May 23	1974	541 542	23	1985
Gray, William P., Ainsworth, Wash. Ter. Life-preserver holder.....	277,269	May 8	943	253	23	1795
Graydon, James W., Newport, R. I., assignor, by mesne assignments, to Coast and Harbor Defence Company, of New York. Submarine torpedo.....	270,950	Jan. 23	1390	401 402	23	289
Graydon, Thomas W., Cincinnati, Ohio. Lamp.....	270,430	Jan. 9	715	211	23	149
Grebe, Henry, Omaha, Nebr. Hay-gatherer.....	272,237	Feb. 13	809	225	23	592
Greeley, Randall, Salem, Mo. Stump-puller.....	275,644	Apr. 10	1021	275	23	1408
Greely, Benjamin J., Boston, Mass. Garment-supporter.....	287,020	Oct. 23	1573	434	25	303
Greely, Charles B. (See Holborn, Robert, assignor.)						
Green, Albert, New York, N. Y. Toy.....	279,743	June 19	1398	390	23	2376
Green, Albert E., Helron, Wis. Harrow.....	284,837	Sept. 11	835	233	24	1052
Green, Alexander, assignor of one-half to J. Hepfinger, Delta, Ohio. Churn-motor.....	290,639	Dec. 18	1606	441	25	1183
Green, Anna M., Denver, Colo. Metallic eyelet-fastening for drawers.....	280,032	June 26	1760	494	23	2445
Green, Charles. (See Wilson, William, Jr., assignor.)						
Green, Charles, Readfield, Me. Clutch-hook.....	274,935	Apr. 3	66	18	23	1237
Green, Charles W., Brooklyn, N. Y. Square.....	281,761	July 24	1797	490	24	332
Green, Duby, Cincinnati, Ohio. Thill coupling and detacher.....	270,658	Jan. 16	1030	296	23	217
Green, Duby, Cincinnati, Ohio. Vehicle-brake.....	282,717	Aug. 7	302	85	24	552
Green, Elisha K., Los Angeles, Cal. Pipe-grapple.....	281,492	July 17	1446	395	24	266
Green, Elmer, North East, Pa. Window shade and screen.....	289,408	Dec. 4	42	12	25	894
Green, Furney F., Comanche, Tex. Veterinary medicine.....	288,630	Nov. 20	1062		25	708
Green, George. (See Hamilton, Miles E., assignor.)						
Green, George F., Kalamazoo, Mich., assignor to W. N. Whiteley, J. Fassler, and O. S. Kelly, Springfield, Ohio. Automatic grain-binder.....	277,709	May 15	1466	395 396	23	1890
Green, Inah M., and J. P. Birch, Philadelphia, Pa. Conduit for electric wires.....	284,413	Sept. 4	310	86	24	956
Green, James A., assignor to Green & Stevens, Bay City, Mich. Lubricator.....	288,328	Nov. 13	676	186	25	632
Green, James H., Brooklyn, N. Y. Supporting and preserving telegraphic conductors.....	275,195	Apr. 3	402	111	23	1295
Green, John, assignor of one-half to R. M. Collins, St. Louis, Mo. Attachment for cutter-heads.....	271,199	Jan. 23	1696	489	23	338
Green, John C., Peoria, Ill. Vegetable-cutter.....	272,041	Feb. 13	568	154	23	551
Green, John J., Bridgeport, Conn. Whiffletree-hook.....	275,196	Apr. 3	404	111	23	1296
Green, John S. (See Barber, Wanton C., assignor.)						
Green, Joseph A. (See Risley, Caleb M., assignor.)						
Green, Joseph W., Jr., and A. Smith, assignors to Glendale Elastic Fabric Company, East Hampton, Mass. Elastic or cord fabric.....	283,100	Aug. 14	749	211	24	640
Green, Lot, Rushville, Ind. Two-wheeled vehicle.....	281,994	July 24	2082	571	24	381
Green, Monroe, Brooklyn, N. Y. Corkscrew.....	276,604	May 1	350	94	23	1687
Green, Perley, and E. P. Duncklee, Stoncham, Mass., assignors to said Duncklee, trustee. Boot and shoe sole.....	289,646	Dec. 4	341	96	25	947
Green, Salmon T., and L. M. Heald, Charlotte, Mich. Plow.....	283,236	Aug. 14	913	254 255	24	670
Green, Samuel. (See Dietzel and Green.)						
Green & Stevens. (See Green, James A., assignor.)						
Green, William C. (See Hilliard and Green.)						
Green, William T., Covington, Ky. Plug-tobacco press.....	276,680	May 1	188	48	23	1656



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Green, William W., assignor to Garden City Fan Company and L. G. Stark, Chicago, Ill. Exhaust or blower fan	272,542	Feb. 20	1205	336	23	665
Greenaway, Benjamin, Louisville, Ky. Overshoe for horses	287,280	Oct. 23	1900	520	25	364
Greene, Edmund B., and C. J. Emerson, Jr., Westfield, Mass. Metronome	271,448	Jan. 30	2016	581	23	404
Greene, Henry. (See Box, William W., assignor.)						
Greene, Henry, Philadelphia, Pa. Fire-escape	279,744	June 19	1399	391	23	2376
Greene, Isaac T., assignor of one-half to D. E. Smith, Milford, Conn. Hand-rubber for washing	285,256	Sept. 18	1345	379	24	1150
Greene, J. Ashton. (See Baxter, William, assignor.)						
Greene, J. Ashton. (See Blake, Henry, assignor.)						
Greene, Jonathan H., Philadelphia, Pa., assignor to himself, D. W. Wagner, New Haven, Conn., and R. T. Wilson, Philadelphia, Pa. Utilizing waste oil-cloth, &c.	276,029	Apr. 17	1498	-----	23	1499
Greene, Nathan H., Montreal, Quebec, Canada. Freight-car	283,340	Aug. 14	1043	293	21	695
Greene, Richard T., Sank Centre, Minn. Hook for suspending ladders	274,758	Mar. 27	1948	541	23	1193
Greene Stove Company. (See Miller, John A., assignor.)						
Greene, William A., Brooklyn, N. Y. Cooking-stove	271,626	Feb. 6	52	14, 15	23	449
Greene, William A., Brooklyn, N. Y. Boiler-furnace	271,627	Feb. 6	55	15, 16	23	450
Greene, William J., and J. L. Herlick, Marquette, Mich. Twine-adjuster	284,414	Sept. 4	312	87	24	956
Greenebaum, Moses S., et al. (See Chamberlain and Harris, assignors.)						
Greener, Richard, assignor of one-half to W. A. Hedden, New Albany, Ind. Oversock	290,640	Dec. 18	1607	442	25	1183
Greenfield, Edwin T., assignor of one-half to S. Bergmann, New York, N. Y. System of electrical distribution	278,535	May 29	2514	686	23	2088
Greenhalgh, Henry. (See Greenhalgh, John B. and H.)						
Greenhalgh, John B., Blackstone, Mass. Lamp-burner	275,901	Apr. 17	1348	371	23	1473
Greenhalgh, John B. and H., Blackstone, Mass. Nut-lock	281,055	July 10	882	245	24	163
Greening, Winfield S., Decatur, assignor to D. Blalock, Macon County, Ill. Sash-cord guide	280,609	July 3	326	91	24	58
Greenlee, Andrew M. (See Houck, Greenlee, and Houck.)						
Greenlee, Ralph S., assignor of one-half to R. L. Greenlee, Chicago, Ill. Mortising-machine	283,341	Aug. 14	1044	294	24	695
Greenlee, Robert L. (See Greenlee, Ralph S., assignor.)						
Greenough, John J., Syracuse, N. Y. Universal-jointed arm. (Reissue)	10,278	Jan. 30	2184	628	23	433
Greenwood, James, et al. (See Maybury, William, assignor.)						
Greenwood, John, Rochester, N. Y. Elevator	273,273	Mar. 6	33	11	23	840
Greenwood, Thomas H. (See Gilbert and Greenwood.)						
Greer, Howard, Chicago, Ill. Roll for slitting iron	281,184	July 10	1047	290	24	192
Greer, Howard, Chicago, Ill., assignor of one-half to G. H. Christy, trustee, Sewickley, Pa. Machine for making spikes	285,355	Sept. 18	1460	411	24	1170
Greer, Joseph A., Galveston, Tex. Compound for the manufacture of artificial stone	269,849	Jan. 2	37	-----	23	10
Greer, William N., Watertown, Dak. Ter. Fish-trap hook	280,610	July 3	327	91	24	58
Greeven, Georg A., Bruchl, Prussia, Germany. Steam vacuum-pump	283,101	Aug. 14	750	211	24	640
Gregerson, George A., Rochester, Minn. Neck-yoke	274,759	Mar. 27	1948	542	23	1194
Gregg, Cyrus A., et al. (See Swartout, William H., assignor.)						
Gregg, Edgar C. (See Fell and Gregg.)						
Gregg, Edgar C., and J. P. Fell, Wheeling, Mo. Hay stacker and loader	283,882	Aug. 28	1707	481	24	833
Gregg, Elliot T., Marshall, Mich. Cultivator	274,590	Mar. 27	1755	487	23	1158
Gregg, Isaac N., and E. Briody, Santa Cruz; said Gregg assignor of one-half to T. Brady, Santa Cruz County, Cal. Tap and faucet	279,745	June 19	1400	391	23	2377
Gregg, Washington P., Boston, Mass. Roller-skate	275,482	Apr. 10	812	220	23	1373
Gregg, William, assignor to himself and J. A. Fowler, Mason, Mich. Device for handling fruit-cans	274,591	Mar. 27	1755	487	23	1158
Gregory, Charles E. (See Buschick, Gustavus E., assignor.)						
Gregory, Fred L., Neligh, Nebr. Bird-perch	276,392	Apr. 24	1062	543	23	1586
Gregory, Fred L., Neligh, Nebr. Second-hand attachment for clocks	281,493	July 17	1447	396	24	267
Gregory, George, Allegheny, Pa. Oscillating steam-engine	285,998	Oct. 2	269	75	25	51
Gregory, George W. (See Haynes, Edgar K., assignor.)						
Gregory, George W., assignor to E. L. Sprague, Boston, Mass. Boot or shoe	290,986	Dec. 25	2067	569	25	1269
Gregory, John, and V. Lapham, Marion, Ohio. Grain-drier	288,428	Nov. 13	812	220	25	657
Gregory, John H., Providence, R. I. Button	288,053	Nov. 6	331	93	25	564
Gregory, Paul, Davenport's Landing, Cal. Mold-board for side-hill plows	285,481	Sept. 25	1616	453	24	1204
Gregory, Thomas J. (See Day and Gregory.)						
Greig, Bennet, New York, N. Y. Frame for feather ornaments	290,679	Dec. 25	1659	457	25	1199
Greig, George, Edinburgh, Scotland. Steam-plow	279,937	June 26	1639	460	23	2424
Greives, John, Paterson, N. J. Electrical insulating material	278,536	May 29	2515	-----	23	2088
Grellner, Christopher J., St. Louis, Mo. Hammer	275,645	Apr. 10	1022	276	23	1408
Grellner, Christopher J., St. Louis, Mo. Hammer	282,208	July 31	2496	685	24	455
Grens, John, Leyden, N. Y. Whiffletree	287,376	Oct. 23	2018	549	25	385
Gresham, James. (See Sheward and Gresham.)						
Gretschel, Alfred H., Leipsic, Germany. Saw-guard	285,407	Sept. 25	1530	431	24	1188
Greve, Herman, St. Paul, Minn. Electric ore-separator	282,073	July 31	2189	601	24	405
Grev, Robert I. (See Pritts, Peter C., assignor.)						
Gridley, Nelson C., et al. (See Chambers, Josephus C., assignor.)						
Gridley, Nelson C. (See Hibbard, George E., assignor.)						
Grier, George S., Milford, Del. Fruit-drier	284,838	Sept. 11	836	234	24	1052
Grier, Robert M. (See Osmer and Grier.)						
Grier, William W., Hulton, Pa. Fifth-wheel for vehicles	288,997	Nov. 27	1511	418	25	795
Griesche, Gustav. (See Edenborn and Griesche.)						
Griesenauer, John, Dardenne, Mo. Fire-escape	289,908	Dec. 11	673	187	25	1011
Griest, John M., assignor to W. Scates, Chicago, and T. S. Ridgway, Shawneetown, Ill. Ruffling attachment for sewing-machines	280,926	July 10	729	204	24	134
Griest, John M., assignor, by mesne assignments, to Chicago Attachment Company, Chicago, Ill. Riveting metals together	290,229	Dec. 18	1062	297	25	1090
Grievess, Andrew, Allegheny, Pa. Welding apparatus	285,124	Sept. 18	1193	334	24	1122
Griffin, George H. (See Bailey and Griffin.)						
Griffin, Dora G., Grand Rapids, Mich. Device for exposing hair to the action of heated vapors	273,129	May 22	1975	543	23	1985
Griffin, George F., and C. W. Dixon, assignors to New England Patent Fire Escape Company, Boston, Mass. Line-carrying projectile	289,909	Dec. 11	674	188	25	1011
Griffin, George W., Franklin Falls, N. H. Handsaw	278,935	June 5	395	108	23	2190
Griffin, John H. (See Wallace and Griffin.)						
Griffin, John S., Cleveland, Ohio. Rolling-mill	282,718	Aug. 7	303	85, 86	24	552
Griffin, P. Henry, Detroit, Mich. Car-wheel-cleaning device	270,306	Jan. 9	567	106	23	121
Griffin, Stockton L. (See Bell, Samuel H., assignor.)						
Griffin, William W., Boston, Mass. Fire-escape	275,197	Apr. 3	405	{ 111 112 }	23	1296
Griffing, Ahner A., Jersey City, N. J. Steam-radiator	273,066	Feb. 27	1873	526	23	789
Griffith, Alexander L., Beallsville, Ohio. Road grader and scraper	276,393	Apr. 24	1963	543	23	1586
Griffith, Hazael, and L. F. Ramey, Terre Haute, Ind. Grain-meter	287,535	Oct. 30	2216	602	25	431

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Griffith, Peleg T., Danby, Vt. Hydraulic motor .....	290,039	Dec. 11	830	235	25	1040
Griffith, Thomas J. (See Lynch and Griffith.) .....						
Griffith, Thomas M., Arlington, N. J. Suspension-bridge .....	285,257	Sept. 18	1346	{ 379 380 }	24	1150
Griffith, William, assignor to himself and J. C. Gray, Pittsburg, Pa. Purifying molten iron .....	289,085	Nov. 27	1623	.....	25	814
Griffith, William, assignor to himself and J. C. Gray, Pittsburg, Pa. Purifying molten iron .....	289,086	Nov. 27	1624	.....	25	814
Griffith, William, assignor to himself and J. C. Gray, Pittsburg, Pa. Purifying molten iron .....	289,087	Nov. 27	1624	.....	25	814
Griffith, William, assignor to himself and J. C. Gray, Pittsburg, Pa. Purifying molten iron .....	289,088	Nov. 27	1625	.....	25	814
Griffiths, Amos E., Philadelphia, Pa. Pulverizing apparatus .....	289,089	Nov. 27	1626	.....	25	814
Griffiths, Amos E., Philadelphia, Pa. Crushing and pulverizing apparatus .....	276,394	Apr. 24	1964	544	23	1586
Griffiths, Morris W., Middle Granville, N. Y. Harrow .....	288,940	Nov. 20	1439	396	25	775
Griffiths, Thomas. (See Clapp and Griffiths.) .....	270,055	Jan. 2	267	77, 78	23	55
Griffiths, William H., Somerville, Mass. Barrel-stave machine .....	273,274	Mar. 6	35	11	23	840
Griffiths, William J. (See Williams, Bennett, assignor.) .....						
Griggs, A. Irving, Westford, N. Y. Slop-jar mat .....	273,726	Mar. 13	619	166	23	947
Griggs, A. Irving, Westford, N. Y. Stove-board .....	279,240	June 12	778	214	23	2266
Griggs, George O., St. Louis, Mo. Lathe-rest .....	271,702	Feb. 6	139	38	23	464
Grigsby, Tyrrell L., Yountville, Cal. Gang-plow .....	287,536	Oct. 30	2219	602	25	431
Grill, Emil, <i>et al.</i> (See Groehl, H. William, assignor.) .....						
Grilley, Thomas M., assignor of one-half to G. W. Bocemsdes, West Haven, Conn. Folding knife and fork .....	288,174	Nov. 6	470	131	25	589
Grim, Charles M., Maple Park, Ill. Harvester .....	289,090	Nov. 27	1626	450	25	814
Grim, Joseph. (See Higgins and Grim.) .....						
Grimes, Andrew. (See Deeds, John B., assignor.) .....						
Grimes, Richard W., and J. Fern, Scranton, Pa. Miner's lamp .....	280,738	July 3	483	137	24	86
Grimm, Asmus H. (See Hien and Grimm.) .....						
Grimm, Paul H. (See Duryea and Grimm.) .....						
Grimm, Paul H., assignor of one-half to J. Duryea, Glen Cove, N. Y. Injector-blower .....	282,074	July 31	2190	601	24	405
Grimm, William G., Philadelphia, Pa. Handle for carrying bundles, &c. ....	275,902	Apr. 17	1348	371	23	1473
Grimmett, Charles F., and J. Cook, Birmingham, county of Warwick, England. Cornice-pole and curtain-suspender .....	288,231	Nov. 13	545	150	25	612
Grimston, George S., Brockley Road, Brockley, county of Kent, England. Gas-burner apparatus .....	274,592	Mar. 27	1756	487	23	1158
Grinder, Alonzo, Altoona, Pa. Railway-switch stand .....	285,356	Sept. 18	1462	411	24	1170
Grinnell, Frederick. (See Delmage, Christopher L., assignor.) .....						
Grinnell, Frederick. (See Grinnell, Richard W. and F.) .....						
Grinnell, Frederick, Providence, R. I. Splice .....	277,478	May 15	1195	321	23	1845
Grinnell, Richard W. and F., Providence, R. I.; said Richard W. Grinnell assignor to said F. Grinnell. Locked joint .....	277,479	May 15	1196	321	23	1845
Grinnell, Richard W. and F., Providence, R. I.; said Richard W. Grinnell assignor to said F. Grinnell. Locked joint .....	277,480	May 15	1197	321	23	1845
Grinnell, Richard W. and F., Providence, R. I.; said Richard W. Grinnell assignor to said F. Grinnell. Automatic fire-extinguisher .....	277,481	May 15	1198	322	23	1845
Griscom, John P., Pottsville, Pa. Diamond-drill .....	272,681	Feb. 20	1381	388	23	696
Griscom, William M., <i>et al.</i> (See Rippien, Adolph, assignor.) .....						
Griscom, William M., Reading, Pa. Apple parer, corer, and slicer .....	270,585	Jan. 16	934	270	23	200
Grismore, George D. (See Ferguson, Grismore, and Wetherill.) .....						
Grist, Richard, and D. Patin, assignors of one-third to R. Grist, Philadelphia, Pa. Shoe ..	286,129	Oct. 2	430	117	25	79
Grist, Robert. (See Grist and Patin, assignors.) .....						
Grist, Thomas A., Cedar Rapids, Iowa. Automatic governor for steam-engines .....	277,710	May 15	1469	397	23	1890
Griswold, Albert F., Erie, Pa. Facing for saw-mill head-blocks .....	281,762	July 24	1798	491	24	332
Griswold, Alice L. B., Philadelphia, Pa. Adjustable pattern for garments .....	281,056	July 10	883	246	24	163
Griswold, Charles C., Chicago, Ill. Fire-escape .....	279,150	June 12	687	188	23	2251
Griswold, James B., Sedalia, Mo. Double-acting force-pump .....	276,172	Apr. 24	1675	463	23	1537
Griswold, John W., Troy, N. Y. Bale-tie .....	274,486	Mar. 27	1624	450	23	1136
Griswold, Lev. (See Holden and Griswold.) .....						
Griswold, Lewis F. (See Parker and Griswold.) .....						
Griswold, Lewis F., Meriden, and R. A. Wooding, Kensington, assignors to C. Parker Company, Meriden, Conn. Clamp for lamp-shades .....	276,030	Apr. 17	1498	412	23	1499
Griswold, Lewis F., and F. H. Chapman, assignors to C. Parker Company, Meriden, Conn. Extension-fixture for chandeliers .....	282,628	Aug. 7	186	54	24	532
Griswold, Matthew, and E. P. Selden, Erie, Pa.; said E. P. Selden, administrator of S. Selden, deceased. Waffle-iron .....	270,659	Jan. 16	1031	296	23	217
Griswold, Norris. (See Holloway and Griswold.) .....						
Griswold, Robert, Woodey, Kans. Hay and grain rack .....	279,938	June 26	1642	460	23	2425
Griswold, Robert, Woodey, Kans. Elevator for unloading and stacking hay and loose grain .....	279,939	June 26	1643	460	23	2425
Griswold, Robert, Woodey, Kans. Apparatus for unloading hay and grain .....	287,667	Oct. 30	2405	648	25	467
Griswold, Thaddeus M., Rochester, N. Y., assignor of one-half to J. P. E. Parker, Nashua, N. H. Whip .....	273,678	Mar. 6	565	150	23	930
Groble, James, Chicago, Ill. Broom-support .....	281,185	July 10	1048	290	24	192
Groehl, H. William, assignor to himself, J. Weissenbach, E. Grill, and F. Miller, Vincennes, Ind. Vertically-adjustable desk .....	281,494	July 17	1447	396	24	267
Groebli, Joseph A., assignor to Kursheedt Manufacturing Company, New York, N. Y. Embroidering-machine .....	283,707	Aug. 21	1489	{ 419 420 421 }	24	783
Groesbeck, David, New York, N. Y. Ventilator .....	290,041	Dec. 11	832	{ 235 236 }	25	1040
Groesbeck, David, assignor to Groesbeck & Wright Spark Arrester Company, New York, N. Y. Spark-arrester for locomotives .....	270,423	Jan. 9	719	212	23	150
Groesbeck, David, J. A. Sterling, C. A. Ball, New York, N. Y., and D. P. Wright, Norwood, Mass., assignors to Groesbeck & Wright Spark Arrester Company, New York, N. Y. Spark-arrester .....	270,424	Jan. 9	723	{ 213 214 }	23	151
Groesbeck, David, assignor to Groesbeck & Wright Spark Arrester Company, New York, N. Y. Steam-boiler .....	284,415	Sept. 4	313	87	24	956
Groesbeck & Wright Spark Arrester Company. (See Groesbeck, David, assignor.) .....						
Groesbeck & Wright Spark Arrester Company. (See Groesbeck, Sterling, Ball, and Wright, assignors.) .....						
Groff, Aaron B., and A. E. Strayer, assignors of one-third to O. C. Groff, Lilleyville, Pa. Car-coupling .....	289,529	Dec. 4	197	55	25	921



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Groff, Charles R., St. Paul, Minn. Preparing coffee compounds	270,787	Jan. 16	1192	344	23	248
Groff, Joseph G., Connersville, Ind. Saw-guard	277,711	May 15	1470	397	23	1890
Groff, Joseph G., Connersville, Ind. Saw-guard	278,130	May 22	1976	543	23	1985
Groff, Joseph G., Connersville, Ind. Saw-guard	284,199	Sept. 4	53	15	24	913
Groff, Oliver C. (See Groff and Strayer, assignors.)						
Grogan, James H., Rome, N. Y. Platform-spring	271,703	Feb. 6	139	39	23	464
Grogan, John. (See Clothier, Grogan, and McMullen.)						
Groh, John, Shanesville, Ohio. Thill-coupling	276,580	May 1	50	14	23	1636
Grom, Henry, assignor of one-half to J. Grom, Newark, N. J. Forming sheet-metal articles. (Reissue.)	10,356	July 10	1104	304	24	202
Grom, John. (See Grom, Henry, assignor.) (Reissue.)						
Groom, Levi J., assignor of two-thirds to T. D. Stetson, New York, N. Y. Bath and wash tub	289,345	Nov. 27	1932	537	25	873
Groot, J. Bleecker, Albany, N. Y. Wire-bound box	281,264	July 17	1160	320	24	218
Gros, Adrien, and C. Salbreux, Dijon, France. Umbrella-hat	270,660	Jan. 16	1033	296	23	218
Gröschel, Anton. (See Küchenmeister, Gröschel, and Rauchenbichler.)						
Gross, Alexander P., San Francisco, Cal. Harness-coupling	274,487	Mar. 27	1625	451	23	1136
Gross, Alexander P., San Francisco, Cal. Dough-raiser	280,370	July 3	38	10	24	9
Gross, Charles L. (See Hildenbrand, George F., assignor.)						
Gross, Elam A., Camden, N. J. Railway-bridge indicator	289,770	Dec. 4	491	137	25	972
Gross, Frederick H., Deer Isle, Me. Sash-holder	275,903	Apr. 17	1349	371	23	1473
Gross, Henry, Tiffin, Ohio. Car-coupling	276,681	May 1	189	49	23	1656
Gross, John. (See Tait and Gross.)						
Gross, Magnus, New York, N. Y. Retort for making gas	277,270	May 8	944	253	23	1795
Gross, Magnus, New York, N. Y. Protecting superheating-pipes	278,537	May 29	2516	686	23	2088
Gross, Magnus, New York, N. Y. Steam-superheater	284,958	Sept. 11	979	276	24	1079
Grossord, Samuel, Moussières, France. Obtaining artificial precious stones	280,467	July 3	169	.....	24	31
Grossord, Samuel, Les Moussières, France. Preparing precious and imitation precious stones	290,040	Dec. 11	831	.....	25	1040
Grossmann, Albert and E., New York, N. Y. Attachment to bridles	273,511	Mar. 6	340	92	23	892
Grossmann, Edward. (See Grossmann, Albert and E.)						
Grossmann, George. (See Asbury, Neider, and Grossmann.)						
Grote, Ernst A., Freudenberg, near Siegen, Prussia, Germany. Substitute for coffee	271,332	Jan. 30	1864	.....	23	376
Grotz, Charles, assignor to Garretson Ruffler Company, Oskaloosa, Iowa. Ruffling attachment for sewing-machines	272,427	Feb. 20	1064	300	23	641
Grotz, Charles, assignor to Ottumwa Iron Works, Ottumwa, Iowa. Machine for nicking screws	278,132	May 22	1980	543	23	1986
Grout, Charles P., New York, N. Y., assignor to J. W. and J. C. White and H. M. Lewis, trustees, Philadelphia, Pa. Dental-engine hand-piece	277,126	May 8	778	204	23	1765
Grout, Frank R., Chicago, Ill. Sizing for gilding on glass	282,629	Aug. 7	188	205	24	533
Grout, Frank R., Chicago, Ill. Machine for spirally corrugating sheet-metal tubes	286,293	Oct. 9	654	174	25	129
Grout, William L. (See Hadley and Grout.)						
Gronowen, Hubert, Leipsic, Saxony, Germany. Manufacture of strontium carbonate	280,172	June 26	1909	.....	23	2473
Grove, William H., and G. H. Steely, assignors of one-third to J. M. and T. J. Timmons and W. Scott, Circleville, Ohio. Straw-stacker	278,131	May 22	1978	543	23	1986
Grover, Albert P., Eureka, Wis. Combined seeder, harrow, and roller	286,427	Oct. 9	814	221	25	158
Grover, Benjamin P. (See Parker and Grover.)						
Grover, George A., Boston, and E. E. Warden, Somerville, Mass. Elevator-lock	287,668	Oct. 30	2406	648	25	467
Groves, Henry W., Indianapolis, Ind., assignor of one-half to Sinkler, Davis & Company, of Indiana. Portable hand saw mill	278,936	June 5	396	108	23	2101
Groves, Leroy S., assignor of one-half to J. W. Shute, Afton, Iowa. Apparatus for generating and carbureting hydrogen gas	273,679	Mar. 6	566	150	23	930
Groves, Samuel D., Sacramento, Ky. Nut-lock	274,188	Mar. 20	1210	333	23	1058
Grow, Marquis D., Dubuque, Iowa. Turbine water-wheel	272,428	Feb. 20	1065	300	23	641
Gruaz, Timothy. (See Brun, Jean J. L., assignor.)						
Gruaz, Timothy, Highland, Ill. Combination-cipher	283,883	Aug. 28	1708	481	24	833
Grubb, William H., Hannibal, Mo. Buck-saw	290,042	Dec. 11	836	236	25	1040
Grube, Jefferson, Auburn, Ind., assignor to Newark Machine Company, Newark, Ohio. Seed-cleaner	271,839	Feb. 6	309	84	23	495
Gruber, John P., Jersey City, N. J. Vent or vent-bung	271,236	Jan. 30	1739	503	23	355
Gruber, John P., Jersey City, N. J. Faucet attachment	275,483	Apr. 10	815	220	23	1373
Grüdelbach, Paul, Berlin, assignor to Schaeffer & Budenberg, Buckau, near Magdeburg, Germany. Cut-off-valve gear	273,512	Mar. 6	342	92	23	892
Gruenebaum, Jacob, assignor of one-half to C. A. Hess, New York, N. Y. Flask or bottle	284,127	Aug. 28	2035	565	24	890
Grumbach, John E., Jersey City, N. J. Paper lantern	277,712	May 15	1471	397	23	1891
Grunder, Christian, and J. H. Moyer, Reading, Pa. Thill loop or tug	279,151	June 12	688	188	23	2251
Grunder, Christian, and J. H. Moyer, Reading, Pa. Roll made from leather disks	289,910	Dec. 11	676	188	25	1011
Grundy, Arthur, assignor to himself, H. A. Landgraff, and E. Tapscott, New York, N. Y. Freight-car	286,197	Oct. 9	512	141	25	105
Grunewald, Michael, et al. (See Kohler, Edward, assignor.)						
Gruninger, Jacob, San Francisco, Cal. Window sash and frame	273,355	Mar. 6	153	43	23	860
Grunzweig, Carl, and P. Hartmann, Ludwigshafen, Germany. Artificial cork	275,904	Apr. 17	1350	.....	23	1473
Gruzon, Hermann. (See Preusser, Albin, assignor.)						
Gruzon, Hermann, and R. Handrick, Buckau, near Magdeburg, Prussia, Germany. Re-generating exhaust	277,271	May 8	946	253	23	1795
Gruzon, Hermann, Buckau, Prussia, and A. Hellhoff, Mentz, Hesse, Germany. Explosive shell	287,924	Nov. 6	168	48	25	537
Gschwendtner, Georg, Cincinnati, Ohio. Fire-kindler	282,883	Aug. 7	488	137	24	586
Guelton, Richard, Brighton, county of Sussex, England. Producing artificial marble and rendering the same fire-proof and water-proof	290,417	Dec. 18	1299	.....	25	1132
Guerber, Frederick S., assignor to Union Switch and Signal Company, Pittsburg, Pa. Valvular apparatus	273,620	Mar. 6	567	150	23	931
Guernsey, Jane M. (See Beals, Ebenezer, assignor.)						
Guernsey, Jane M. (See Guernsey, William B., assignor.)						
Guernsey, William B., assignor to J. M. Guernsey, Norwich, N. Y. Automatic stop for draw-bar brakes	288,568	Nov. 13	976	269	25	686
Guernsey, William B., assignor to J. M. Guernsey, Norwich, N. Y. Automatic car-brake	288,569	Nov. 13	978	269	25	686
Guernsey, William B., Norwich, N. Y., assignor, by mesne assignments, to Torrey Automatic Brake Company, of New York. Automatic car-brake	289,091	Nov. 27	1628	451	25	815
Guernsey, William B., Norwich, and W. B. Turner, New York, N. Y., assignors of one-third to Torrey Automatic Brake Company, of New York. Locomotive or car brake	278,429	May 29	2387	651	23	2065
Guernsey, William J., Philadelphia, Pa. Transposing key-board for musical instruments	276,622	May 1	192	49	23	1657

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Gnest, James A., Burlington, Iowa. Desk.....	270,895	Jan. 23	1321	381	23	278
Guest, James A., Burlington, Iowa. Store-shelving.....	274,488	Mar. 27	1626	451	23	1136
Guest, John H., Brooklyn, N. Y. Electric-arc lamp.....	279,152	June 12	689	189	23	2251
Gnest, John H., Brooklyn, N. Y. Manufacture of incandescent electric lamps.....	282,884	Aug. 7	489	{ 137 138 }	24	587
Guignon, Ernest E. (See Guignon, Lawrence E. and E. E.)						
Guignon, Lawrence E. and E. E., Corry, Pa. Barrel-pump.....	286,428	Oct. 9	815	221	25	158
Guild & Garrison. (See Garrison, William F., assignor.)						
Guild & Garrison. (See Guild, William H., assignor.)						
Guild, William H., assignor to Guild & Garrison, Brooklyn, N. Y. Pump-valve.....	276,805	May 1	351	94	23	1687
Guild, William H., assignor to Guild & Garrison, Brooklyn, N. Y. Duplex direct-acting engine.....	278,133	May 22	1982	544	23	1986
Guillaume, Henri, Washington, D. C. Sleeping-car.....	284,733	Sept. 11	710	199	24	1031
Guillouma, Francis, New Baltimore, Ohio. Liniment.....	284,629	Sept. 11	575		24	1008
Guilloz, John F. (See Jeanjaquet, F. Eugene, assignor.)						
Guldayer, Louis, et al. (See Dutton, George W., assignor.)						
Gulden, Charles, New York, N. Y. Cap for mustard-bottles.....	271,237	Jan. 30	1740	503	23	355
Gulden, Jacob, New York, N. Y. Mustard-bottle stopper.....	276,683	May 1	193	49	23	1657
Gulick, Frank S., Bolivar, N. Y. Stove-pipe holder.....	285,748	Sept. 25	1951	551	24	1264
Gump, Alexander, assignor of one-half to J. Kindle, Fletcher, Ohio. Transporting frame and wheel for harvesters.....	276,581	May 1	51	14	23	1635
Gumpfer, Jacob J., et al. (See Pfautz, Daniel M., assignor.)						
Gunckel, Winfield O., assignor of two-thirds to H. C. McKeen and J. D. Kefuss, Terre Haute, Ind. Separator.....	282,719	Aug. 7	305	86	24	553
Gunckel, Winfield O., assignor of two-thirds to H. C. McKeen and J. D. Kefuss, Terre Haute, Ind. Roller-feed mechanism.....	282,720	Aug. 7	307	87	24	553
Gund, Fred, et al. (See Held, August S., assignor.)						
Gund, Fred, et al. (See Tobias, Cyrus, assignor.)						
Gunderson, Albert, Shabbona, assignor to A. M. Munson, Lee, Ill. Apparatus for reeling and unreeling barbed fence-wire.....	283,884	Aug. 28	1710	482	24	833
Gunderson, Albert, Shabbona, Ill., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass., and I. L. Ellwood, De Kalb, Ill. Barbed-wire fence.....	286,130	Oct. 2	430	117	25	80
Gunn, George P. (See Haviland and Gunn.)						
Gunn, John C., Knoxville, Tenn. Lamp-chimney.....	274,489	Mar. 27	1628	451	23	1136
Gunn, John C., Knoxville, Tenn. Reel for flying kites.....	274,490	Mar. 27	1629	451	23	1136
Gunn, Martha E. (See Bridges, Mary J., assignor.)						
Gunn, Sarah A. (See Diebel, William, assignor.)						
Gunsight Consolidated Silver Mining Company of Arizona. (See McCully, Robert, assignor.)						
Gunther, George A., Brooklyn, N. Y. Device for depositing torpedoes in snow-banks.....	275,039	Apr. 3	208	56	23	1261
Gunther, George A., New Utrecht, N. Y. Snow-plow.....	276,395	Apr. 24	1965	544	23	1586
Gunther, George A., New Utrecht, N. Y. Depositing torpedoes in snow-banks.....	281,495	July 17	1448	396	24	267
Gunther, George A., New Utrecht, N. Y. Snow-plow.....	281,496	July 17	1449	396	24	267
Gunther, George A., New Utrecht, assignor of one-third to H. Kierstein, Brooklyn, N. Y. Snow-plow.....	281,497	July 17	1450	397	24	268
Günther Julius, Quincy, Ill. Starch.....	276,806	May 1	352		23	1688
Gurley, Emily F. (See Shelby, Christopher C., assignor.)						
Gurley, Lewis E. (See Gurley, William and L. E.)						
Gurley, William and L. E., Troy, N. Y. Leveling-instrument.....	286,606	Oct. 16	1037	281	25	204
Gurley, William, assignor to himself and L. E. Gurley, Troy, N. Y. Leveling-rod.....	287,021	Oct. 23	1574	424	25	304
Gurney, Henry W., East Nodaway, Iowa. Motor.....	272,429	Feb. 20	1067	300	23	641
Gurney, J. Theodore, Boston, Mass. Running-gear for vehicles.....	272,238	Feb. 13	810	{ 225 226 }	23	593
Gurney, J. Theodore, Boston, Mass. Harness-saddle.....	280,739	July 3	485	137	24	86
Gurney, John H., et al. (See Wright, Noah D., assignor.)						
Gurney, Thomas C. (See Martin, Gaylord, assignor.)						
Guscott, Stephen J., Chicago, Ill. Device for stacking railway-rails, lumber, &c.....	275,763	Apr. 10	1173	{ 321 322 }	23	1434
Gustin, George A. (See Story, Ephraim J., assignor.)						
Guth, Henry, New York, N. Y. Ventilating-valve for fermenting-casks.....	275,764	Apr. 10	1175	322	23	1435
Guthrie, Frank A., Gallipolis, Ohio. Lock.....	283,776	Aug. 28	1586	448	24	813
Guthrie, Ossian, Chicago, Ill. Facilitating the congelation of water, &c. (Reissue).....	10,283	Feb. 6	531	142	23	532
Guthrie, Ossian, Chicago, Ill. Aiding the formation of atmospheric or natural ice.....	277,024	May 8	646		23	1742
Gutmann, Emil, et al. (See Martinez, Rafael, assignor.)						
Gwathmey, Richard R., Memphis, Tenn. Cotton-gin.....	278,134	May 22	1983	{ 544 545 }	23	1987
Gwyn, Walter B., Asheville, N. C. Billiard-cue trimmer.....	284,548	Sept. 4	470	133	24	984
Gyles, James F., Chicago, Ill. Automatic car-stove-fire extinguisher.....	277,187	May 8	760	205	23	1765
Gyles, James F., Chicago, Ill. Automatic car-stove-fire extinguisher.....	278,236	May 22	2111	582	23	2009
Gysin, Martin, and E. Huber, New York, N. Y. Shoe horn and jack.....	271,704	Feb. 6	141	39	23	464
Haecker, John G., New York, N. Y. Cut-off valve.....	282,630	Aug. 7	189	55	24	523
Haag, Johannes, Augsburg, Bavaria, Germany. Steam and hot-water radiator.....	287,122	Oct. 23	1700	465	25	328
Haak, Henry, Myerstown, Pa. Milk-strainer.....	282,169	July 31	2355	649	24	430
Haar, Henry M. (See Poznanski, Joseph, assignor.)						
Haas, Christian, Chicago, Ill. Carriage-seat.....	272,381	Feb. 13	995	277	23	624
Haas, Edwin, Philadelphia, Pa. Bottle stopper and fastener.....	273,356	Mar. 6	154	44	23	860
Haas, Edwin, Philadelphia, Pa. Printing-cylinder.....	278,937	June 5	398	109	23	2191
Haas, Edwin, Philadelphia, Pa. Stopper-fastening.....	284,200	S. pt. 4	55	13	24	914
Haas, Henry, New York, N. Y. Pedal for musical instruments.....	290,043	Dec. 11	836	236	25	1040
Haas, James M., Wabash, Ind. Tongue-support.....	278,938	June 5	399	109	23	2191
Haas, Levi, Chester, Pa. Construction of houses.....	274,315	Mar. 20	1376	378	23	1086
Haas, Levi, Chester, Pa. Culinary utensil.....	278,939	June 5	399	110	23	2191
Haas, Levi, Chester, Pa. Railway chair and tie.....	282,309	July 31	2497	686	24	455
Haas, Levi, Chester, Pa. Door sill and stop.....	290,878	Dec. 25	1916	529	25	1245
Haas, Samuel H., Chicago, Ill. Cuff.....	284,839	Sept. 11	837	234	24	1053
Haas, William, New York, N. Y. Stuffing-box for valve-stems, &c.....	275,484	Apr. 10	816	221	23	1374
Haase, John A., Philadelphia, Pa. Ratchet-drill.....	286,294	Oct. 9	656	174	25	129
Haberkorn, Christian H. (See Garretson, Albert D., assignor.)						
Habegger, Johann, St. Louis, Mo. Baby-walker.....	282,980	Aug. 14	593	168	24	613
Haber, Maximilian F. (See Metcalfe and Haber.)						
Haberman, Frederick, New York, N. Y. Cuspidor-mat.....	272,239	Feb. 13	813	226	23	593
Hack, Emily F. (See Hack, Henry S., assignor.)						
Hack, Henry S., Taunton, Mass. Calendar.....	287,022	Oct. 23	1576	434	25	304
Hack, Henry S., assignor, by mesne assignments, to E. F. Hack, Taunton, Mass. Calendar.....	288,329	Nov. 13	677	186	25	632



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Hackenberg, Julius, Hoboken, N. J., assignor to C. H. Graef, Edgewater, N. Y. Bracelet.	282,310	July 31	2498	686	24	456
Hacket, Theodore N., Emporium, Pa. Saw-arbor	271,840	Feb. 6	310	85	23	495
Hackett, Allen, La Grange, Me. Saw-guide	286,295	Oct. 9	657	175	25	129
Hackett, Allen, La Grange, Me. Saw-guide	286,296	Oct. 9	657	175	25	129
Hackett, Allen, La Grange, Me. Coupling-link for railway-cars	289,530	Dec. 4	197	56	25	921
Hackett, Jonathan W. (See Park and Hackett.)						
Hackett, William H., New York, N. Y. Combined cuff-holder and sleeve-button	272,240	Feb. 13	814	226	23	593
Hackstadt, George H. A., Ludlow, Ky. Spoke-tensioning machine	282,515	Aug. 7	45	14	24	508
Hackstadt, George W., Covington, Ky., assignor to C. F. Bradley & Co., Cincinnati, Ohio.						
Book-cover	289,647	Dec. 4	342	96	25	947
Hadden, Walter J., New York, and J. S. Wood, Brooklyn, N. Y. Disinfecting apparatus	279,644	June 19	1284	357	23	2357
Hadden, William, Brooklyn, N. Y. Apparatus for distributing powders upon surfaces	269,850	Jan. 2	38	12	23	10
Hadden, William, Brooklyn, assignor to American Railway Signal Company, New York, N. Y. Railway-signal	273,513	Mar. 6	343	93	23	893
Hadden, William, Brooklyn, assignor to American Railway Signal Company, New York, N. Y. Railway-signal	273,514	Mar. 6	346	93	23	893
Hadden, William, Brooklyn, assignor to American Railway Signal Company, New York, N. Y. Railway signal apparatus	273,515	Mar. 6	349	93	23	893
Hadden, William, Brooklyn, assignor to American Railway Signal Company, New York, N. Y. Railway signal apparatus	273,516	Mar. 6	351	93	23	894
Hadden, William, Brooklyn, assignor to American Railway Signal Company, New York, N. Y. Railway signal apparatus	273,517	Mar. 6	354	94	23	894
Hadden, William, Brooklyn, assignor to American Railway Signal Company, New York, N. Y. Electric railway-signal	278,940	June 5	400	110	23	2191
Haddock, Worcester, assignor to National Cable Power Company, Cincinnati, Ohio. Cable street-railway	275,378	Apr. 10	672	179	23	1349
Haddock, Worcester, assignor to National Cable Power Company, Cincinnati, Ohio. Gripping attachment for cable-railways	275,379	Apr. 10	676	180	23	1350
Hadley, Benjamin H., Providence, R. I. Surface-grinding table for emery-wheels	280,033	June 26	1761	494	23	2445
Hadley, Charles F. (See Overman and Hadley.)						
Hadley, George A. (See Moore and Hadley.)						
Hadley, George G., et al. (See Houlehan, James, assignor.)						
Hadley, George W., assignor of one-half to T. C. Page, Chicopee Falls, Mass. Breech-loading gun	275,377	Apr. 10	669	179	23	1348
Hadley, Horace W., and W. L. Gront, Orange, Mass. Mechanical movement	277,025	May 8	647	168	23	1742
Hadley Manufacturing Company. (See Turner, William H., assignor.)						
Hadlock, Samuel, Port Townsend, Wash. Ter. Nippers for pile-drivers	274,189	Mar. 20	1211	333	23	1058
Hadra, Edward, Cumberland, Md. Cigar coloring and flavoring machine	275,646	Apr. 10	1023	276	23	1409
Hachuleu, William, assignor to F. J. L. Blandy, Zanesville, Ohio. Steam-actuated valve	279,378	June 12	970	209	23	2296
Hafely, Alfred C., New York, N. Y. Book-clasp	287,123	Oct. 23	1700	465	25	328
Haff, Edward P., Brooklyn, N. Y. Razor-strop	272,042	Feb. 13	589	154	23	551
Haff, Edward P., Brooklyn, N. Y. Hair-pin package	276,031	Apr. 17	1500	412	23	1499
Hafgar, Magnus J., Chicago, Ill. Folding desk	271,061	Jan. 23	1523	440	23	310
Hafgar, Magnus J., Chicago, Ill. Desk	281,498	July 17	1451	397 398	24	268
Hagan, Elijah J., Willow township, Greene county, Iowa. Sulky check-row corn-planter	279,241	June 12	779	215	23	2266
Hagan, John A., assignor of one-half to Sheffield Velocipede Car Company, Three Rivers, Mich. Grain-car-door mechanism	285,258	Sept. 18	1349	380	24	1151
Hagan, Levi A., Jacksonville, Ill. Device for copying and enlarging pictures	275,822	Apr. 17	1253	344	23	1455
Hagan, William E., assignor of one-half to W. C. Buell, Troy, N. Y. Implement for setting button-fastenings	290,680	Dec. 25	1659	458	25	1199
Hagedorn, Frederick, San Francisco, Cal. Manufacture of mattress-stuffing	289,409	Dec. 4	43		25	894
Hagelberg, Wolff, Berlin, Germany, assignor to Kaufmann & Strauss, New York, N. Y. Card-support	278,941	June 5	400	110	23	2192
Hagemann, Heinrich, Vienna, Austria-Hungary. Stereotyping-machine	270,056	Jan. 2	268	78, 79	23	55
Hagerstown Steam Engine and Machine Company. (See Watkins, Luther M., assignor.)						
Hagerty, James S., Baltimore, Md. Kitchen-safe	290,879	Dec. 25	1917	529	25	1246
Hagstoz, Thomas B., et al. (See Grace, Harry R., assignor.)						
Hagstoz, Thomas B., et al. (See Mueller, Theodore, assignor.)						
Hague, Charles A., assignor to Furst & Bradley Manufacturing Company, Chicago, Ill. Sulky-plow	283,102	Aug. 14	752	212	24	640
Hahn, Charles F. C., assignor of one-half to J. Simon, Toledo, Ohio. Cot-bed	290,418	Dec. 18	1308	364	25	1132
Hahn, John, Reading, Pa. Stove-grate	287,537	Oct. 30	2220	602	25	432
Haid, Alfred, Rahway, N. J. Galvanic-battery	286,809	Oct. 16	1292	350	25	249
Haid, Alfred, Rahway, N. J., assignor to Edison Electric Light Company, New York, N. Y. Secondary battery	271,628	Feb. 6	58	16	23	450
Haigh, Joseph P., assignor to J. G. Holmes, Pittsburg, Pa. Pipe-wrench	272,955	Feb. 27	1746	488	23	766
Haight, Charles L. (See Brown and Haight.)						
Haight, E. J., et al. (See Bedbury, George W., assignor.)						
Haight, Edward A., Shalersville, and D. Williams, Cleveland, Ohio. Bed-bottom	272,956	Feb. 27	1747	488	23	766
Haight, Elias H., Rockford, Ill. Neck-yoke	278,703	June 5	37	11	23	2131
Haight, Henry J., New York, N. Y. Poultry-coop	270,307	Jan. 9	568	167	23	121
Haight, Henry J., New York, N. Y. Poultry-coop	280,815	July 10	597	167	24	112
Haight, J. J., et al. (See Duncan and Evens, assignors.)						
Haight, John B., Cincinnati, Ohio. Cylinder-cock for engines	279,562	June 19	1192	330	23	2340
Haigis, John M., Beaver Falls, Pa. Grinding-machine	286,429	Oct. 9	816	221 222	25	159
Hales, William, Albany, N. Y. Broiler	284,295	Sept. 4	172	49	24	933
Haines, Dudley W., and A. D. Hankerson, Readfield, Me. Car-coupling	270,057	Jan. 2	272	79	23	56
Haines, Frank P., Camden, N. J., assignor, by mesne assignments, to Williams Manufacturing Company, Northampton, Mass. Fruit-shipping and truck basket	288,429	Nov. 13	813	220	25	657
Haines, Horace G., et al. (See Perkins, John C., assignor.)						
Haines, Joseph T., Balbec, Ind. Portable elevator	275,647	Apr. 10	1025	277	23	1409
Hainsworth, Frederick, Chicago, Ill. Apparatus for ventilating water-closets. (Reissne.)	10,346	June 26	2122	596	23	2510
Hainsworth, William, Pittsburg, Pa. Preparing steel ingots for rolling	272,682	Feb. 20	1381	388	23	697
Hainsworth, William, Pittsburg, Pa. Bessemer plant	272,683	Feb. 20	1383	389	23	697
Hainsworth, William, Pittsburg, Pa. Making steel castings	284,004	Aug. 28	1881	523	24	863
Hainsworth, William, Pittsburg, Pa. Bessemer plant	284,005	Aug. 28	1882	523	24	864
Hainsworth, William, Pittsburg, Pa. Manufacturing steel	284,006	Aug. 28	1886	523	24	864
Hair, Charles N. (See Genin, John B., assignor.)						
Hake, Francis A., Cuero, Tex. Thill-carrier for harness	273,983	Mar. 13	947	261	23	1004
Hake, Francis A., Cuero, Tex. Horsecollar	282,721	Aug. 7	308	87	24	553
Hake, Philipp, Hoboken, N. J. Ornamenting paper and cards	285,482	Sept. 25	1617	454	24	1204

*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Hake, Philipp, Hoboken, N. J., and G. A. Raisbeck, Brooklyn, N. Y. Ornamenting writing-paper, envelopes, &c	270,586	Jan. 16	935	271	23	201
Haldeman, John H., Westfield, Mass. Apparatus for opening dampers	279,867	June 19	1545	432	23	2402
Hale, Charles O. (See Du Bois, William A., assignor.)						
Hale, Elias J., Foxcroft, Me. Burner for lamps.	285,028	Sept. 18	1082	302	24	1103
Hale, Elias J., Foxcroft, Me. Burner for lamps.	285,029	Sept. 18	1083	303	24	1103
Hale, Elias J., Foxcroft, Me. Burner for lamps.	288,232	Nov. 13	546	151	25	612
Hale, Henry S., Philadelphia, Pa. Seat.	271,062	Jan. 23	1525	441	23	311
Hale, Henry S., Philadelphia, Pa. Chair	275,823	Apr. 17	1254	345	23	1456
Hale, Henry S., Philadelphia, Pa. Chair	277,272	May 8	947	254	23	1795
Hale, Henry S., Philadelphia, Pa. Wardrobe-bed	277,506	May 15	1302	350	23	1861
Hale, Henry S., Philadelphia, Pa. Seat.	280,740	July 3	486	137 138	24	86
Hale, Henry S., Philadelphia, Pa. Sleeping-car.	285,890	Oct. 2	141	40, 41	25	28
Hale, Henry S., Philadelphia, Pa. Sleeping-car.	259,346	Nov. 27	1934	537	25	873
Hale, William C., Austin's Springs, Tenn. Millstone-balance	277,273	May 8	948	254	23	1796
Hale, William C., Austin's Springs, Tenn. Millstone-driver	285,613	Sept. 25	1776	503	24	1234
Hale, William E. (See Baldwin, Cyrus W., assignor.)						
Hale, William F., Jamestown, N. Y. Fruit-drier	281,057	July 10	884	246	24	164
Haley, Charles H. (See Haley, George S. and C. H.)						
Haley, Eben D. (See Rundlett, Charles, assignor.)						
Haley, George S. and C. H., assignors to United States Wind Engine and Pump Company, Batavia, Ill. Sheave-case	282,454	July 31	2689	738	24	489
Haley, John J., Newton, Mass. Manufacture of belting	271,629	Feb. 6	59	16	23	450
Haley, John J., Newton, Mass. Manufacture of belting	271,630	Feb. 6	60	17	23	450
Haley, Thomas, Cambridge, Mass. Nozzle for hose-pipes	278,008	May 22	1827	499	23	1959
Halfpenny, Martin, Pontiac, Mich. Two-wheeled vehicle	277,482	May 15	1200	322	23	1845
Halfpenny, Martin, Pontiac, Mich. Gear for platform-wagons	282,455	July 31	2690	738 739	24	489
Halkyard, William. (See Field and Halkyard.) (Reissue.)						
Halkyard, William, assignor of one-half to H. A. Church, Providence, R. I. Machine for covering electric wire	278,009	May 22	1829	499	23	1960
Halkyard, William, assignor of one-half to H. A. Church, Providence, R. I. Machine for covering wire	281,186	July 10	1048	290	24	192
Halkyard, William, assignor of one-half to H. A. Church, Providence, R. I. Electric wire cable	284,959	Sept. 11	980	276	24	1079
Hall, Albert, Cypress Hill, N. Y. Button-fastening	289,092	Nov. 27	1632	451	25	815
Hall, Albert, Cypress Hill, N. Y. Button-fastening machine	274,316	Mar. 20	1377	378	23	1086
Hall, Albert E. and M. W., Plainfield, N. J. Pumping-engine	286,921	Oct. 16	1436	395	25	274
Hall, Almon, assignor of one-half to H. T. Stock, Toledo, Ohio. Machine for unloading railway-cars	289,648	Dec. 4	342	97	25	948
Hall, Alvah W., Meriden, Conn. Electric railway-signal	279,868	June 19	1546	432	23	2402
Hall, Alvah W., Meriden, Conn. Double-circuit instrument	276,807	May 1	353	94	23	1688
Hall, Alvah W., Meriden, Conn. Electric switch and signal apparatus	284,840	Sept. 11	838	234	24	1053
Hall, Alvah W., Meriden, Conn. Apparatus for interlocking electric signals	284,841	Sept. 11	839	235 236 237	24	1053
Hall, Asa, assignor to N. C. Thompson, Rockford, Ill. Cultivator	284,842	Sept. 11	842	236 237	24	1053
Hall, Augustus O., et al. (See Gowan, James H., assignor.)	282,885	Aug. 7	491	138	24	587
Hall, Benjamin F., assignor of one-third to S. B. Carr, Lansing, Mich. Metallic pivot for window-blind slats	279,379	June 12	971	269	23	2297
Hall, Benjamin J., and J. E. Mustard, Glen Hall, Ind. Cultivator	284,734	Sept. 11	712	199	24	1031
Hall & Bidwell. (See Glenn, George K., assignor.)						
Hall & Brown. (See McChesney, Ruben, assignor.)						
Hall, Charles A. (See Blake and Hall.)						
Hall, Charles H., assignor of one-half to R. P. Pattison, Chicago, Ill. Lozenge-machine	273,518	Mar. 6	357	94, 95	23	895
Hall, Charles N. (See Murphy, John, assignor.)						
Hall, Charles S. (See Watson and Hall.)						
Hall, Charles S. (See Watson, Hall, and Bauer.)						
Hall, Charles S., C. M. Whitcomb, and W. J. D'Ewart, Worcester, Mass. Process of and apparatus for annealing and cleaning and galvanizing or plating wire continuously	286,538	Oct. 9	944	254	25	182
Hall, Cyrus J., Belfast, Me. Windlass	282,075	July 31	2191	602	24	406
Hall, Daniel. (See Doughty and Hall.)						
Hall, David S., Stoughton, Mass. Carriage-axle nut	286,131	Oct. 2	431	117	25	80
Hall, Dyer P., assignor to E. G. and E. Wallace, Rochester, N. H. Cutter-head	284,620	Sept. 11	575	162	24	1008
Hall, Edward, assignor of one-half to C. E. Sage, Elkhart, Ind. Bit	287,538	Oct. 30	2221	603	25	432
Hall, Edward C., assignor of one-half to F. E. Cady, Auburn, N. Y. Combined water filter and cooler	276,533	Apr. 24	2132	593	23	1615
Hall, Edward J. (See Heylman, John W., assignor.)						
Hall, Edward J., Buffalo, N. Y. Feed-water heater for steam-boilers	272,684	Feb. 20	1386	389	23	697
Hall, Edwin J., Waltham, Mass. Mechanism for timing watch-balances	288,223	Nov. 13	547	151	25	612
Hall, Edwin L., Deaverton, Ohio. Hay elevator and carrier	274,317	Mar. 20	1377	378	23	1086
Hall, Francis L., Oncida, N. Y. Brick-kiln	287,432	Oct. 30	2090	567 568	25	405
Hall, Frank W., Dahlonega, Ga. Stamp-mill	276,582	May 1	52	15	23	1636
Hall, Frederick S. (See Urie, Thomas, assignor.)						
Hall, George. (See Elliott, William V., assignor.)						
Hall, George A., South Waterford, Me. Railway-gate	282,631	Aug. 7	191	55, 56	24	533
Hall, George A., Waterford, and G. S. Fogg, Westbrook, Me.; said Fogg assignor to said Hall. Railway-gate	280,307	June 26	2080	586	23	2503
Hall, George W., Nora Springs, Iowa. Ointment	279,940	June 26	1643		23	2425
Hall, George W., Nora Springs, Iowa. Trace-support	284,843	Sept. 11	843	237	24	1054
Hall, George W., Nora Springs, Iowa. Trace-holding attachment for hame-clips	287,826	Nov. 6	45	13	25	515
Hall, Harvey C., Brooklyn, N. Y. Pump	274,760	Mar. 27	1949	542	23	1194
Hall, Hayden H., New Hamburg, N. Y. Gas and coke kiln	287,433	Oct. 30	2091	568	25	406
Hall, Henry D., New York, N. Y. Ozone apparatus	282,190	July 31	2357	649	24	430
Hall, Henry G., Fayetteville, N. C. Bran or flour packer	279,746	June 19	1401	391	23	2377
Hall, Henry M., assignor to T. G. Lovegrove, Philadelphia, Pa. Handle for steam and other valves	290,575	Dec. 18	1527	421	25	1171
Hall, Hiram S., Jamestown, N. Y. Furniture-leg fastening	270,661	Jan. 16	1034	297	23	218
Hall, Hiram S., Jamestown, N. Y. Machine for making spiral wire springs	287,827	Nov. 6	45	13, 14	25	515
Hall, Horace N., Taunton, Mass. Hub-attaching device	278,942	June 5	401	110	23	2192
Hall, Howard A., Sturgis, Mich. Check-valve	283,777	Aug. 28	1587	448	24	812



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Hall, J. E. (See Huyck, Francis P., assignor.)						
Hall, John, Watertown, Mass. Adjustable dress-form	269,851	Jan. 2	40	13	23	10
Hall, John C., and C. A. Mahle, Corry, Pa. Brush-block-boring machine	284,128	Aug. 28	2035	566	24	890
Hall, Joseph, and L. St. André, Clear Lake, Wis. Saw-handle	277,026	May 8	648	168	23	1742
Hall, Joseph L. (See Kock, Wilhelm, assignor.)						
Hall, Kennedy, Hurricane, Ark. Cotton-planter	275,380	Apr. 10	679	180	23	1350
Hall, Le Vant O., Buchanan, Mich. Piston-packing	287,669	Oct. 30	2407	649	25	468
Hall, Lewis, Metamora, assignor of one-fourth to A. G. Scherer, Peoria, Ill. Traction-wheel	270,662	Jan. 16	1035	297	23	218
Hall, Milan W. (See Hall, Albert E. and M. W.)						
Hall, Moses L., Osborn, Ohio. Bridle-blind	281,359	July 17	1276	354	24	238
Hall, O. F. (See Pagel, J. C. Friedrich, assignor.)						
Hall, Oliver S., Marion Iowa. Music-leaf turner	286,297	Oct. 9	658	175	25	129
Hall, Osborn B. (See Walworth and Hall.)						
Hall, Osborn B., Jr., Malden, Mass. Gas-burner	284,631	Sept. 11	577	162	24	1008
Hall, Philip A. (See Ebbert, John, assignor.)						
Hall, R. H. (See Butler, William J., assignor.)						
Hall, Reuben D., New Hampton, Mo. Cultivator	289,093	Nov. 27	1632	{ 451 452 }	25	815
Hall, Robert A. (See Rneckert and Hall.)						
Hall, Samuel E. (See Cornish and Hall.)						
Hall, Samuel G., Cohoes, N. Y. Burr for knitting-machines	275,198	Apr. 3	406	112	23	1296
Hall, Samuel G., Cohoes, N. Y. Burr for knitting-machines	275,199	Apr. 3	407	112	23	1296
Hall, Samuel S. (See Hobson, James, assignor.)						
Hall, Samuel S., and J. Walmsley, Bury, near Manchester, England. Warping and beam-ing machine	284,416	Sept. 4	316	87, 88	24	956
Hall Southern Cotton Gin Company, S. Z. (See Coleman, William O., assignor.)						
Hall, Thomas, and J. Newton, Lawrence, Mass., assignors to said Hall. Cap spinning frame	284,549	Sept. 4	471	134	24	984
Hall, Thomas G., Brooklyn, assignor to I. N. Cook and S. B. McLane, Yonkers, N. Y. Tool for grasping and holding articles	275,335	Apr. 3	593	159	23	1327
Hall, Thomas H. (See De Quillfeldt, Charles, assignor.)						
Hall, Thomas P. (See Kennedy and Hall.)						
Hall, William A. (See Leslie and Hall.)						
Hall, William B., Lancaster, Pa. Breech-loading fire-arm	276,868	May 1	355	95	23	1688
Hall, William D. (See Morse, Theodore W., assignor.)						
Hall, William F., Boston, Mass. Door-knob attachment	278,704	June 5	38	11	23	2131
Hall, William F., and P. G. Hubert, New York, N. Y. Elevator	276,396	Apr. 24	1966	544	23	1587
Hall, William H., London, England. Toy locomotive-engine	281,360	July 17	1276	354	24	238
Hall, William L., Troy, N. Y. Shirt	270,663	Jan. 16	1036	297	23	219
Hall, William L., Troy, N. Y. Shirt	276,609	May 1	357	95	23	1689
Hall, William P., Piqua, Ohio. Smoke-consuming device	283,600	Aug. 21	1363	381	24	759
Hall, William P., Piqua, Ohio. Boiler-furnace	283,708	Aug. 21	1495	421	24	784
Hall, Zachary T., Philadelphia, Pa. Price-tag	286,430	Oct. 9	818	222	25	159
Hallas, James G., assignor to Benedict & Burnham Manufacturing Company, Waterbury, Conn. Drawer-pull	289,251	Nov. 27	1817	502	25	850
Hallenbeck, Joseph P., New York, assignor to National Machine Company, Troy, N. Y. Button-hole attachment for sewing-machines	273,727	Mar. 13	620	{ 167 168 }	23	948
Hallenbeck, Joseph P., New York, assignor to National Machine Company, Troy, N. Y. Button-hole attachment for sewing-machines	275,200	Apr. 3	409	{ 112 113 }	23	1296
Hallenbeck, Joseph P., New York, assignor, by mesne assignments, to National Machine Company, Troy, N. Y. Button-hole attachment for sewing-machines	277,128	May 8	784	206	23	1766
Hallenbeck, Martin, Albany, N. Y. Horse bay-rake	278,538	May 29	2516	687	23	2088
Haller, Augustine, <i>et al.</i> (See Beck, John B., assignor.)						
Haller, Martin. (See Sauser and Haller.)						
Hallitt, James, Hannibal, Mo., assignor of one-half to D. W. Morgan, Pittsfield, Ill. Detachable step for farm-wagons	272,543	Feb. 20	1205	337	23	666
Hallett, William R., assignor of one-half to W. Hefington, Batchtown, Ill. Plaiting-machine	285,030	Sept. 18	1084	303	24	1104
Halley, Samuel D., assignor of one-half to C. H. Alapaw, St. Louis, Mo. Hinge	270,880	Jan. 16	1295	373	23	267
Hallheimer, Max, Brooklyn, N. Y. Mechanical movement	279,941	June 26	1644	461	23	2425
Halliday, Edgar. (See Rau, Engen, assignor.)						
Halliday, Frank E., Geigersville, Ky. Clamp for books	289,252	Nov. 27	1817	502	25	850
Hallidie, Andrew S., San Francisco, Cal. Cable-railway	276,233	Apr. 24	1758	489	23	1552
Hallidie, Andrew S., San Francisco, Cal. Traveling-bag	276,240	Apr. 24	1759	490	23	1552
Hallidie, Andrew S., San Francisco, Cal. Battery-screen	284,735	Sept. 11	713	199	24	1031
Halligan, Harvey, and H. Rugg, assignors to New Haven Copper Company, Seymour, Conn. Auger	278,539	May 29	2518	687	23	2089
Halliwell, Jane. (See Sackett, Joseph S., assignor.)						
Halloock Damper Regulator Company. (See Halloock, Valentine H., assignor.)						
Halloock, John J., Liverpool, N. Y. Wicker basket	282,516	Aug. 7	48	14	24	508
Halloock, John K. (See Spaulding and Halloock.)						
Halloock, John K., <i>et al.</i> (See Spaulding, Elijah F., assignor.)						
Halloock, John K., and E. F. Spaulding, assignors of one-third to E. S. Smith, Erie, Pa. Cut-off-valve gear	281,312	July 17	1214	{ 336 337 }	24	228
Halloock, Valentine H., Queens, assignor to Halloock Damper Regulator Company, Brooklyn, N. Y. Damper-regulator for steam-boilers	276,810	May 1	359	95	23	1689
Hallowell, Albert, Lowell, Mass. Loom-picker staff-check	288,631	Nov. 20	1062	292	25	708
Hallowell, Levi, China, Me. Ice-scraper	279,645	June 19	1285	357	23	2357
Hallowell, Wallace. (See Mills, Charles W., assignor.)						
Hallström, Hadar, Eskilstuna, Sweden. Manufacture of cutlery	274,318	Mar. 20	1379	379	23	1086
Halpin, Druiitt, Westminster, England. Cut-off-valve gear	271,063	Jan. 23	1528	441	23	311
Halpin, Druiitt, Westminster, England. Mechanism for supplying water to ships' engines	274,701	Mar. 27	1952	543	23	1194
Halsey, A. J. (See Hunt, Henry C., assignor.)						
Halsey, Andrew J., <i>et al.</i> (See Hunt, Henry C., assignor.)						
Halsey, Daniel, Jr., Newark, N. J. Combined tan-vat and wheel	278,331	May 29	2260	619	23	2043
Halsey Fire Engine Company. (See Halsey, Menzo D., assignor.)						
Halsey, Menzo D., Detroit, Mich., assignor to Halsey Fire Engine Company, of Michigan. Fire-engine	285,259	Sept. 18	1351	381	24	1152
Halstead, Charles, New York, N. Y. Coffee-urn	270,788	Jan. 16	1192	344	23	248
Halstead, Charles, New York, N. Y. Coffee-urn	273,067	Feb. 17	1874	526	23	789
Halstead, Charles, New York, N. Y. Coffee-pot	281,265	July 17	1161	320	24	218
Halstead, Charles, New York, N. Y. Stench-trap	289,831	Dec. 11	574	160	25	994
Halstead & Spencer. (See Maret, John T., assignor.)						
Halsted, Nathaniel, Scranton, Pa. Car-coupling	272,430	Feb. 20	1067	301	23	641

*Alphabetical list of patentees—Continued.*

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Haltaufferheide, Heinrich, Cassel, Prussia, Germany. Door-hinge .....	283,601	Aug. 21	1364	381	24	759
Halteman, William A., <i>et al.</i> (See Schaeffer, Lester A., assignor.)						
Halter, Andrew A., <i>et al.</i> (See Arend, John J., assignor.)						
Halvossen, Soren, Winchester, Wis. Skid .....	282,311	July 31	2499	686	24	456
Ham, Charles T., Rochester, N. Y. Lantern .....	283,237	Aug. 14	914	255	24	670
Ham, Charles T., assignor to Steam Gauge and Lantern Company, Rochester, N. Y. Lan- tern .....	278,540	May 29	2519	687	23	2089
Ham, Charles T., assignor to Steam Gauge and Lantern Company, Rochester, N. Y. Tubu- lar lantern .....	285,408	Sept. 25	1531	{ 431 432 }	24	1188
Ham, Erasmus R., New Market, Ga. Cultivator .....	278,541	May 29	2520	688	23	2089
Ham, Henry H., Jr., Portsmouth, N. H. Calendar .....	287,281	Oct. 23	1901	520	25	364
Hamaker, David L., <i>et al.</i> (See Hunter, Edwin, assignor.)						
Hamaker, Edwin W., <i>et al.</i> (See Hamaker, John H., assignor.)						
Hamaker, John H., assignor of one-third to E. W. and U. S. Hamaker, Canton, Ohio. Grain and seed thrasher and separator .....	283,778	Aug. 28	1588	449	24	813
Hamaker, Ulysses S., <i>et al.</i> (See Hamaker, John H., assignor.)						
Haman, Aiken, San Francisco, Cal. Endless-cable grip, &c. ....	287,377	Oct. 23	2018	549	25	385
Hamann, August, Hoboken, N. J. Manufacture of glass buttons .....	285,125	Sept. 18	1195	335	24	1122
Hambach, James S., Jacksonville, Ill. Sun-printing frame .....	276,173	Apr. 24	1677	464	23	1538
Hamblet, James, Brooklyn, N. Y. Electric synchronizing apparatus for time-pieces .....	270,058	Jan. 2	273	79	23	56
Hamblet, James, Brooklyn, N. Y. Circuit and apparatus for electric-clock systems .....	288,175	Nov. 6	471	131	25	589
Hambleton, Francis H., Baltimore, Md. Globe or stop valve .....	277,713	May 15	1472	398	23	1891
Hambleton, Francis H., Baltimore, Md. Stop-valve .....	290,044	Dec. 11	837	{ 236 237 }	25	1041
Hambly, William S., Bradford, Pa. Bicycle .....	290,576	Dec. 18	1528	421	25	1171
Hambrecht, Heinrich F., Hamburg, Germany. Knife-cleaning machine .....	271,841	Feb. 6	310	85	23	495
Hambuer, Ephraim, assignor of one-half to D. P. Frank and J. Koch, Detroit, Mich. But- ton-hole stay for boots and shoes .....	288,794	Nov. 20	1269	347	25	743
Hamel, Joseph F. (See Malone and Hamel.)						
Hamer, Samuel. (See McCracken and Hamer.)						
Hamill, Charles W., Baltimore, Md. Wheel for advertising .....	285,357	Sept. 18	1463	412	24	1170
Hamilton, Charles H. (See Monnt, Jerome C., assignor.)						
Hamilton, Clarence J., Plymouth, Mich. Pump .....	270,789	Jan. 16	1193	344	23	248
Hamilton, Docia C., New York, N. Y. Dress-maker's measure .....	276,032	Apr. 17	1500	413	23	1499
Hamilton, Emery M., assignor to L. Goldsmith, New York, N. Y. Telegraphic receiving- instrument .....	273,728	Mar. 13	634	168	23	951
Hamilton, Frederic A. (See Trott and Hamilton.)						
Hamilton, James A., trustee. (See Sweeney, George W., assignor.)						
Hamilton, James E., New York, N. Y. Underground system of laying electrical conductors .....	279,646	June 19	1286	358	23	2357
Hamilton, John A., <i>et al.</i> (See Conway, Michael L., assignor.)						
Hamilton, John W. (See Cole, James W., assignor.)						
Hamilton, Jonathan R., Kingston, assignor of one-half to P. Johnson, Dassel, Minn. Holder for mower and reaper knives .....	270,790	Jan. 16	1194	345	23	248
Hamilton, Jonathan R., Kingston, Minn. Corn-sheller .....	281,868	July 24	1932	{ 528 529 }	24	255
Hamilton Lead Bath Company. (See Vanderhoof, Henry T., assignor.)						
Hamilton, Lemmon Arnold & Co. (See Hamilton, William, assignor.)						
Hamilton, Miles E., assignor of one-half to G. Green, Auburn, N. Y. Combined lock and latch .....	282,886	Aug. 7	492	138	24	587
Hamilton, Robert. (See Colton, Albert B., assignor.)						
Hamilton, Samuel, Salinas, Cal. Header-spring .....	284,296	Sept. 4	174	49	24	933
Hamilton, Samuel, Salinas, Cal. Thrashing-machine and separator .....	287,925	Nov. 6	170	49	25	537
Hamilton, Silas H., Lawrence, Kans. assignor, by mesne assignments, to H. W. Porter, Chicago, Ill. Manufacture of paper boards. (Reissue) .....	10,386	Sept. 25	1995	564	24	1270
Hamilton, Silas H., Lawrence, Kans., assignor, by mesne assignments, to H. W. Porter, Chicago, Ill. Manufacture of paper boards. (Reissue) .....	10,387	Sept. 25	1996	565	24	1270
Hamilton, Tobias, Centrefield, Ohio. Life-boat .....	278,542	May 29	2521	688	23	2089
Hamilton, William, Allegheny, assignor to Hamilton, Lemmon Arnold & Co., Pittsburg, Pa. Burial-casket .....	275,201	Apr. 3	415	113	23	1297
Hamilton, William B. (See Kohnle and Hamilton.)						
Hamilton, William H., Watrousville, Mich. Stump-machine .....	272,957	Feb. 27	1748	488	23	766
Hamilton, Winfield S. (See Thomas, Edwin E., assignor.)						
Hamlet, John H., Indianapolis, Ind. Saw-table gage .....	287,124	Oct. 23	1701	466	25	328
Hamlin, Evelyn B., Chicago, Ill., assignor to Post & Co., Cincinnati, Ohio. Telephone switch-board .....	279,747	June 19	1402	{ 391 392 }	23	2377
Hamlin, Harry. (See Graves, Gilbert S., assignor.)						
Hamlin, Harry. (See Roat, Edwin, assignor.)						
Hamlin, Henry A. (See Cogger and Hamlin.)						
Hamlin, John, Wilkes-Barré, Pa. Anvil .....	278,237	May 22	2113	582	23	2009
Hamlin, Lucius, Sebago Lake, Me. Fire-escape ladder .....	275,905	Apr. 17	1351	372	23	1473
Hamlin, Lucius, Sebago Lake, Me. Canning-press .....	275,906	Apr. 17	1352	372	23	1473
Hamm, Adolph G., and H. W. Eisenbise, Burlington, Iowa. Car-brake .....	272,241	Feb. 13	814	227	23	593
Hamm, Aron, assignor of one-third to J. N. Weaver, Sayre, Pa. Claw-bar .....	282,722	Aug. 7	309	87	24	553
Hammack, Nott S., <i>et al.</i> (See Van Sickle, George W., assignor.)						
Hammelmann, Charles, Buffalo, N. Y. Fan-blower .....	270,897	Jan. 23	1324	382	23	278
Hammelmann, Charles, Buffalo, N. Y. Mechanical movement .....	282,076	July 31	2192	602	24	406
Hammer, Charles O., Pittsburg, Pa. Bottle-stopper .....	290,577	Dec. 18	1529	421	25	1171
Hammer, John. (See Kern and Hammer.)						
Hammer, Robert E., Philadelphia, Pa. Convertible sofa-bed .....	278,136	May 22	1984	545	23	1987
Hammerl, Joseph, Long Island City, N. Y. Graining-tool .....	273,519	Mar. 6	359	95	23	895
Hammerl, Joseph, Long Island City, N. Y. Graining-tool .....	285,999	Oct. 2	270	76	25	51
Hammerl, Joseph, Long Island City, N. Y. Refrigerator .....	288,430	Nov. 13	814	220	25	657
Hammermiller, William, assignor to C. Emmerich & Co., Chicago, Ill. Feather-crushing machine .....	274,936	Apr. 3	67	18	23	1237
Hammermiller, William, assignor to C. Emmerich & Co., Chicago, Ill. Machine for clean- ing and sorting feathers .....	280,371	July 3	39	11	24	9
Hammerschmidt, John W., Quincy, Ill. Slat-support for bedsteads, &c. ....	275,602	Apr. 3	416	114	23	1298
Hammerschmidt, Wilhelm, Philadelphia, Pa. Gas-engine .....	288,232	Nov. 20	1063	292	25	708
Hammerstein, Malvine. (See Hammerstein, Oscar, assignor.)						
Hammerstein, Oscar, assignor to M. Hammerstein, New York, N. Y. Cigar-machine .....	272,958	Feb. 27	1749	488	23	767
Hammill, Joshua M., assignor to J. Boyd, Philadelphia, Pa. Non-conducting compound .....	286,922	Oct. 16	1437	395	25	274
Hammond, Andrew H., Worcester, Mass. Winding-roller for musical instruments .....	271,064	Jan. 23	1529	442	23	311
Hammond, Andrew H., Worcester, Mass. Mechanical musical instrument .....	277,129	May 8	787	{ 206 207 }	23	1766
Hammond, Andrew H., Worcester, Mass. Mechanical musical instrument .....	284,844	Sept. 11	844	237	24	1054



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Hammond, Daniel S., Brooklyn, N. Y. Bag-lock.....	277,714	May 15	1473	398	23	1891
Hammond, Daniel S., Brooklyn, N. Y. Traveling-bag.....	279,942	June 26	1646	401	23	2425
Hammond, Dawson E. (See Pelton, James B., assignor.)						
Hammond, George W., assignor of one-half to G. W. Henry, Earl Park, Ind. Cultivator..	278,543	May 29	2522	688	23	2089
Hammond, H. Jay. (See Wilson, Herbert S., assignor.)						
Hammond, H. Jay, and H. S. Wilson, Kalamazoo, Mich. Grinding-mill.....	285,031	Sept. 18	1086	303	24	1104
Hammond, Isaac B., Chicago, Ill. Ditching-machine.....	289,410	Dec. 4	44	13	25	894
Hammond, Isaac B., Chicago, Ill., assignor of one-third to E. Elliott, Chester, Minn. Dumping-wagon.....	277,483	May 15	1201	322 323	23	1845
Hammond, J. R., et al. (See Carson, Robert J., assignor.)						
Hammond, James B., New York, N. Y. Type-writing machine.....	290,419	Dec. 18	1309	364 365 366	25	1132
Hammond, James B., New York, N. Y. Type-writing machine.....	290,420	Dec. 18	1321	367	25	1135
Hammond, John F., Omaha, Nebr. Nail-plate feeder.....	278,943	June 5	403	111	23	2192
Hammond, Louis, New Haven, Conn. Die for rolling axes.....	278,544	May 29	2523	688	23	2089
Hammond, Watson F., Mashpee, Mass. Cranberry-screen.....	280,372	July 3	40	11	24	9
Hammond, William E., Meriden, Conn., assignor to Cleveland Non-Explosive Lamp Company, Cleveland, Ohio. Suspension-hook for chandeliers.....	280,611	July 3	327	92	24	58
Hamner, William C., Morganfield, Ky. Fire-place and chimney.....	278,791	June 5	157	46	23	2149
Hamnett, William C., Toledo, Ohio. Adjustable window-cornice.....	270,425	Jan. 9	730	214	23	152
Hanon, Augustin H., Paris, France. Apparatus for making telegraph-cables.....	288,795	Nov. 20	1269	347	25	743
Hampton, John A., Houston, Tex. Hay and cotton press.....	273,520	Mar. 6	359	95	23	895
Hampton, William Z., Clemons ville, N. C. Fruit-drier.....	271,065	Jan. 21	1531	442	23	312
Hamrick, Jerome M., Buffalo Gap, Tex. Wrench.....	278,135	May 22	1984	545	23	1987
Hanavan, John H., San Francisco, Cal. Portable hanging scaffold.....	276,241	Apr. 24	1759	490	23	1552
Hanchett, Oren R., Erie, Pa. Tobacco-cutter.....	286,607	Oct. 16	1040	281	25	205
Hanchett, Oren R., assignor to Selden & Griswold Manufacturing Company, Erie, Pa. Cake-griddle.....	271,842	Feb. 6	311	85, 86	23	495
Hancock, Albert R., assignor to himself and M. R. Davey, Lincoln, Nebr. Metal lathing..	279,748	June 19	1406	392	23	2377
Hancock, Clinton C., Philadelphia, Pa. Neck-wear.....	284,736	Sept. 11	713	200	24	1031
Hancock & Hancock. (See Tunney, Charles H., assignor.)						
Hancock, Isaiah, assignor to S. M. and J. R. Hancock, Fayetteville, Tenn. Cultivator-plov.....	270,426	Jan. 9	731	214	23	152
Hancock, James R., et al. (See Hancock, Isaiah, assignor.)						
Hancock, John. (See Merriam, Lyman W., assignor.)						
Hancock, Samuel M., et al. (See Hancock, Isaiah, assignor.)						
Hand, Furman, Pontiac, Ill. Thill-coupling.....	285,400	Sept. 25	1532	432	24	1189
Handforth, Benjamin, Hoboken, N. J. Spring-roller for curtain-fixtures.....	284,417	Sept. 4	319	88	24	957
Haudlan, Alexander, Jr., St. Louis, Mo. Locomotive head-light.....	281,869	July 24	1934	529	24	356
Handrick, Richard. (See Gruson and Handrick.)						
Handy, Charles F., and W. P. Anthony, Providence, R. I., assignors to Pope Manufacturing Company, Boston, Mass. Tricycle.....	274,762	Mar. 27	1953	543	23	1194
Handy, James R., Attleborough, Mass. Charm for watch-chains.....	286,608	Oct. 16	1041	281	25	205
Handy, John, and D. H. Lord, Northfield, Minn. Flour-packer.....	277,895	May 22	1691	461	23	1936
Haner, Emil, Geneseo, Ill. Plow.....	281,499	July 17	1452	398	24	268
Haney, Solomon, Waterloo, Iowa. Windmill.....	270,059	Jan. 2	274	80	23	56
Haney, William H., assignor to H. Korf, Jr., Cincinnati, Ohio. Candle-molding machine..	273,876	Feb. 27	1651	402	23	751
Haney, William M., Bellevue, Iowa. Milk or cream carrier.....	280,308	June 26	2081	586	23	2503
Hanford, Robert G., Jr., Columbus, Ohio. Fastening for straps, &c.....	275,203	Apr. 3	417	114	23	1298
Hanford, Robert G., Jr., Columbus, Ohio. Buckle.....	275,204	Apr. 3	418	114	23	1298
Hanford, Robert G., Jr., Columbus, Ohio, assignor to O. B. North & Co., New Haven, Conn. Name-strap fastener.....	274,763	Mar. 27	1954	543	23	1195
Hanford, Robert G., Jr., Columbus, Ohio, assignor to O. B. North & Co., New Haven, Conn. Gag-runner.....	277,715	May 15	1474	398	23	1891
Hanford, Robert G., Jr., Columbus, Ohio, assignor to O. B. North & Co., New Haven, Conn. Gag-runner.....	277,716	May 15	1474	398	23	1891
Hanford, Samuel, Binghamton, N. Y. Manufacture of illuminating-gas.....	273,068	Feb. 27	1875	527	23	789
Hanford, William T. (See Tallman, David S., assignor.)						
Hanika, Christian, assignor to Hanika Iron Fence Company, Springfield, Ohio. Fence.....	287,828	Nov. 6	47	14	25	516
Hanika, Christian, assignor to Hanika Iron Fence Company, Springfield, Ohio. Metallic fence.....	289,253	Nov. 27	1818	502	25	851
Hanika Iron Fence Company. (See Hanika, Christian, assignor.)						
Hankerson, Alwyn D. (See Haines and Hankerson.)						
Hankey, Anthony, Rochdale, Mass. Roll-bar for pulp-engines.....	288,234	Nov. 13	548	151	25	612
Haukin, William H., Jr., and C. Tinney, Brooklyn, N. Y. Re-enforcing plate for saw-handles.....	280,612	July 3	329	92	24	58
Hauley, Michael W., Chicago, Ill. Grain-shovel.....	276,684	May 1	194	50	23	1657
Hanlon, George O., et al. (See Hanlon, John F., assignor.)						
Hanlon, John. (See Leadley, James E., assignor.)						
Hanlon, John. (See Leadley and Hanlon.)						
Hanlon, John, New York, N. Y., assignor to United Gas Improvement Company, Philadelphia, Pa. Gas apparatus.....	269,929	Jan. 2	125	37, 38	23	26
Hanlon, John, New York, N. Y., assignor to United Gas Improvement Company, Philadelphia, Pa. Apparatus for making gas.....	270,427	Jan. 9	732	215	23	152
Hanlon, John, New York, N. Y., assignor to United Gas Improvement Company, Philadelphia, Pa. Gasometer.....	273,521	Mar. 6	360	96	23	895
Hanlon, John, New York, N. Y., J. E. Leadley, Camden, and S. Gibbs, Warren County, N. J., assignors to United Gas Improvement Company, Philadelphia, Pa. Process of and apparatus for manufacturing gas.....	273,230	Feb. 27	2084	585 586	23	826
Hanlon, John, New York, N. Y., J. E. Leadley, Camden, and S. Gibbs, Warren County, N. J., assignors to United Gas Improvement Company, Philadelphia, Pa. Steam-boiler for gas-generators.....	273,522	Mar. 6	360	96	23	896
Hanlon, John, New York, N. Y., and J. E. Leadley, Camden, N. J., assignors to United Gas Improvement Company, Philadelphia, Pa. Process of and apparatus for manufacturing gas.....	285,614	Sept. 25	1776	503 504 505 506	24	1234
Hanlon, John F., Boston, assignor to G. O. and J. P. A. Hanlon, Cambridge, Mass. Railway-rail.....	276,242	Apr. 24	1760	490	23	1552
Hanlon, Joseph P. A., et al. (See Hanlon, John F., assignor.)						
Hanna, Cyrus T., Allegheny, Pa. Roller-grinding mill.....	272,043	Feb. 13	570	154	23	551
Hanna, William C. (See Kallista, Joseph, assignor.)						
Hannan, Michael, New York, N. Y. Snow-melting apparatus.....	281,500	July 17	1452	398	24	268
Hannay, James B., Glasgow, county of Lanark, Scotland. Incrustation-preventive.....	285,615	Sept. 25	1779	506	24	1235

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Hannum, Henry A., Cazenovia, N. Y. Vibrating propeller for boats .....	278,945	June 5	408	112	23	2193
Hansberry, Lewis E. (See Smith and Hansberry.)						
Hansberry, Thomas K., Norton, Kans. Fence .....	290,578	Dec. 18	1530	421	25	1171
Hanscom, Albert S., Moorhead, Minn. Traction-engine .....	270,308	Jan. 9	569	167	23	121
Hanscom, Jackson M., Boston, Mass. Metal-boring tool .....	281,687	July 24	1695	461	24	313
Hansel, John, Yellow Springs, Ohio. Corn-husking chair .....	281,266	July 17	1161	321	24	219
Hansell, Walter P., assignor to French Spiral Spring Company, Pittsburg, Pa. Car-spring .....	273,837	Mar. 13	773	209	23	974
Hansen, Andrew, Racine, Wis. Logging-sleigh .....	271,843	Feb. 6	312	86	23	496
Hansen, Jens P., Sorøe, Sjælland, Denmark. Machine for sharpening saws .....	285,126	Sept. 18	1196	335	24	1123
Hansen, Thorvald T. A. (See Andersen and Hansen.)						
Hanser, Jacob, Oxford, Ohio. Vehicle-spring .....	280,613	July 3	329	92	24	59
Hansen, Charles, assignor of one-half to F. Appelquist, Rock Island, Ill. Plow .....	271,844	Feb. 6	313	86	23	496
Hansen, Charles P., Edwardsburg, Mich. Check-rower and planter .....	270,428	Jan. 9	732	215	23	152
Hanson, Christian. (See Phelps and Hanson.)						
Hansen, Frank B., New York, N. Y. Pump .....	274,937	Apr. 3	68	19	23	1237
Hanson, Freeman, Bar Mills, Mo. Wood-turning machine .....	272,242	Feb. 13	816	227	23	593
Hanson, Freeman, Hollis, Mo. Wood-turning lathe .....	286,810	Oct. 16	1294	{ 350 351 }	{ 25 25 }	{ 249 249 }
Hanson, Freeman, Hollis, assignor to G. L. and C. F. Warren, Portland, Me. Nail for carriage-curtain fastenings .....	273,729	Mar. 13	635	169	23	951
Hanson, Freeman, Hollis, assignor of one-half to J. G. McFarland and D. A. Meaher, Portland, Me. Turning-lathe .....	286,811	Oct. 16	1295	{ 351 352 }	{ 25 25 }	{ 250 250 }
Hanson, Olaf. (See Sande, Albert N., assignor.)						
Hanson, Olcy C., Eureka, Cal. Shingle-sawing machine .....	289,094	Nov. 27	1633	452	25	815
Hanson, Swan, Moline, and J. S. Leas, Rock Island, assignors to Barnard & Leas Manufacturing Company, Moline, Ill. Grain-scourer .....	276,966	May 1	565	147	23	1723
Hanson, William S., Mount Pleasant, Iowa. Tile-ditching machine .....	286,966	Oct. 16	1158	312	25	225
Hanstein, Hermann, Chicago, Ill. School-blackboard .....	278,010	May 22	1830	500	23	1950
Hanstein, Hermann, Chicago, Ill. Attachment to dividers .....	288,235	Nov. 13	549	151	25	612
Hanz, Daniel, Sullivan, Ind. Motor .....	277,717	May 15	1475	399	23	1891
Happersberger, Fredrick, Madison, Ind. Electric annunciator .....	289,411	Dec. 4	46	13	25	895
Happersberger, John, Cincinnati, Ohio, assignor to Cincinnati Electric Clock Company. Electric mechanism for controlling the hands of clocks .....	273,231	Feb. 27	2086	586	23	827
Happersberger, John, Cincinnati, Ohio, assignor to Cincinnati Electric Clock Company. Electric clock movement .....	278,946	June 5	410	112	23	2193
Harang, Théophile, New Orleans, La. Apparatus for the disintegration of bagasse and other vegetable matter .....	278,545	May 29	2523	689	23	2090
Harbach, Theodore J. (See Vick, Alfred, assignor.)						
Harbine, John T., Xenia, Ohio. Machine for trimming oil-cakes .....	276,811	May 1	359	95	23	1689
Harbison, Dickson T., Duncanville, Ill. Trace-buckle .....	287,125	Oct. 23	1702	466	25	329
Harbison & Walker. (See McKenna, William S., assignor.)						
Harbold, John E. L., Worthington, Ky. Car-coupling .....	286,198	Oct. 9	512	141	25	105
Harbster, Matthan, <i>et al.</i> (See Rippken, Adolph, assignor.)						
Harbster, William, <i>et al.</i> (See Rippken, Adolph, assignor.)						
Hard, Charles H., Oneida, N. Y. Mattress-frame .....	288,431	Nov. 13	815	221	25	658
Harden, Jasper F., New Plymouth, Ohio. Watch-fob .....	278,947	June 5	411	112	23	2193
Harden, John J., Chicago, Ill. Hand-grenade for fire-extinguishers .....	282,981	Aug. 14	594	168	24	613
Hardenbergh, Henry J., New York, N. Y., and G. A. Weinreich, Philadelphia, Pa.; said Weinreich assignor to said Hardenbergh. Transom-lifter .....	285,811	Oct. 2	37	12	25	8
Harder, Frank P., <i>et al.</i> (See Burns and Buckman, assignors. (Reissue.)						
Harder, William A. (See Lawrence, George H., assignor.)						
Hardie, Jason W., New York, N. Y. Pneumatic store-service apparatus .....	289,649	Dec. 4	345	97	25	948
Hardin, Benoni J., Springfield, Ky. Bolt .....	282,077	July 31	2193	602	24	406
Harding, James, Newark, N. J. Die for forming the claws of hatchets .....	285,127	Sept. 18	1197	335	24	1123
Harding, John H., Milwaukee, Wis. Embossing upon plastered walls and other surfaces .....	278,238	May 22	2114	522	23	2009
Harding, Thomas, Lafayette, Ind. Car-coupling .....	274,764	Mar. 27	1955	544	23	1195
Hardison, Lewis A., Duke Centre, Pa. Machine for drilling wells .....	274,120	Mar. 20	1130	311	23	1043
Hardman, James, Jr. (See Adams, George B., assignor.)						
Hardocg, Martin, Avery, Iowa. Mining-machine .....	282,632	Aug. 7	192	56	24	533
Hardtmuth, Franz, Budweis, Austria-Hungary. Pencil or crayon holder .....	276,812	May 1	360	96	23	1669
Hardwick, Frederick. (See Brown, Joshua, assignor.)						
Hardwick, Joseph O., Colorado City, Colo. Washing-machine .....	274,190	Mar. 20	1212	334	23	1058
Hardy, George R. (See Blodgett and Hardy.)						
Hardy, Manly. (See Getchell, George W., assignor.)						
Hardy, Orlando B. (See Lauth and Hardy.)						
Hardy, Thomas P., New York, N. Y. Pipe-coupling .....	282,312	July 31	2500	687	24	456
Hardy, Thomas P., New York, N. Y. Reducing pipe-coupling .....	290,045	Dec. 11	838	237	25	1041
Hare, John R., Baltimore, Md. Street-car fare-box .....	274,319	Mar. 20	1380	379	23	1086
Harger, Joel P. (See Keith, Horace M., assignor.)						
Hargrave, Philip H. (See Keller, Peter, assignor.)						
Hargreaves, John C. (See Fawcett and Hargreaves.)						
Haring, John F. (See Gamblee and Haring.)						
Harker, John B., Columbus, Ohio. Casting hollow ware .....	272,044	Feb. 13	573	155	23	551
Harker, John B., and C. L. Wilkins, Columbus, Ohio. Waffle-iron .....	277,492	May 8	1122	301	23	1825
Harland, James M., Dayton, Ohio. Wrench .....	288,432	Nov. 13	815	221	25	658
Harley, John M. (See Polson and Harley.)						
Harley, Joseph L., Baltimore, Md. Register .....	277,130	May 8	789	207	23	1767
Harley, Olin, Bluffton, Ind. Screen .....	280,614	July 3	330	92	24	59
Harley, William C., St. Louis, Mo. Skid .....	276,685	May 1	195	50	23	1657
Harlow, Ivory W., assignor to Plymouth Foundry Company, Plymouth, Mass. Steve .....	273,730	Mar. 13	636	169	23	951
Harlow, John M., Brighton, Cal. Fruit-stoner .....	269,852	Jan. 2	41	13	23	10
Harman, Jonathan, Solomon City, Kans. Attachment for plows and cultivators .....	280,615	July 3	331	93	24	59
Harman, William, Chicago, Ill. Combustion device for steam-boiler furnaces .....	287,670	Oct. 30	2408	649	25	468
Harmer, Henry, Southampton, Ontario, assignor to F. Broughton, Hamilton, Canada. Safety switch-guard .....	289,254	Nov. 27	1819	503	25	851
Harmon, Gilbert P., Portland, Me. Water-gage .....	239,255	Nov. 27	1820	503	25	851
Harmon, John W., Boston, Mass. Artificer's level .....	270,951	Jan. 23	1393	402	23	289
Harmon, John W., Boston, Mass. Artificer's leveling-instrument .....	281,267	July 17	1162	321	24	219
Harmon, Orville S., Brooklyn, N. Y., assignor to P. Lorillard & Co., Jersey City, N. J. Pocket-knife for cutting tobacco .....	276,813	May 1	362	96	23	1690
Harmony, William P., Sidney, Ohio. Composer's type-case stand .....	272,243	Feb. 13	818	228	23	594
Harned, Frank P., Camden, N. J., assignor to C. R., I. R., and J. R. Wainwright, Philadelphia, Pa. Grinding caustic soda .....	286,132	Oct. 2	432	.....	25	80
Harnist, Peter, Marine, Ill. Flour-mill feeder .....	290,421	Dec. 18	1323	367	25	1135



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Harper, Adrian. (See Roland and Harper.)						
Harper, Andrew J., Unionville Centre, Ohio. Wagon-hound	271,631	Feb. 6	61	17	23	450
Harper, Andrew J., Unionville Centre, Ohio. Wagon-hound	275,907	Apr. 17	1353	372	23	1474
Harper, Charles S., Sharon, Mass. Carriage-axle	276,174	Apr. 24	1678	464	23	1538
Harper, David, Jonesborough, Ark. Excavator	287,671	Oct. 30	2410	{ 649 650 }	25	468
Harper, Henry M., Elmira, N. Y. Switch lever and rod	275,336	Apr. 3	594	159	23	1327
Harper, Isaac and S., Pittsburg, Pa. Regenerating-furnace	274,320	Mar. 20	1380	{ 379 380 }	23	1087
Harper, John, assignor of one-half to W. R. Swartz, Duncannon, and G. W. Meily, Harrisburg, Pa. Fire-escape	280,741	July 3	489	138	24	87
Harper, John W., Assumption, Ill. Stack-roof	286,431	Oct. 9	818	222	25	159
Harper, John W., assignor of one-half to J. B. Graham, Jersey City, N. J. Interlocking apparatus for railway switches and signals	273,681	Mar. 6	569	151	23	931
Harper, Nathan, assignor to M. W. Adams, Newark, N. J. Hat-sizing machine	278,332	May 29	2261	{ 619 620 }	23	2043
Harper, Nathan, assignor to M. W. Adams, Newark, N. J. Hat-sizing apparatus	278,333	May 29	2265	620	23	2044
Harper, Richard E., Butler, Mo. Whiffletree-clip	288,796	Nov. 20	1270	348	25	743
Harper, Robert W., Evansville, Ind. Broom	273,984	Mar. 13	948	261	23	1004
Harper, Robert W., assignor, by mesne assignments, to J. H. Polsdorfer, Evansville, Ind. Wash-board	287,926	Nov. 6	171	49	25	537
Harper, Samuel. (See Harper, Isaac and S.)						
Harper, Samuel, et al. (See Gearing, Charles, assignor.)						
Harpham, George E. (See McDermott, John, assignor.)						
Harrah, Stephen R., Pittsburg, Kans. Sash-fastener	279,749	June 19	1406	392	23	2378
Harrah, William C., Webster City, Iowa. Excavator and grader combined	277,027	May 8	649	169	23	1742
Harrah, Edward W. (See Hawley, Theodore, assignor.)						
Harrah, Edward W., Fairfield, Conn. Curtain or covering for carriages	280,309	June 26	2082	587	23	2503
Harrell, William K., Clarinda, Iowa. Plow	274,491	Mar. 27	1630	452	23	1137
Harrigan, Cornelius, Rome, N. Y. Sleigh	278,662	May 29	2666	729	23	2114
Harrington, Edmond B. (See Luce, Theodore, assignor.)						
Harrington, Edwin, assignor to E. Harrington & Son, Philadelphia, Pa. Hoisting-machine	272,431	Feb. 20	1068	301	23	642
Harrington, Edwin, assignor to E. Harrington & Son, Philadelphia, Pa. Hoisting-machine	272,432	Feb. 20	1069	301	23	642
Harrington, Franklin. (See Bemis, James H., assignor.)						
Harrington, John C., Providence, R. I. Bracelet	272,244	Feb. 13	819	228	23	594
Harrington, John C., Providence, R. I. Bracelet	289,531	Dec. 4	198	56	25	921
Harrington, Rufus S., Minneapolis, Minn. Washing-machine	277,028	May 8	651	169	23	1743
Harrington & Son, Edwin. (See Harrington, Edwin, assignor.)						
Harris, Alfred E., Mile End Road, county of Middlesex, England. Car-brake	277,274	May 8	949	{ 254 255 }	23	1796
Harris, Alphonso S., Chelsea, Mass. Automatic fire-extinguisher	269,930	Jan. 2	126	38	23	26
Harris, Alphonso S., Chelsea, Mass. Gas-burner	269,931	Jan. 2	128	38	23	27
Harris, Arthur, Chicago, Ill., assignor to J. M. Adams. Locomotive head-light	272,245	Feb. 13	820	228	23	594
Harris, Arthur, Chicago, Ill., assignor to J. M. Adams. Locomotive head-light	272,246	Feb. 13	820	229	23	594
Harris, Arthur, assignor to J. M. Adams, Chicago, Ill. Locomotive head-light	276,814	May 1	363	96	23	1690
Harris, Arthur, and G. M. Clark, assignors to J. M. Adams, Chicago, Ill. Locomotive head-light	270,791	Jan. 16	1195	345	23	248
Harris, Arthur, and G. M. Clark, assignors to J. M. Adams, Chicago, Ill. Locomotive head-light	270,792	Jan. 16	1195	345	23	249
Harris, Arthur, and G. M. Clark, assignors to J. M. Adams, Chicago, Ill. Locomotive head-light	270,793	Jan. 16	1196	345	23	249
Harris, Arthur, and G. M. Clark, assignors to J. M. Adams, Chicago, Ill. Locomotive head-light	270,794	Jan. 16	1197	346	23	249
Harris, Arthur, and G. M. Clark, assignors to J. M. Adams, Chicago, Ill. Locomotive head-light	270,795	Jan. 16	1198	346	23	249
Harris, Arthur, and G. M. Clark, assignors to J. M. Adams, Chicago, Ill. Locomotive head-light	272,247	Feb. 13	821	229	23	595
Harris Button Hole Company. (See Dancel, Christian, assignor.)						
Harris, Charles A., Belleville, Tex. Machine for washing dishes	289,650	Dec. 4	347	97	25	948
Harris, Charles A., assignor of one-half to C. P. Curtis and E. Karchner, Millbury, Ohio. Stave-baling machine	287,672	Oct. 30	2411	650	25	468
Harris, Charles R., Attleborough, Mass. Locket	281,688	July 24	1696	461	24	313
Harris, Darius W., assignor to Snell Manufacturing Company, Fiskdale, Mass. Metal die for making angles	276,033	Apr. 17	1501	413	23	1499
Harris, David, Brooklyn, N. Y. Machine for making button-hole linings	282,078	July 31	2194	{ 602 603 }	24	406
Harris, Frederick G. (See Chamberlain and Harris.)						
Harris, George E., Virginia, Ill. Sharpening-stone	290,579	Dec. 18	1531	.....	25	1171
Harris, Gilbert J. (See Flewelling and Harris.)						
Harris, Hanry, Suisun City, Cal. Metallic fastener	285,260	Sept. 18	1353	381	24	1152
Harris, Hanry, Suisun City, Cal. Pantaloon	286,609	Oct. 16	1042	281	25	205
Harris, James W. and S., assignors of one-half to J. A. Ballard & Son, Saltillo, Miss. Plow	290,641	Dec. 18	1608	442	25	1184
Harris, John, Columbus, Nebr. Motive power	270,796	Jan. 16	1198	346	23	249
Harris, John, Cavistoe, N. Y. Pump	273,985	Mar. 13	949	261	23	1004
Harris, John G., et al. (See Atkinson, Henry C., assignor.)						
Harris, Jonathan, Grand Ledge, Mich. Curtain-fixture	274,191	Mar. 20	1213	334	23	1058
Harris, Joseph, Jr., Boston, Mass. Wheel for vehicles	272,133	Feb. 13	688	187	23	570
Harris, Joshua W., Waynesborough, assignor of one-half to T. W. Lambert, Greenville, Va. Neck-yoke	289,256	Nov. 27	1821	503	25	851
Harris, Milo, assignor of one-half to N. E. Thomas, Jamestown, N. Y. Pillow-sham holder	278,705	June 5	38	11	23	2131
Harris, Noah R., et al. (See Hutson, William L., assignor.)						
Harris, Orlan A., Madelia, Minn. Washing-machine	277,896	May 22	1092	{ 461 462 }	23	1937
Harris, Samuel R., et al. (See Knowlton, William W., assignor.)						
Harris, Samuel R., et al. (See Sweet, George N., assignor.)						
Harris, Sarah A., et al. (See Cooper, Daniel M., assignor.)						
Harris, Stephen. (See Harris, James W. and S.)						
Harris, Thomas A., Callisburg, Tex. Store-shelving	273,069	Feb. 27	1876	527	23	790
Harris, Thomas H., London, England. Stretcher for pantaloons and other garments	286,812	Oct. 16	1296	352	25	250
Harris, Virginus C. (See Foster and Harris.)						
Harris, William E., New York, N. Y. Ore-amalgamator	272,045	Feb. 13	574	155	23	551
Harris, William E., New York, N. Y. Amalgamator	272,544	Feb. 20	1206	337	23	666

*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Harris, William E., New York, N. Y. Amalgamating-furnace .....	273,275	Mar. 6	36	12	23	841
Harris, William E., New York, N. Y. Oxidizing-furnace .....	276,175	Apr. 24	1679	464	23	1538
Harris, William E., New York, N. Y. Machine for amalgamating the gold and silver in pulverized ores .....	282,982	Ang. 14	595	168	24	613
Harris, William E., St. Louis, Mo., and E. B. Evans, Covington, Ky., assignors of one-fourth to S. and G. H. Knight, St. Louis, Mo., and O. Knight, Washington, D. C. Roll for rolling metal .....	288,176	Nov. 6	475	131	25	590
Harris, William H., Buffalo, N. Y. Filter .....	290,046	Dec. 11	839	237	25	1041
Harris, William M., Menlo, Iowa. Lock for stencil-plates .....	275,205	Apr. 3	419	115	23	1298
Harris, William P., South Chicago, Ill. Automatic roll-call for telegraph-lines .....	280,616	July 3	332	93	24	59
Harris, William W., assignor of one-fourth to J. W. Holtzclaw, Spartanburg, S. C. Combined cotton-seed drill and fertilizer-distributor .....	289,771	Dec. 4	492	137	25	972
Harrison, Abraham W., Abergavenny, county of Monmouth, England. Valve for oscillating engines .....	271,449	Jan. 30	2018	582	23	404
Harrison Brothers & Co. (See Semper, Conrad, assignor.) .....						
Harrison, Frank, Loveland, Colo. Saw-guide .....	284,007	Aug. 28	1887	529	24	864
Harrison, Jay L., Lebanon, Ind. Wagon-brake .....	276,686	May 1	196	50	23	1657
Harrison, John F., assignor of one-half to H. J. Davison, New York, N. Y. Equilibrated gas-holder .....	272,248	Feb. 13	822	229	23	595
Harrison, John S., Clinton, Iowa. Fire-escape ladder .....	282,079	July 31	2197	603	24	406
Harrison, John W., Wheeling, W. Va. Shutter-worker .....	270,310	Jan. 9	571	168	23	122
Harrison, Jonathan W., Ypsilanti, Mich. Jack for raising railroad-tracks .....	269,932	Jan. 2	129	38	23	27
Harrison, Joseph, Milwaukee, Wis. Mold .....	277,131	May 8	792	207	23	1767
Harrison, Leonard S., Nashville, Ohio. Auxiliary barrel for guns .....	278,546	May 29	2525	689	23	2090
Harrison, M. La Rue, Washington, D. C., and F. Underhill, assignors to Yale Lock Manufacturing Company, Stamford, Conn. Wicket .....	270,309	Jan. 9	570	167	23	121
Harrison Machine Works. (See Buchanan, William C., assignor.) .....						
Harrison, Robert J., Cary, N. C. Seed-planter and cultivator .....	276,034	Apr. 17	1502	414	23	1499
Harrison, Samuel T., San Francisco, Cal. Rasp .....	279,750	June 19	1407	393	23	2378
Harrison, Thomas B. (See Barry, James A., assignor.) .....						
Harrison, Thomas S., Philadelphia, Pa. Producing a perfumed soap alkali .....	282,633	Aug. 7	193		24	534
Harrison, William H., Louisville, Ky. Device for holding coin and making change .....	282,723	Aug. 7	309	87, 88	24	554
Harrison, William H., assignor to himself and H. H. Littell, Louisville, Ky. Car-starter .....	271,066	Jan. 23	1532	442	23	312
Harrison, William P. (See Miller and Harrison.) .....						
Harrison, William P., Columbus, Ohio. Reel for chain-pumps .....	272,433	Feb. 20	1070	301	23	642
Harriss, James W., Terrell, Tex. Sweat-leather for riding-saddles .....	290,880	Dec. 25	1917	529	25	1246
Harrod, John H., Huntsville, Ohio. Car-coupling .....	288,999	Nov. 27	1513	418	25	795
Harrod, William H., Sellersburg, Ind. Sulky-plow .....	288,998	Nov. 27	1513	418	25	795
Harroun, Alexander, Clockville, N. Y. Support for climbing plants .....	278,706	June 5	39	11	23	2131
Harry, Baldwin W., and J. C. Kieffer, Milton Centre, Ohio. Car-coupling .....	277,275	May 8	950	255	23	1796
Harry, Simon J., Negaunee, Mich. Car-coupling .....	273,357	Mar. 6	155	44	23	861
Harsha, Mortimer S., assignor of one-half to O. Berg, Chicago, Ill. Saw-feeding device .....	288,330	Nov. 13	677	186	25	633
Hartson, Alfred H. (See Asimont, Henry H., assignor.) .....						
Hart, Albert. (See Fisher and Hart.) .....						
Hart, Amos D., Elmira, N. Y. Scaffold-bracket .....	284,845	Sept. 11	846	238	24	1054
Hart, Andrew D., North Garden, Va. Safety-hammer for fire-arms .....	273,070	Feb. 27	1877	527	23	790
Hart, Benjamin W., London, England. Pneumatic apparatus for the separation of minerals, &c. .....	271,450	Jan. 30	2019	582	23	405
Hart, Calvin, Farmington, Ill. Farm-gate .....	276,176	Apr. 24	1679	464	23	1538
Hart, Daniel R., and J. B. Geach, New York, N. Y. Car-bell .....	273,358	Mar. 6	156	44	23	861
Hart, David S., Paradise, Ill. Washing-machine .....	290,047	Dec. 11	840	238	25	1041
Hart, Eli S., Clinton, Iowa. Track-drill .....	286,298	Oct. 9	659	176	25	129
Hart, Fred O., assignor to himself and E. D. Weston, Wakefield, Mass. Grate for stoves and furnaces .....	274,938	Apr. 3	69	19	23	1237
Hart, Harrie B., Philadelphia, Pa. Bicycle-bell .....	275,485	Apr. 10	816	221	23	1374
Hart, Harrie B., Philadelphia, Pa. Bicycle-saddle .....	285,691	Oct. 2	145	41	25	28
Hart, Henry C., Detroit, Mich. Baggage-rack for railway-cars .....	282,687	Aug. 7	493	139	24	587
Hart, Hubert C., Unionville, Conn. Belt-fastener .....	272,685	Feb. 20	1387	389	23	697
Hart, Hubert C., Unionville, Conn. Belt-fastener .....	281,058	July 10	885	246	24	164
Hart, Hubert C., Unionville, Conn. Knife .....	281,361	July 17	1280	355	24	238
Hart, James H., Denver, Colo. Ash-depositor .....	277,718	May 15	1475	399	23	1891
Hart, Joel T., Greenwood, Mo. Hay rake and loader .....	279,647	June 19	1289	358	23	2357
Hart, John C., Green's Fork, Ind. Cultivator .....	273,071	Feb. 27	1878	527	23	790
Hart, John P., Jr. (See Herman, Addison M., assignor.) .....						
Hart, Joseph, New York, N. Y. Fire-escape .....	283,391	Aug. 21	1116	316	24	714
Hart, Louis H., assignor to H. C. Wilkinson, New York, N. Y. Imitation telegraph-key .....	281,362	July 17	1281	355	24	238
Hart, Stacy B., Peoria, Ill. Force-feed fertilizer attachment for grain-drills .....	277,719	May 15	1476	399	23	1892
Harter, Francis, Wilkes-Barre, Pa. Wagon-brake .....	278,948	June 5	411	112	23	2193
Harter, Isaac. (See Kohler, Frederick E., assignor.) .....						
Harter, Joseph, Tiffin, Ohio. Combined harrow, roller, and scraper .....	277,029	May 8	652	170	23	1743
Harter, Joseph V., Denver, Ill. Ground-pulverizer and stalk-cutter .....	282,724	Aug. 7	310	88	24	554
Harter, Michael D., et al. (See Rote, Charles V., assignor.) .....						
Hartford, David F., assignor of one-half to T. T. Hartford, Boston, Mass. Sole-rounding machine .....	274,939	Apr. 3	70	19	23	1237
Hartford Machine Screw Company. (See Spencer, Christopher M., assignor.) .....						
Hartford Sanitary Plumbing Company. (See Birkery and Lord, assignors.) .....						
Hartford Sanitary Plumbing Company. (See Hatch, George E., assignor.) .....						
Hartford Sanitary Plumbing Company. (See Lord and Day, assignors.) .....						
Hartford, Thomas T. (See Hartford, David F., assignor.) .....						
Hartig, Henry, Brooklyn, N. Y. Steam-engine .....	277,897	May 22	1693	462	23	1937
Hartje, Frederick. (See Hartje, George and F.) .....						
Hartje, George and F., New York, N. Y. Manufacture of gold for jewelry .....	281,059	July 10	886		24	164
Hartle, Andrew J., Covington, Ohio. Reel for reaping-machines .....	270,797	Jan. 16	1200	346	23	250
Hartley, D. Bert, Chicago, Ill. Rocking, reclining, and easy chair .....	276,687	May 1	197	50, 51	23	1658
Hartley, D. Bert, Chicago, Ill. Clutch mechanism .....	276,688	May 1	199	51	23	1658
Hartley, D. Bert, Chicago, Ill. Mechanical movement .....	278,011	May 22	1833	500	23	1960
Hartley, Henry C., and J. L. Rodgers, Springfield, Ohio. Button-hole attachment for sewing-machines .....	279,563	June 19	1194	330	23	2340
Hartley, James M. (See Hartley, Marquis D. L. and J. M.) .....						
Hartley, Marquis D. L. and J. M., San Diego, Cal. Whiffletree .....	285,032	Sept. 18	1087	303	24	1104



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Hartman, Benjamin J., Wooster, Ohio. Harness-saddle .....	281,501	July 17	1454	398	24	260
Hartman, Charles F., Keller's Church, Pa. Rail-joint .....	274,593	Mar. 27	1737	488	23	1150
Hartman, Charles R., Vincennes, Ind. Hub of colter for plows .....	278,949	June 5	413	113	23	2194
Hartman, Charles R., Vincennes, Ind. Hub for wheel-colters .....	278,950	June 5	413	113	23	2194
Hartman, Francis M., Marathon, Ohio. Horseshoe .....	285,261	Sept. 18	1354	382	24	1152
Hartman, Franklin, Flowerfield, Mich. Rosette-buckle .....	275,824	Apr. 17	1255	345	23	1456
Hartman, George J., Lake, assignor to W. H. Lotz and E. Carqueville, Chicago, Ill. Seal-lock for car-doors .....	284,632	Sept. 11	578	163	24	1008
Hartmann, Henry, Jersey City, N. J. Water-filter .....	283,103	Aug. 14	754	212	24	641
Hartman, Henry, assignor to W. M. Johnson and K. Hensser, Salt Lake City, Utah Ter. Combination can-opener .....	278,951	June 5	415	113	23	2194
Hartman, Jacob B., Wooster, Ohio. Window-blind .....	289,632	Dec. 11	575	161	25	994
Hartman, Jacob B., Wooster, Ohio. Refrigerator .....	289,633	Dec. 11	576	161	25	994
Hartman, John M., Philadelphia, Pa. Hot-blast stove .....	275,908	Apr. 17	1354	373	23	1474
Hartman, Joseph V., and A. Wetzel, Jr., Linwood, Ohio. Car-coupling .....	288,797	Nov. 20	1271	348	25	747
Hartman, Samuel. (See Heidmeyer, Conrad J., assignor.)						
Hartmann, Eugen F. G., Berlin, assignor to Gebr. Stollwerck, Cologne, Germany. Soluble cocoa .....	270,878	Jan. 16	1293		23	267
Hartmann, Eugen F. G., Berlin, assignor to Gebr. Stollwerck, Cologne, Germany. Soluble cocoa .....	273,975	Mar. 13	940		23	1003
Hartmann, Paul. (See Grunzweig and Hartmann.)						
Hartnagel, Jacob, New York, N. Y., assignor to J. N. Wiggin, Caldwell, N. J. Manufacture of window-shades and similar articles .....	274,594	Mar. 27	1758		23	1159
Hartson, La Fayette, Wyoming, Iowa. Harness buckle and loop .....	281,870	July 24	1935	529	24	356
Hartung, Charles C., St. Louis, Mo. Self-closing hatchway .....	290,048	Dec. 11	841	238	25	1041
Hartwell, Eugene B., Delphos, Ohio. Neck-yoke .....	278,952	June 5	415	113	23	2194
Hartwell, James G. (See Eddy, Peter, assignor.)						
Hartwell, Newton W., Louisville, Ky. Telegraph-blank .....	284,297	Sept. 4	175	49, 50	24	934
Hartwich, Ferdinand F., Onaga, Kans. Straw-stacker .....	277,720	May 15	1478	400	23	1892
Hartwich, Ferdinand F. and H. F., Onaga, Kans. Boring-machine .....	281,871	July 24	1936	529	24	356
Hartwich, Herman F. (See Hartwich, Ferdinand F. and H. F.)						
Harty, William, Johnstown, Pa. Rolling-mill .....	276,177	Apr. 24	1680	465	23	1538
Harty, William, Portsmouth, Ohio. Spring-testing machine .....	277,698	May 22	1694	462	23	1937
Harvey, Hayward A., Orange, N. J. Automatic nut-tapping machine .....	272,877	Feb. 27	1653	462 463	23	752
Harvey, Hayward A., Orange, N. J. Nut and bolt .....	273,731	Mar. 13	637	169 170	23	951
Harvey, Hayward A., Orange, N. J. Tap for cutting spiral wedge-nuts .....	274,492	Mar. 27	1631	452	23	1137
Harvey, Hayward A., Orange, N. J. Machine for rolling the threads of wood-screws .....	284,633	Sept. 11	579	163	24	1008
Harvey, Hayward A., Orange, N. J., assignor to Harvey Screw and Bolt Company, of Connecticut. Screw .....	288,798	Nov. 20	1271	348	25	744
Harvey, John, Brooklyn, N. Y., assignor to himself, J. Fitz, Martinsburg, W. Va., and W. J. Davis, Brooklyn, N. Y. Middlings-purifier .....	285,128	Sept. 18	1198	335 336	24	1123
Harvey, Peter I., assignor of one-half to A. Clark and P. Kline, Amsterdam, N. Y. Feed-guide attachment for knitting-machines .....	279,350	June 12	972	269	23	2297
Harvey Screw and Bolt Company. (See Harvey, Hayward A., assignor.)						
Harvey, Willard H., Kingman, Me. Mosquito-guard .....	281,502	July 17	1455	399	24	269
Harvell, Seaborn H. B., Morgan County, Ga. Rat-trap .....	290,580	Dec. 18	1531	422	25	1171
Harwood Chair Seat Company. (See Harwood, Herbert J., assignor.)						
Harwood, Herbert J., Littleton, assignor to Harwood Chair Seat Company, Boston, Mass. Folding chair .....	275,206	Apr. 3	420	115	23	1298
Harwood, J. C., et al. (See Graham, Andrew, assignor.)						
Hasenpflug, Charles E., Paterson, N. J. Caster for trucks, &c. ....	288,633	Nov. 20	1064	293	25	708
Hasenpflug, George. (See Rosentreter, Frank L., assignor.)						
Haskell, Charles S., Philadelphia, Pa. Steam-engine governor .....	285,692	Oct. 2	146	41	25	29
Haskell, Charles S., and W. B. Fleming, Philadelphia, Pa. Valve .....	288,331	Nov. 13	680	187	25	633
Haskell Company, William H. (See Cooper, Theodore, assignor.)						
Haskell, Elbridge F., Lawrence, Mass. Strainer for tea and coffee pots .....	286,813	Oct. 16	1297	352	25	251
Haskell, George W., assignor to G. W. W. H., and H. J. Haskell, Philadelphia, Pa. Thill-coupling .....	279,381	June 12	973	270	23	2297
Haskell, Henry J., et al. (See Haskell, George W., assignor.)						
Haskell, Joseph E., Chicago, Ill. Portable telescopic case .....	281,268	July 17	1163	321	24	219
Haskell, Luther D., Jr., Beverly, Mass. Fifth-wheel .....	282,799	Nov. 20	1273	349	25	744
Haskell, Thomas S., Springfield, Mass. Pan or stove-cover lifter .....	279,153	June 12	691	189	23	2251
Haskell, William H., et al. (See Haskell, George W., assignor.)						
Haskin, Chancey C., Waltham, assignor of two-thirds to J. E. Haskin and E. D. Mereness, Westside, Iowa. Car-coupling .....	288,800	Nov. 20	1274	349	25	744
Haskin, De Witt C., New York, N. Y. Construction of submarine tunnels .....	286,924	Oct. 16	1439	395	25	274
Haskin, James E., et al. (See Haskin, Chancey C., assignor.)						
Haskin, Uri, assignor to J. H. Dalzell, Pittsburg, E. G. Bates, Philadelphia, and G. H. Christy, Sewickley, Pa. Metal-straightening machine .....	273,682	Mar. 6	570	151	23	931
Haskins, Benjamin H., assignor of one-half to J. Young, Mechanicsville, N. Y. Automatic spittoon-holder .....	286,299	Oct. 9	660	176	25	130
Haskins, Charles D., New York, N. Y., assignor to Western Electric Company, Chicago, Ill. Electric lamp .....	283,482	Aug. 21	1227	345 346	24	734
Haskins, Charles D., New York, N. Y., assignor to Western Electric Manufacturing Company, Chicago, Ill. Telephone-transmitter .....	286,923	Oct. 16	1438	395	25	274
Haskins, Harry S., assignor to E. Harrington & Son, Philadelphia, Pa. Hoisting-machine .....	272,439	Feb. 20	1076	303	23	643
Haslehurst, Theodore E. (See Park, James, assignor.)						
Häslor, Adolph, New York, N. Y. Sofa-bed .....	277,721	May 15	1479	400	23	1892
Hastup, William, Sidney, Ohio. Earth-scraper .....	278,953	June 5	416	114	23	2194
Hastup, William, Sidney, Ohio. Earth-scraper .....	284,418	Sept. 4	320	89	24	957
Hass, Theodore M., New York, N. Y. Album-clasp .....	277,722	May 15	1479	400	23	1892
Hass, Theodore M., New York, N. Y. Stop-hinge .....	284,008	Aug. 28	1688	529	24	865
Hassell, Richard L., Chicago, Ill. Indicating-poise for scale-beams .....	274,493	Mar. 27	1631	452 453	23	1137
Hassell, Richard L., Chicago, Ill. Indicating scale-weight .....	274,494	Mar. 27	1634	453 454	23	1137
Hasselman, Lewis W., Indianapolis, Ind. Straw-stacker .....	274,940	Apr. 3	72	20	23	1238
Hasselman, Lewis W., Indianapolis, Ind. Straw-stacker. (Reissue) .....	10,347	July 3	548	152 153	24	97
Hasselman, Lewis W., Indianapolis, Ind. Clamp for securing turn-tables for straw-stackers .....	290,049	Dec. 11	841	238	25	1042
Hasselman, Lewis W., Indianapolis, Ind. Straw-stacker .....	290,050	Dec. 11	842	239	25	1042

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Hassenforder, Charles. (See Huling, Charles C., assignor.)						
Hassenforder, Charles. (See Pearson, Robert P., assignor.)						
Hastings Concentrator Company. (See Hastings, Emory B., assignor.)						
Hastings, E. Warren, Boston, assignor of one-third to R. J. Butterfield, Chelmsford, Mass. Awning	289,532	Dec. 4	199	56	25	931
Hastings, Edwin G., Nevada, Iowa. Grinding-mill	278,954	June 5	417	114	23	2195
Hastings, Emory B., assignor to Hastings Concentrator Company, Palmer, Mass. Magnetic apron-cylinder for ore-separating machines	290,182	Dec. 11	993	280	25	1070
Hastings, Glover S., Waterbury, Conn. Knife-handle	277,132	May 8	793	208	23	1767
Hastings, Michael, Brooklyn, N. Y. Stop-valve	271,067	Jan. 23	1533	442	23	312
Hastings, Todd & Schanck. (See Van Campen, Savillion, assignor.)						
Hat Curling Machine Company. (See Cocker, Frederick, assignor.)						
Hatch, Albert T. (See Hatch, Hyman and A. T.)						
Hatch, Anson, assignor of one-half to A. E. Schmidt, New Haven, Conn. Lubricating vertical bearings	280,742	July 3	490	138	24	87
Hatch, Edward P. (See White, Samuel K., assignor.)						
Hatch, Elias T., New York, N. Y. Apartment-house	288,332	Nov. 13	681	187	25	633
Hatch, George E., Meriden, assignor to Hartford Sanitary Plumbing Company, Hartford, Conn. Manufacture of glass bowls for water-closets	286,000	Oct. 2	271	76	25	51
Hatch, George T., and F. W. Riesenber, Peoria, Ill. Reversing-gear for engines	287,023	Oct. 23	1576	434	25	304
Hatch, Hyman and A. T., South Elgin, Ill. Whiffletree-hook	271,632	Feb. 6	62	17	23	451
Hatch, James L., Rochester, N. Y. Counter-stiffener machine	286,432	Oct. 9	819	222	25	159
Hatcher, Edmund N. (See Emmick, Andrew C., assignor.)						
Hatcher, Isaiah G., Cleveland, Ohio. Pedestal for burial-caskets	283,885	Aug. 28	1711	482	24	833
Hatcher, William G., Atlanta, Ga. Picket-pointing machine	285,033	Sept. 18	1088	304	24	1104
Hatchman, Robert, Detroit, Mich. Fire-pot for stoves	283,602	Aug. 21	1365	381	24	759
Hatfield, George W., Dayton, Ohio. Oil-press box and pan	272,134	Feb. 13	689	188	23	571
Hatfield, Llewellyn T., Milau, Mo. Hay-rake	276,689	May 1	200	51	23	1658
Hatfield, Lyman, assignor of one-half to H. C. Ranney, Cleveland, Ohio. Car-coupling	272,135	Feb. 13	691	189	23	571
Hathaway, Byron A., Chicago, Ill. Combined chair and cutting-table	272,434	Feb. 20	1071	302	23	642
Hathaway, Charles L., Austin, Tex. Car-coupling	285,616	Sept. 25	1780	506	24	1235
Hathaway, Ellsworth C. (See Wright, Charles A., assignor.)						
Hathaway, George M., et al. (See Dey and Hathaway.)						
Hathaway, Henry H., Clockville, N. Y. Horse hay-rake	270,218	Jan. 9	468	137	23	102
Hathaway, Thomas J., Montevallo, Mo. Well-drilling machine	289,257	Nov. 27	1822	503	25	851
Hatheway, William S., Deansville, N. Y. Apparatus for deodorizing organic substances	278,955	June 5	419	114	23	2195
Hattabaugh, Isaac J. (See Jolly, George W., assignor.)						
Hatton, George. (See Hopkins and Hatton.)						
Hauce, William A., Springfield, Ohio. Hair-crimping tool	278,944	June 5	408	111	23	2193
Hauck, Albert, Jewett, Ohio. Peg-cutter	275,648	Apr. 10	1026	277	23	1409
Hauck, Edward J., Brooklyn, N. Y. Sheet-metal box	283,228	Aug. 14	915	255	24	670
Haugh, Ketcham & Co. (See Brown, William H., assignor.)						
Hangk, Carl, Wurzen, Saxony, Germany. Cigar-machine	289,412	Dec. 4	48	14	25	895
Haulenbeck, Henry C., Orange, N. J. Hat-cooling apparatus for blocking-machines	276,243	Apr. 24	1761	491	23	1552
Hauss, Charles F., Jr., Brownsville, Ind. Seeding device	281,269	July 17	1164	322	24	219
Hauss, Charles F., Jr., Brownsville, Ind. Seeding device	281,270	July 17	1165	322	24	219
Hauss, David J., T. E. McNamara, and J. S. Zerbe, assignors to American Union Electric Company, Cincinnati, Ohio. Electric-arc lamp	286,925	Oct. 16	1440	396	25	278
Hausman, Charles, New York, N. Y. Handle attachment to bowling-balls	287,927	Nov. 6	172	49	25	534
Hautin Sewing Machine Company. (See Wardwell, Simon W., Jr., assignor.)						
Havasy, Lucinius, New York, N. Y. Satchel and muff	273,523	Mar. 6	361	96	23	896
Havasy, Lucinius, New York, N. Y. Brush	273,524	Mar. 6	362	96	23	896
Havasy, Lucinius, New York, N. Y. Combined satchel and muff	284,298	Sept. 4	176	50	24	934
Havell, George, Newark, N. J. Button-hook	289,095	Nov. 27	1635	452	25	816
Haven, Egbert D., Albany, Oreg. Combined step-ladder and hoist	282,983	Aug. 14	596	168	24	613
Haven, James L. (See Mooney, John B., assignor.)						
Haven, James L., Cincinnati, Ohio. Tobacco-cutter	283,779	Aug. 28	1591	449	24	813
Havens, James S., Ogdensburg, N. Y. Gas-light reflector	271,451	Jan. 30	2021	583	23	405
Havens, William H., Paterson, N. J. Steam fire-engine	274,321	Mar. 20	1382	380	23	1087
Havens, William R., and J. W. Nesmith, Denver, Colo. Pig-iron breaker	272,249	Feb. 13	823	229	23	595
Haverty, Peter F., Shenandoah, Pa. Artificial stone	284,299	Sept. 4	176	.....	24	934
Haviland, Benjamin, and G. P. Gunn, assignors to H. M. Quackenbush, Herkimer, N. Y. Manufacturing felted slugs	290,230	Dec. 18	1063	298	25	1091
Haviland, John, Boston, Mass. Thill-coupling	289,413	Dec. 4	49	14	25	895
Hawes, Arnold C., Noroton, Conn. Wash-basin	279,943	June 26	1647	461	23	2425
Hawes, Arnold C., Noroton, Conn. Horseshoe	280,816	July 10	598	167	24	112
Hawes, Henry B., Grant, Pa. Stump-extractor	277,484	May 15	1202	323	23	1846
Hawes, Hervey K., et al. (See Leland, Edwin A., assignor.)						
Hawes, Levi M., Hampton Falls, N. H. Cattle-tie	273,986	Mar. 13	950	261	23	1004
Hawes, Levi M., Hampton Falls, N. H. Mowing and reaping machine	281,572	July 24	1937	530	24	356
Hawk, Hale E., Kansas City, Mo. Car-coupling	278,334	May 29	2270	621	23	2044
Hawk, Hale E., Kansas City, Mo. Car-coupling	280,743	July 3	491	139	24	87
Hawk, Hale E., Kansas City, Mo. Dredging and excavating machine	287,763	Oct. 30	2538	683	25	491
Hawkes, Lewis A. (See Hawkes, Timothy and L. A.)						
Hawkes, Timothy and L. A., Jersey City, N. J. Fountain attachment for pens	275,825	Apr. 17	1255	345	23	1456
Hawkey, John L., Cape May, N. J. Automatically-operating door	274,765	Mar. 27	1956	544	23	1195
Hawkins, Charlie S. (See Hawkins, William A. and C. S.)						
Hawkins, Frank S., Worcester, Mass. Power molding-machine	270,898	Jan. 23	1325	383	23	278
Hawkins, Henry R. (See Hawkins, William and H. R.)						
Hawkins, J. Wesley, Galion, Ohio. Lifting-jack	287,539	Oct. 30	2222	603	25	432
Hawkins, John T., Taunton, Mass. Printing-press	272,834	Feb. 20	1579	443	23	732
Hawkins, John T., Taunton, Mass. Printing-press	272,835	Feb. 20	1583	444	23	733
Hawkins, John T., Taunton, Mass. Gripper mechanism for printing-presses	281,763	July 24	1799	491	24	332
Hawkins, John T., Taunton, Mass. Printing-press	286,814	Oct. 16	1298	353	25	251
Hawkins, Lorenzo D., Stoneham, Mass. Eye-letting-machine	272,382	Feb. 13	996	278	23	624
Hawkins, Samuel K., assignor to Buckeye Brush Company, Cleveland, Ohio. Brush	277,899	May 22	1696	463	23	1938
Hawkins, William, Oregon, Mo. Wagon-seat top	270,060	Jan. 2	275	80	23	56



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Hawkins, William and H. R., Oregon, Mo. Amalgamator	281,060	July 10	886	{ 246 247 }	{ 24 24 }	164
Hawkins, William, San Francisco, Cal. Making insertible saw-teeth	280,617	July 3	334	93	24	59
Hawkins, William A. and C. S., Waxahachie, Tex. Car-coupling	272,435	Feb. 20	1072	302	23	642
Hawkins, William C., Lima, S. C. Plow	273,987	Mar. 13	951	262	23	1005
Hawkinson, Nels W., Litchfield, Minn. Feed-water adjustment for pumps	273,276	Mar. 6	37	12	23	841
Hawks, William, Millington, Mich. Hand corn-planter	275,486	Apr. 10	817	221	23	1374
Hawksworth, Thomas, Allegheny, Pa. Washing-machine	272,250	Feb. 13	824	230	23	595
Hawley, Alfred A. (See Davis and Hawley.)						
Hawley, Hiram C., Valley Falls, and J. I. Davis, Topeka, Kans. Device for loading cattle on railway-cars	274,192	Mar. 20	1214	334	23	1058
Hawley, Joseph R., Hartford, Conn. Charm-compass	280,817	July 10	599	167	24	112
Hawley, Theodore, assignor of one-half to E. W. Harral, Fairfield, Conn. Boot for carriages	279,944	June 26	1648	462	23	2426
Hawley, Theodore, assignor of one-half to E. W. Harral, Fairfield, Conn. Boot for carriages	279,945	June 26	1649	462	23	2426
Haworth, George D., Decatur, Ill. Seed-planter	270,219	Jan. 9	469	137	23	102
Haworth, George D., Decatur, Ill. Corn-planter check-line reel	277,030	May 8	653	170	23	1743
Haworth, George D., Decatur, Ill. Seed-planter	277,031	May 8	654	170	23	1744
Haworth, George D., Decatur, Ill. Seed-planter	283,780	Aug. 28	1592	450	24	813
Haworth, George D., Decatur, Ill. Seed-planter	283,781	Aug. 28	1594	{ 450 451 }	{ 24 24 }	814
Haworth, George D., Decatur, Ill. Seed-planter	283,782	Aug. 28	1595	451	24	814
Haworth, Joseph. (See Kerr and Haworth.)						
Haws, William H., Johnstown, Pa. Covering for ladle stopper-rods	280,618	July 3	335	94	24	59
Hawthorn, John and P., and J. P. Liddell, Newtown, county of Chester, England. Apparatus for washing woven fabrics	274,766	Mar. 27	1957	544	23	1195
Hawthorn, John, J. P. Liddell, and P. Hawthorn, Newtown, county of Chester, England. Roller for stretching fabrics	281,503	July 17	1456	399	24	269
Hawthorn, Peter. (See Hawthorn and Liddell.)						
Hawthorn, Peter. (See Hawthorn, Liddell, and Hawthorn.)						
Hay, Alexander, Coshocton, Ohio. Sack-filler	282,984	Aug. 14	598	169	24	614
Hay, Edwin B. (See Smith, Israel S., assignor.)						
Hay, James, Sr. and Jr. (See Sawyer, Sylvester, assignor.)						
Hay, James A., and J. Ralston, Slippery Rock, Pa. Delivery-roller for circular-saw mills	273,072	Feb. 27	1880	528	23	790
Hay, John F., Erie, Pa. Mold for garden and other rakes	273,683	Mar. 6	572	152	23	932
Hayden, Albert E., assignor, by mesne assignments, to himself and E. C. Hayden, Holyoke, Mass. Shirt	284,634	Sept. 11	580	163	24	1008
Hayden Brass Company, Joel. (See Richards, Francis H., assignor.)						
Hayden, Eugene C. (See Hayden, Albert E., assignor.)						
Hayden, George D., Alton, Ill. Turning-lathe	287,673	Oct. 30	2412	650	25	469
Hayden, George D., Alton, Ill. Tamping-bar	290,422	Dec. 18	1324	367	25	1135
Hayden, Harris H., New York, N. Y. Store-service apparatus	273,526	Mar. 6	364	97, 98	23	896
Hayden, Harris H., New York, N. Y. Store-service apparatus	283,104	Aug. 14	754	{ 212 213 }	{ 24 24 }	641
Hayden, Harris H., New York, N. Y. Store-service apparatus	283,239	Aug. 14	915	256	24	670
Hayden, Harris H., assignor to Automatic Parcel Delivery Company, New York, N. Y. Store-service apparatus	272,686	Feb. 20	1388	390	23	698
Hayden, Harris H., assignor to Automatic Parcel Delivery Company, New York, N. Y. Store-service apparatus	273,525	Mar. 6	362	97	23	896
Hayden, Harris H., assignor to Automatic Parcel Delivery Company, New York, N. Y. Store-service apparatus	277,276	May 8	951	255	23	1796
Hayden, Harris H., New York, N. Y., assignor to Lamson Cash Railway Company, Boston, Mass. Carrier for store-service apparatus	280,468	July 3	170	45	24	31
Hayden, Harris H., New York, N. Y., assignor to Lamson Cash Railway Company, Boston, Mass. Store-service apparatus	280,469	July 3	171	45	24	31
Hayden, Henry A., Baltimore, Md. Clasp for suspenders, &c	271,452	Jan. 30	2021	583	23	405
Hayden, Henry F. (See Morgan, Hayden, and Morgan.)						
Hayden, Henry F., Washington, D. C. Apparatus for generating and utilizing vapor or gas	274,595	Mar. 27	1759	488	23	1159
Hayden, Henry F., Washington, D. C. Generator for hydrocarbon vapor or gas	274,596	Mar. 27	1761	488	23	1159
Hayden, Henry F., Washington, D. C. Apparatus for generating gas from hydrocarbons and utilizing the same in furnaces	274,597	Mar. 27	1762	489	23	1160
Hayden, Henry F., Washington, D. C. Gas-furnace	274,598	Mar. 27	1765	489	23	1160
Hayden, Henry F., Washington, D. C., assignor of two-thirds to J. A. Logan, Illinois, and J. T. Morgan, Alabama. Hydrocarbon-generator	275,207	Apr. 3	421	115	23	1298
Hayden, Henry F., Washington, D. C., assignor of two-thirds to J. A. Logan, Chicago, Ill., and J. T. Morgan, Selma, Ala. Apparatus for generating gas and vapor from liquid hydrocarbons	277,567	May 15	1305	350	23	1861
Hayden, Henry F., assignor to International Vapor Fuel and Carbon Iron and Manufacturing Company, Washington, D. C. Apparatus for generating vapor from liquid hydrocarbons	278,792	June 5	158	46	23	2149
Hayden, Henry F., assignor to International Vapor Fuel and Carbon Iron and Manufacturing Company, Washington, D. C. Apparatus for generating vapor from liquid hydrocarbons	278,793	June 5	159	47	23	2149
Hayden, Henry F., assignor to International Vapor Fuel and Carbon Iron and Manufacturing Company, Washington, D. C. Apparatus for generating vapor from liquid hydrocarbons	279,154	June 12	692	189	23	2251
Hayden, J. O., et al. (See Williamson, George, assignor.)						
Hayden, Peter, New York, N. Y. Hame	287,282	Oct. 23	1903	520	25	364
Hayden, Peter, New York, and A. A. Boyd, Auburn, N. Y. Hame	272,251	Feb. 13	825	230	23	596
Hayden, William B., Columbus, Ohio. Hame	270,429	Jan. 9	733	216	23	152
Haydock, Thomas T. (See Baner, Cornelius, assignor.)						
Haydock, Thomas T. (See Ohlsen, Haas C., assignor.)						
Haydock, Thomas T. (See Rogers, Michael J., assignor.)						
Haydon, Walter T. (See Enshell and Haydon.)						
Haydon, William. (See Reiff, William H., assignor.)						
Hayes, Edwin A., New York, N. Y. Covering for steam-boilers	280,470	July 3	173	46	24	32
Hayes, Edwin A., New York, N. Y. Life-raft	281,689	July 24	1697	462	24	313
Hayes, Erasmus. (See Parks and Sheffield, assignors.)						
Hayes, George, New York, N. Y. Metallic skylight	277,485	May 15	1203	323	23	1846
Hayes, George, New York, N. Y. Window-slat adjuster	279,155	June 12	693	190	23	2252
Hayes, George, New York, N. Y. Window-slat adjuster	279,156	June 12	694	190	23	2252
Hayes, George, New York, N. Y. Metallic skylight	280,034	June 26	1762	495	23	2446
Hayes, George, New York, N. Y. Transom-lifter	280,035	June 26	1762	495	23	2446

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Hayes, George, New York, N. Y. Skylight	280,036	June 26	1763	495	23	2446
Hayes, George, New York, N. Y. Metallic skylight-bar	282,191	July 31	2359	649	24	431
Hayes, George, New York, N. Y. Machine for the manufacture of skylight-bars, window-sash bars, and moldings	289,096	Nov. 27	1636	452 } 453 }	25	816
Hayes, Henry H., New York, N. Y. Powder-duster	277,900	May 22	1697	463	23	1938
Hayes, Michael C., Boston, Mass. Harness-saddle	284,419	Sept. 4	320	80	24	957
Hayes, Michael R., Syracuse, N. Y. Apparatus for heating salt-water preparatory to purifying and evaporating the same	273,988	Mar. 13	952	262	23	1005
Hayes, Philip, Waynetown, Ind. Trace-buckle	279,382	June 12	974	270	23	2297
Hayes, Plymmon S., Chicago, Ill. Chloride-of-silver battery	282,634	Aug. 7	194	56	24	534
Hayes, Thomas E. (See Campbell, Franklin P., assignor.)						
Hayes, Timothy, Anderson's Ferry, Ohio. Making and cooling mash	288,333	Nov. 13	681	187	25	634
Hayes, William, Jr., assignor to himself, S. D. Howland, Fall River, C. E. Cook, Dartmouth, and A. P. Smith, New Bedford, Mass. Mechanism for preventing the lapping of belts on shafting	272,667	Feb. 20	1390	390	23	698
Hayes, William L., Cleveland, Ohio. Punch-grinding machine	274,322	Mar. 20	1383	380	23	1087
Hayna, Clementina J. M., St. Louis, Mo. Air-feeding grate-bar	276,178	Apr. 24	1682	465	23	1538
Haynes, Andre S., Rome, N. Y. Spokeshave	273,073	Feb. 27	1881	528	23	791
Haynes, Charles F., Newton, Mass. Book-rest	289,652	Dec. 4	348	98	25	948
Haynes, Edgar K., assignor of one-half to G. W. Gregory, Boston, Mass. Filter	276,179	Apr. 24	1683	465	23	1539
Haynes, Edgar K., Boston, Mass., assignor to Boston Water Purifier Company, of Maine. Filter	282,313	July 31	2500	687	24	456
Haynes, Henry M., Saxonville, assignor to W. H. Bent, Wayland, Mass. Apparatus for flanging and upsetting soles	286,926	Oct. 16	1442	396	25	275
Haynes, Thomas, assignor to H. A. Dorr, Kansas City, Mo. Lock for reclining-chairs	289,653	Dec. 4	349	98	25	949
Hays, Charles W., Philadelphia, Pa. Velocipede	280,927	July 10	733	204	24	135
Hays, Elam, Clear Lake, Iowa. Water-proof paint	274,599	Mar. 27	1768		23	1161
Hays, Henry T., Lexington, Ind. Grading-machine	276,583	May 1	53	15	23	1637
Hays, Moses. (See Zimmer, Henry, assignor.)						
Hayton, William, Canandaigua, N. Y. Collar-fastener	279,751	June 19	1408	393	23	2378
Hayward, Charles W. L., East Weymouth, Mass. Ironing-table	289,097	Nov. 27	1638	454	25	816
Hayward, Jennie H., Sidney, Me. Corset	276,397	Apr. 24	1967	544	23	1587
Hayward, John H. (See Johnson and Hayward.)						
Hazard, George S., Newport, Ky. Protective pad for picture-frames	280,818	July 10	600	168	24	112
Hazard, Henry T., Los Angeles, Cal. Measuring device for shot-pouches, powder-flasks, &c	276,090	May 1	200	51	23	1658
Hazard, Henry T., Los Angeles, Cal. Magazine fire-arm	279,242	June 12	780	215	23	2267
Hazel, William M., New York, N. Y. Button-fastening	272,836	Feb. 20	1587	446	23	733
Hazel, William M., New York, N. Y. Setting instrument for attaching buttons	278,012	May 22	1834	500	23	1961
Hazeland, Samuel S., Parish of St. Sampsons, county of Cornwall, England. Oar and oar-lock	281,873	July 24	1939	530	24	357
Hazelp, Joseph N., Baltimore, Md. Top for children's carriages	276,035	Apr. 17	1504	414	23	1500
Hazlehurst, Edward. (See Borsch, John L., assignor.)						
Hazeltine & Chantrell. (See Chantrell, John, assignor.)						
Hazen, Silas B., and G. L. Van Gorder, Winamac, Ind. Door-check	281,504	July 17	1457	399	24	269
Hazleton, Francis M., Red Bluff, Cal. Device for turning wrist-pins	280,471	July 3	174	46	24	32
Hazlett, Frederic B., assignor of two-thirds to L. Z. Farwell and F. Bartlett, Freeport, Ill. Telephonic annunciator	279,946	June 26	1650	462	23	2436
Heaberlin, Andrew J. (See Moore and Heaberlin.)						
Head, Joseph, Richmond, Va. Agitator for tan-vats	281,061	July 10	888	247	24	164
Head, Thomas, Lowell, Mass. Horseshoe	287,024	Oct. 23	1577	435	25	304
Headen, Frank, assignor of one-half to F. McAuley, Chicago, Ill. Machine for crozing staves	276,398	Apr. 24	1968	545	23	1587
Headlee, John A. (See Renfro, John N., assignor.)						
Heald, Joel, Oak Grove, Iowa. Check-row marker	282,888	Aug. 7	495	139	24	588
Heald, Lucinda M. (See Green and Heald.)						
Healey, Brierley D., Liverpool, county of Lancaster, England. Apparatus for melting and mixing bituminous compounds	277,277	May 8	952	256	23	1796
Healy, Michael L., assignor to himself, C. A. W. Weinberg, C. M. Babcock, and G. Bergstrom, Republic, Mich. Compound for tempering and hardening iron	290,423	Dec. 18	1325		25	1135
Heap, David P., U. S. Army. Electric switch	281,363	July 17	1282	355	24	239
Heard, Henry, Greensborough, Ga. Millstone-driver	269,853	Jan. 2	42	13	23	10
Heard, Henry, Greensborough, Ga. Bush-box for spindles	289,534	Jan. 2	42	13	23	11
Heartley, George W., Toledo, Ohio. Spring-seat for vehicles	285,617	Sept. 25	1781	506	24	1235
Heartsill, Abram, Louisville, Tenn. Quilting attachment for sewing-machines	272,688	Feb. 20	1391	390 } 391 }	23	698
Heath, Frank. (See Heath, Lawrence, assignor.)						
Heath, James S., assignor to J. O. Wisner, Son & Co., Brantford, Ontario, Canada. Spring-hoe	281,874	July 24	1940	530	24	357
Heath, Justus H., Mott's Corners, N. Y. Fire-escape ladder	280,373	July 3	41	11	24	9
Heath, Laban, Boston, Mass. Mattress	274,495	Mar. 27	1635	454	23	1138
Heath, Lawrence, Macedon, assignor of one-half to F. Heath, Rochester, N. Y. Fertilizer-distributor	285,483	Sept. 25	1618	454	24	1204
Heath, Mark A. (See Lynch and Heath.)						
Heath, Robert F. S., Camden, N. J. Hat, cap, and other head-wear	273,074	Feb. 27	1881	528	23	791
Heaton Button Fastener Company. (See Goodfellow, John H., assignor.)						
Heaton Button Fastener Company. (See Prentice, George W., assignor.)						
Heaton Button Fastener Company. (See Sweet, Parker H., Jr., assignor.)						
Heaton Button Fastener Company. (See Thayer, James F., assignor.)						
Heaton, Charles, Guilford, N. Y. Tool-handle	280,581	Dec. 18	1533	422	25	1171
Heaton, Henry, Cleveland, Ohio. Feed water heater for locomotives	279,383	June 12	975	270	23	2297
Heaton, Henry, Cleveland, Ohio. Belt fastener	289,414	Dec. 4	50	14	25	895
Heaton, William, Lee, Iowa. Animal-tethering cloth	283,240	Aug. 14	918	256	24	670
Heaverin, William H., assignor of five-eighths to W. H. Calvert and W. S. Burroughs, St. Louis, Mo. Car-coupling	279,752	June 19	1408	393	23	2378
Heavner, Andrew J., assignor of one-half to W. T. Smith, Pittsfield, Ill. Fire-escape	287,540	Oct. 30	2223	603 } 604 }	25	433
Hebbard, Charles C., Knoxville, Tenn. Car-spring	290,582	Dec. 18	1534	422	25	1172
Hebbard, Henry H. (See Williams, Frank R., assignor.)						
Hebbon, William, New Brighton, assignor to American Cloth Workers Company, New York, N. Y. Method of and machine for shrinking, drying, and finishing cloth	276,036	Apr. 17	1505	414 } 415 }	23	1500
Hebbon, William, New Brighton, assignor to American Cloth Workers Company, New York, N. Y. Machine for opening and measuring cloth	276,037	Apr. 17	1506	415	23	1500
Heberling, John, Mount Pleasant, Ohio, assignor to Heberling Running Stitch Sewing Machine Company. Running-stitch sewing-machine	284,300	Sept. 4	177	50	24	934
Heberling, John and W. L., Mount Pleasant, Ohio. Tension-release	287,928	Nov. 6	173	50	25	538



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Heberling Running Stitch Sewing Machine Company. (See Heberling, John, assignor.)						
Heberling, William L. (See Heberling, John and W. L.)						
Hobert, Arthur J., <i>et al.</i> (See Hébert, Louis H., assignor.)						
Hobert, Joseph J., <i>et al.</i> (See Hébert, Louis H., assignor.)						
Hobert, Joseph R., Brooklyn, N. Y. Sewing-machine	290,424	Dec. 18	1326	367	25	1135
Hébert, Louis H., St. Johns, Quebec, assignor of two-thirds to J. J. and A. J. Hébert, St. Henri, Canada. Car-brake	284,201	Sept. 4	56	15, 16	24	914
Hebner, Peter, Boonville, Ind. Fan attachment	275,208	Apr. 3	422	115	23	1298
Hebron, Benjamin, Cassopolis, Mich. Reaper and harvester	275,649	Apr. 10	1027	277	23	1410
Hechavarria, Bernardo C., <i>et al.</i> (See Montejó, Miguel A., assignor.)						
Hechavarria, Bernardo C., and M. A. Montejó, New York, N. Y. Head-wear	272,136	Feb. 13	692	189	23	571
Hecht, Bernard. (See Fiske, Bradley A., assignor.)						
Heckel, Henry, Cincinnati, Ohio. Making soap from fats and oils	273,175	Feb. 27	1882		23	791
Hecker, George V., New York, N. Y. Feed mechanism for roller-mills	287,126	Oct. 23	1703	466	25	329
Heckman, Daniel, Nazareth, Pa. Corn-planter	290,681	Dec. 25	1661	458 459	25	1200
Heckman, Thomas M. (See Gilday and Heckman.)						
Hedden, Jotham E. (See Larter, Robert, assignor.)						
Hedden, William A. (See Greener, Richard, assignor.)						
Hedge, Hugh B., <i>et al.</i> (See Baker, George C., assignor.)						
Hedge, Hugh B. (See Likes, Hedge, and Baker.)						
Hedge, Hugh B., and T. A. Noble, assignors of one-third to M. R. Baker, Des Moines, Iowa. Wire-barbing machine	273,838	Mar. 13	774	210	23	975
Hedger, William A., Wheatland, Cal. Washing-machine	273,359	Mar. 6	157	44	23	861
Hedges, Dorethea, administratrix. (See Hedges, Isaac A.)						
Hedges, Elijah, Indianapolis, Ind. Head-rest for collars	290,682	Dec. 25	1664	459	25	1200
Hedges, Hiram C., <i>et al.</i> (See Lewis, Henry G., assignor.)						
Hedges, Isaac A., deceased, D. Hedges, administratrix, and assignor to J. A. Field & Co., St. Louis, Mo. Bagasse-furnace	278,547	May 29	2526	689	23	2090
Hedges, Jonathan W., J. S. and T. J. Gill, Richwood, Ohio. Ditch and road scraper	281,875	July 24	1942	531	24	357
Hedges, Killingworth W., Westminster, county of Middlesex, England. Electric lighting	284,420	Sept. 4	321	89	24	957
Hedges, Samuel P., Greenport, N. Y. Potato-digger	271,068	Jan. 23	1534	443	23	312
Hedges, William H., Newark, N. J. Fancet	288,334	Nov. 13	682	188	25	634
Hedlund, Lars G., Rothsay, Minn. Car-coupling	286,001	Oct. 2	272	76	25	51
Hedrick, John M. (See Stansbury and Hedrick.)						
Hedrick, Mason, assignor of one-half to H. C. Ward, Oakland City, Ind. Binder attachment for harvesters	280,619	July 3	336	94	24	60
Hedtmann, Wilhelm, assignor to A. Henkels, Langerfeld, Hagen, Germany. Braiding-machine	288,236	Nov. 13	550	152 153 154	25	613
Heebner, David S., <i>et al.</i> (See Heebner, Josiah D., assignor.)						
Heebner, David S., I. D., and W. D., Lansdale, Pa. Horse-power tread	285,129	Sept. 18	1199	336	24	1123
Heebner, David S., I. D., and W. D., Lansdale, Pa. Brake for machine-wagons	286,300	Oct. 9	661	176	25	130
Heebner, Isaac D. (See Heebner, David S., I. D., and W. D.)						
Heebner, Isaac D., <i>et al.</i> (See Heebner, Josiah D., assignor.)						
Heebner, Josiah D., Lansdale, Pa., assignor of one-half to D. S., I. D., and W. D. Heebner. Harvester-binder	278,956	June 5	420	114 115 116	23	2195
Heebner, William D. (See Heebner, David S., I. D., and W. D.)						
Heebner, William D., <i>et al.</i> (See Heebner, Josiah D., assignor.)						
Heebner, William D., <i>et al.</i> (See Nyce and Hunsicker, assignors.)						
Heermans, Thaddeus W., Chicago, Ill. Cut-off valve	286,002	Oct. 2	273	76, 77	25	51
Hecson, William H., Dudley, Pa. Grate-bar	282,192	July 31	2360	650	24	431
Heffernan, Matthew, Cleveland, Ohio. Wall-paper-hanging machine	272,436	Feb. 20	1073	302	23	643
Hefington, William. (See Hallett, William R., assignor.)						
Heffner, John, Hopewell township, and W. Kelly, Liberty township, Bedford county, Pa. Car-coupling	277,723	May 15	1480	400	23	1892
Heffner, John M. (See Heffner, William and J. M.)						
Heffner, William and J. M., Minneapolis, Minn. Combined stand-pipe and fire-escape	282,314	July 31	2502	688	24	456
Heft, Nathan H., Valley, N. J., assignor to S. M. Nash, Scranton, Pa. Tubular package for blasting-cartridges	278,957	June 5	424	116	23	2196
Hegglund, Oliver, Oakland, Nebr. Rabbit-planer	274,600	Mar. 27	1769	490	23	1161
Heglinbotham, Joseph, Philadelphia, Pa. Knitting-machine	286,003	Oct. 2	274	77	25	52
Heidel, Gustavos, St. Louis, Mo. Automatic car-brake	274,767	Mar. 27	1960	545	23	1195
Heidel, Gustavos, St. Louis, Mo. Car-brake	275,650	Apr. 10	1028	277	23	1410
Heidel, Gustavos, St. Louis, Mo. Fire-escape	276,815	May 1	364	96	23	1690
Heidel, Gustavos, St. Louis, Mo. Horseshoe	280,819	July 10	601	168	24	112
Heidelmeyer, Max, Chicago, Ill. Mouth-piece for speaking-tubes	280,374	July 3	42	12	24	10
Heidmeyer, Conrad J., Allegheny, assignor of one-fourth to S. Hartman, Pittsburg, Pa. Monument	271,453	Jan. 30	2022	584	23	405
Heilbrun, Louis I., New York, N. Y. Show-stand	284,202	Sept. 4	58	16	24	914
Heilman, Russel P. (See Perkins, Richard B., assignor.)						
Heiluer & Strauss. (See Strauss, Henry S., assignor.)						
Heim, Joseph J., East St. Louis, Ill. Metallic hoop keeper	273,076	Feb. 27	1883	529	23	791
Heimann & Wall. (See Kendall, John L., assignor.)						
Heine, August. (See Holcomb and Heine.)						
Heineke, Dietrich, Brooklyn, N. Y. Rotating toy	275,209	Apr. 3	423	116	23	1299
Heinemann, Harry M., San Francisco, Cal. Suspender-hook	276,244	Apr. 24	1763	491	23	1553
Heinemann, Theodore P., Connersville, Ind. Saw-guard	281,690	July 24	1699	462	24	314
Heinisch, Johann G., Belgard, Pomerania, Germany. Bridle	273,077	Feb. 27	1883	529	23	791
Heinle, Robert, Allegheny, Pa. Meter	287,283	Oct. 23	1904	521	25	365
Heinzheimer, Jacob, <i>et al.</i> (See Topmiller, Bernard, assignor.)						
Heise, Henry H. (See Arndt, Theophilus, assignor.)						
Heiser, Frederick S., New York, N. Y. Game-counter	282,725	Aug. 7	311	88	24	554
Heisler, Charles L., Wapakoneta, Ohio. Vegetable-cutter	287,127	Oct. 23	1704	467	25	329
Held, August S., Freeport, Ill. Drive-chain link	281,995	July 24	2083	572	24	381
Held, August S., assignor to M. Hettinger, C. O. Collmann, F. Gund, D. E. Schulte, J. Erfert, D. Kuehner, O. B. Sanford, C. H. Little, and F. Bartlett, Freeport, Ill. Drive-chain link	273,732	Mar. 13	638	170	23	951
Held, Charles W. (See Locke, Richard B., assignor.)						
Heldreth, Joseph W., and E. W. Umberger, Wytheville, Va. Churn mechanism	271,705	Feb. 6	141	39	23	464
Helios Electric Light Company of Maine. (See Brown and Bosworth, assignors.)						
Hellenbrand, Charles W., Salem, Oreg. Manufacture of candy	272,252	Feb. 13	826	230	23	596

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Heller, Cyrus, Williamsport, Pa. Printer's-ink case	273,989	Mar. 13	954	263	23	1005
Heller, Daniel C., Reading, assignor of one-half to W. Leshner, Mosserville, Pa. Pastry-board	271,706	Feb. 6	142	40	23	465
Heller, Levi D., Columbus, Ohio. Pen-support and hand-rest	281,876	July 24	1943	531	24	357
Hellhoff, Albert. (See Gruson and Hellhoff.)						
Helliwell, Thomas W., Brighouse, county of York, England. Glazing the roofs of horticultural structures	284,421	Sept. 4	322	89	24	957
Helmbacher Forge and Rolling Mills Company. (See Tidemann, Henry G., assignor.)						
Helman, Andrew, Winfield, Kans. Combined land-roller, clod-crusher, and harrow	289,258	Nov. 27	1823	504	25	851
Helman, Orlando A., Cincinnati, Ohio. Electric burglar-alarm	280,472	July 3	175	46	24	32
Helme, John W., Orland, Ind. Draft-equalizer	281,505	July 17	1457	399	24	289
Helmus, Adolph, and I. Dreyfuss, New York, N. Y. Frame for trimmings	286,697	Oct. 16	1159	312	25	226
Helmus, Christian, Jr., et al. (See Clark, Henry, assignor.)						
Helsing, J. Jonas, San Francisco, Cal. Door-lock	282,517	Aug. 7	49	14, 15	24	508
Héme, Claude, Bay City, Mich. Salt-grainer	278,794	June 5	160	47	23	2150
Hemingray, Ralph G., Covington, Ky. Glass-batch mixer	290,771	Dec. 25	1784	493	25	1223
Hemje, Charles, Washington, D. C. Compressing pulverized material	287,128	Oct. 23	1706	467	25	329
Hemje, Charles, assignor of one-half to C. Abner, Washington, D. C. Metallic bushing	289,654	Dec. 4	350	98	25	949
Hemje, Charles, and T. C. Brecht, Washington, D. C. Machine for compressing plastic and other materials	279,384	June 12	976	271	23	2297
Hemje, Charles, and T. C. Brecht, Washington, D. C. Mold for manufacturing stoppers and bungs from paper-pulp, &c.	279,869	June 19	1548	432 433	23	2402
Hemler, Michael. (See Mosler and Hemler.)						
Hemler, Michael, assignor to Mosler Safe and Lock Company, Cincinnati, Ohio. Safe	284,422	Sept. 4	323	90	24	958
Hemmer, Frederick L. (See Sargood and Hemmer.)						
Hemminger, George. (See Goodhart and Hemminger.)						
Hemphill, Edward A., Elizabeth, N. J., assignor to Kiggins and Tooker Company, New York, N. Y. Memorandum-book	285,618	Sept. 25	1783	507	24	1235
Hemphill, Sylvester, Belmont, Wis. Harness attachment	286,004	Oct. 2	277	78	25	52
Hemphill, William. (See Bales and Jackson, assignors.)						
Hempstead, Edward. (See Stevens, John L., assignor.)						
Hempsted, Samuel W., Columbus, Ohio. Paint-oil	288,433	Nov. 13	816		25	658
Henay, William H. (See Henay, William S. and W. H.)						
Henay, William S. and W. H., Concord, N. H. Ornamentation of surfaces	278,958	June 5	424	116	23	2196
Henchoz-Arnold, Auguste, and F. Henchoz-Huguenin, Locle, Switzerland. Stop-watch	272,545	Feb. 20	1207	337	23	666
Henchoz-Huguenin, Fritz. (See Henchoz-Arnold and Henchoz-Huguenin.)						
Hencken, George. (See Miller, Charles C., assignor.)						
Hendee, William G., Springfield, Mass. Stop-motion for spinning and twisting machines	279,870	June 19	1549	433	23	2403
Hendershot, Jonathan, Shirtsville, W. Va. Sawing-machine	271,454	Jan. 30	2022	584	23	405
Henderson, Avery, Upper Sandusky, Ohio. Bill-file	281,002	July 10	889	247	24	164
Henderson, Charles C. and J. R., Arkadelphia, Ark. Cloth-measuring machine	274,768	Mar. 27	1961	545	23	1196
Henderson, Eben C. C., Pictou, and T. A. McDonald, Durham, Nova Scotia, Canada. Shoe-lace fastening	280,173	June 26	1910	537	23	2473
Henderson, George A. (See Ewing and Henderson.)						
Henderson, Henry A., Lynn, assignor to F. F. Raymond, 2d, trustee, Newton, Mass. Heel-trimming machine	281,691	July 24	1700	462 463	24	314
Henderson, Jacob R. (See Henderson, Charles C. and J. R.)						
Henderson, James, Bellefonte, Pa. Manufacture of iron and steel	274,889	Mar. 27	2107		23	1220
Henderson, James, Bellefonte, Pa. Manufacturing iron, steel, &c.	278,013	May 22	1836		23	1061
Henderson, James, Bellefonte, Pa. Compound for furnace-linings and fire-brick	270,157	June 12	695		23	2252
Henderson, James, Bellefonte, Pa. Compound for furnace-linings and fire-brick	279,158	June 12	695		23	2252
Henderson, James, Bellefonte, Pa. Compound for furnace-linings and fire-brick	279,159	June 12	696		23	2252
Henderson, James, Bellefonte, Pa. Compound for furnace-linings and fire-brick	279,160	June 12	697		23	2252
Henderson, James, Bellefonte, Pa. Hardening fire-brick	279,161	June 12	698		23	2252
Henderson, James, Bellefonte, Pa. Furnace and art of working the same	281,063	July 10	889	247 248	24	165
Henderson, James, Bellefonte, Pa. Furnace for the manufacture of iron and steel and for other purposes	282,315	July 31	2503	688	24	457
Henderson, James, Bellefonte, Pa. Purifying iron and condensing the products	283,241	Aug. 14	919		24	671
Henderson, James, Bellefonte, Pa. Condensing certain gaseous compounds	283,242	Aug. 14	1042	295	24	696
Henderson, James, Bellefonte, Pa. Manufacturing iron and steel	283,483	Aug. 21	1229		24	734
Henderson, James, Bellefonte, Pa. Manufacturing iron and steel	283,484	Aug. 21	1231	346	24	734
Henderson, James, Bellefonte, Pa. Basic process of manufacturing iron and steel	283,783	Aug. 28	1597		24	814
Henderson, James, Bellefonte, Pa. Annealing cast steel or iron	284,550	Sept. 4	472		24	985
Henderson, James, Bellefonte, Pa. Purifying solid iron, producing therefrom malleable iron or steel without fusion	284,551	Sept. 4	473		24	985
Henderson, James, Bellefonte, Pa. Basic process of manufacturing iron and steel	284,552	Sept. 4	475		24	985
Henderson, James, Bellefonte, Pa. Basic process of manufacturing iron and steel	284,553	Sept. 4	476		24	985
Henderson, James, Bellefonte, Pa. Basic process of manufacturing iron and steel	284,554	Sept. 4	477		24	985
Henderson, James, Bellefonte, Pa. Furnace and working the same. (Reissue)	10,399	Oct. 30	2576	692	25	499
Henderson, James, assignor, by mesne assignments, to C. G. Francklyn, New York, N. Y. Purifying iron by means of fluorides and condensing the gaseous products therefrom	279,947	June 26	1650	462 463	23	2426
Henderson, James, assignor of one-half to C. G. Francklyn, New York, N. Y. Manufacturing iron and steel	280,310	June 26	2083		23	2504
Henderson, James, assignor of one-half to C. G. Francklyn, New York, N. Y. Furnace for manufacturing iron and steel	281,764	July 24	1801	491	24	332
Henderson, John. (See Coombes, Joseph A., assignor.)						
Henderson, John C., et al. (See Vass, Dyson D., assignor.)						
Henderson, John H., and E. Schutz, Sierra Buttes, Cal. Revolving sprinkler	270,664	Jan. 16	1037	297	23	219
Henderson, Roger S., and A. Sanders, Philadelphia, Pa. Balance door-hanger	279,442	June 12	1045	250	23	2309
Henderson, S. E. (See Frost, Warren H., assignor.)						
Henderson, Thomas, Nashville, Tenn. Flushing-tank for water-closets, urinals, &c.	283,105	Aug. 14	757	213	24	641
Henderson, William C., Sulphur Springs, Tex. Sulky-plow	286,433	Oct. 9	821	223	25	160
Hendley, William, assignor to G. P. Goff, Washington, D. C. Conduit for underground lines for telegraph and other wires	281,064	July 10	893	248 249	24	165
Hendley, William, assignor to G. P. Goff, Washington, D. C. Ventilating-conduit for electric wires and adjusting the wires in same	281,220	July 10	1093	301 302	24	200
Hendrick, Obadiah, Macon, Miss. Syringe	277,568	May 15	1306	350	23	1862
Hendricks, Adam C., Duffield's, assignor of one-half to H. S. Shepherd, Shepherdstown, W. Va. Fertilizer-distributor and grain-drill	272,546	Feb. 20	1208	337	23	666
Hendricks, Adam C., Duffield's, assignor of one-half to H. S. Shepherd, Shepherdstown, W. Va. Fertilizing grain-drill	272,547	Feb. 20	1209	338	23	666
Hendricks, Clarke, assignor of one-half to J. R. Fean, Modesto, Cal. Car-coupling	285,262	Sept. 18	1354	382	24	1152



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Hendrickson, Joseph G. (See Clamer, Francis J., assignor.)						
Hendrickson, Joseph G. (See Clamer and Hendrickson.)						
Hendrickson, Joseph G. (See Delaplaine, Hendrickson, and Clamer.)						
Hendrickson, Stephen C., Brooklyn, N. Y., assignor to Union Switch and Signal Company, Pittsburg, Pa. Electric railway-signal.	276,038	Apr. 17	1507	415	23	1500
Hendrickson, Zachariah, Syracuse, Ind. Velocipede.	280,473	July 3	175	46	24	32
Hendry, Alfred J., Darlot, Ga. Ventilation.	287,434	Oct. 30	2093	569	25	406
Hendryx, Andrew B., New Haven, Conn. Bird-cage.	277,724	May 15	1481	401	23	1892
Hendryx, Andrew B., New Haven, assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Chain-pulley.	285,263	Sept. 18	1355	382	24	1152
Henestrosa, Ignacio, Madrid, Spain. Mechanical pen.	270,661	Jan. 2	276	80, 81	23	56
Henius, Max W., Waterbury, Conn. Button.	270,665	Jan. 16	1039	298	23	219
Henius, Max W., Waterbury, Conn. Corset-clasp.	278,430	May 29	2388	651	23	2066
Henkels, Albert. (See Hedtmann, Wilhelm, assignor.)						
Henkle, Eli J., Baltimore, Md. Gate for railway-crossings.	287,674	Oct. 30	2413	651	25	469
Henley, George, <i>et al.</i> executors. (See Henley, William T.)						
Henley, Micajah C., Richmond, Ind. Screw-driver.	285,484	Sept. 25	1619	454	24	1204
Henley, William J., and S. T. Axtell, Oswego, N. Y. Oar for ice-boats.	288,801	Nov. 20	1275	349	25	744
Henley, William T., deceased, Plaistow, county of Essex, England; G. Henley and S. Gedge, executors. Telegraph-cable.	286,098	Oct. 16	1161	312	25	226
Henn, Charles M., Chicago, Ill. Toy bank.	271,200	Jan. 23	1697	490	23	338
Henneberg, Henry, assignor to A. Shoeninger, Chicago, Ill. Christmas-tree holder.	283,392	Aug. 21	1118	316	24	714
Hennebutte, Henri J. E. (See Menard and Hennebutte.)						
Hennessy, Thomas, Oakland, Cal. Stop-valve.	273,839	Mar. 13	776	210	23	975
Henriels, P. Victor, Buffalo, N. Y. Smut-machine.	276,584	May 1	54	15	23	1637
Henning, William B., Waterloo, assignor of one-fourth to J. B. Casebeer and T. G. Matheny, Auburn, Ind. Constructing roads, sidewalks, &c. (Reissue).	10,388	Sept. 25	1997	565	24	1270
Henninger, George J., Allentown, Pa. Compound for cooling and lubricating journals.	288,054	Nov. 6	332	.....	25	564
Henninger, Julius, Blue Island, assignor of one-half to H. W. Joseph, Chicago, Ill. Corset.	270,062	Jan. 2	277	82	23	57
Henninger, Julius, Blue Island, assignor, by mesne assignments, to E. R. Church, Chicago, Ill. Flour-sifter.	277,278	May 8	954	256	23	1797
Henrich, Heinrich, assignor to R. Henrich, New York, N. Y. Finger-ring.	274,193	Mar. 20	1215	334	23	1059
Henrich, Heinrich, assignor to R. Henrich, New York, N. Y. Finger-ring.	278,959	June 5	425	116	23	2196
Henrich, Rosa. (See Henrich, Heinrich, assignor.)						
Henrichs, Peter, Fargo, Dak. Ter. Bottle-stopper and draft-nozzle.	276,816	May 1	365	97	23	1690
Henris, John E., Collegeville, Cal. Seeder and cultivator.	272,046	Feb. 13	574	155	23	551
Henry, Andrew L., Ladora, Ind. Sifter.	281,364	July 17	1283	355	24	239
Henry, Charles J. (See Simmons and Henry.)						
Henry, Frank. (See Craige and Henry.)						
Henry, George W. (See Hammond, George W., assignor.)						
Henry, James A., Platteville, Wis. Solvent for paints, oils, and varnishes.	275,381	Apr. 10	681	.....	23	1351
Henry, John B. (See Boyer and Henry.)						
Henry, John C., assignor of one-half to L. W. Towne, P. F. Clinton, Kansas City, Mo., and J. L. Barnes, Lawrence, Kans. Speed-governor.	270,430	Jan. 9	734	216	23	152
Henry, John C., assignor of one-half to L. W. Towne, P. F. Clinton, Kansas City, Mo., and J. L. Barnes, Lawrence, Kans. Speed-recorder.	270,431	Jan. 9	736	216, 217	23	153
Henry, John J., assignor of one-half to G. A. Schall, Baltimore, Md. Roller-skate.	284,009	Aug. 28	1889	529	24	865
Henry, John S. (See Moonny, Joseph G., assignor.)						
Henry, Robert G. (See Crittenden and Henry.)						
Hensel, George F. (See Kienzie, John G., assignor.)						
Henshaw, George. (See Strachan and Henshaw.)						
Henshaw, Willis C., East Hamburg, N. Y. Wire-stretcher.	279,948	June 26	1652	463	23	2426
Henson, Robert J., Cairo, Ill. Sawing-machine.	290,425	Dec. 18	1327	368	25	1135
Henson, William S., Newark, N. J. Cleaning cisterns.	277,486	May 15	1204	323	23	1846
Henszey, William P., <i>et al.</i> (See Wilder and Parry, assignors.)						
Henwood, Horace E., New York, N. Y. Thill-coupling.	278,960	June 5	426	117	23	2196
Henwood, John, Philadelphia, Pa. Double-acting pump.	277,279	May 8	954	256	23	1797
Henwood, John, assignor to himself, J. C. Whitaker, and C. R. Scull, Philadelphia, Pa. Direct-action steam-pump.	284,010	Aug. 28	1889	529, 530	24	865
Hepburn, Lewis L., Ilion, N. Y. Breech-loading gun.	290,426	Dec. 18	1328	368	25	1136
Heppinger, Jacob. (See Green, Alexander, assignor.)						
Hepp, Edward, assignor to K. Oehler, Offenbach-on-the-Main, Germany. Manufacture of blue dye-stuff or coloring-matter.	270,311	Jan. 9	572	.....	23	122
Hepp, Daniel, Chicago, Ill. Pen-holder.	276,399	Apr. 24	1969	545	23	1587
Hequembourg, Charles E., Dunkirk, N. Y. Regenerative gas-heater.	286,301	Oct. 9	662	176	25	130
Herb, Ernst H., <i>et al.</i> (See Schwarzwaldner, Henry, assignor.)						
Herbert, Henry, assignor to J. D. Abraham, Cincinnati, Ohio. Pipe tongs and cutter.	287,378	Oct. 23	2021	549	25	385
Herbert, William B., New York, N. Y. Manufacturing decorated tiles, plaques, &c.	273,527	Mar. 6	367	.....	23	897
Herboth, Ferdinand, Newark, N. J. Wool-oiling apparatus.	287,025	Oct. 23	1578	435	25	305
Herbrand Company. (See Herbrand, Jacob, assignor.)						
Herbrand, Jacob, assignor to Herbrand Company, Fremont, Ohio. Drop-perch for vehicles.	276,967	May 1	567	148	23	1723
Herbrand, Jacob, assignor to Herbrand Company, Fremont, Ohio. Running-gear for vehicles.	277,725	May 15	1483	401	23	1893
Herder, Rudolph H., Topeka, Kans. Vinegar-generator.	288,055	Nov. 6	333	93	25	564
Hering, Benjamin S., Cambridge, Ohio. Hotel-indicator.	275,210	Apr. 3	424	116	23	1299
Hering, Carl O. (See Goodsell, Adamson, and Hering.)						
Heritage, Charles. (See Heritage, Joseph, assignor.)						
Heritage, Joseph, assignor to C. Heritage, Warren, Mass. Screw-jack.	279,753	June 19	1410	394	23	2378
Herkimer, Jacob, assignor of one-fourth to R. V. Stanley, Chicago, Ill. Loop-clamp for holding traces, &c.	279,385	June 12	978	271	23	2298
Herlick, John S. (See Greene and Herlick.)						
Herman, Addison M., assignor to himself and J. P. Hart, Jr., Newtonia, Mo. Tilting barrel or bin.	281,506	July 17	1458	400	24	269
Herman, Adolph E., Ravenna, Ohio. Spring-vehicle.	288,634	Nov. 20	1066	293	25	708
Herman, Henry, <i>et al.</i> (See Shields, Francis M., assignor.)						
Hermann, Adolph E., Ravenna, Ohio. Spring-vehicle.	277,032	May 8	655	171	23	1744
Hermudson, Albert, Misha Mokwa, Wis. Curry-comb.	276,817	May 1	366	97	23	1690
Herr, August W., Chicago, Ill. Vault cover and ventilator.	284,203	Sept. 4	60	17	24	915
Herr, Frank K. and S. K., Westminster, Md. Vehicle-body.	274,769	Mar. 27	1963	545	23	1196
Herr, Samuel K. (See Herr, Frank K. and S. K.)						
Herrens, Michael, St. Louis, Mo. Car-replacer.	283,784	Aug. 28	1598	451	24	814
Herreshoff, John B. F., Brooklyn, assignor to himself, G. H. and W. H. Nichols, New York, N. Y. Copper-smelting furnace.	273,840	Mar. 13	777	211	23	975

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Herreshoff Manufacturing Company. (See Herreshoff, Nathaniel G., assignor.)						
Herreshoff, Nathaniel G., Bristol, R. I., assignor to Herreshoff Manufacturing Company, of Rhode Island. Valve-gear for steam-engines	280,311	June 26	2085	587	23	2504
Herreshoff, Nathaniel G., Bristol, R. I., assignor to Herreshoff Manufacturing Company, of Rhode Island. Steam-engine valve	280,312	June 26	2086	587	23	2504
Herrick, Edwin T., Providence, R. I. Automatic clutch for elevators	274,770	Mar. 27	1963	546	23	1196
Herrick, Gamaliel E. (See Davis, Zebulon, assignor.) (Reissue.)						
Herrick, George W., assignor to Peninsular Stove Company, Detroit, Mich. Coal-fork	272,137	Feb. 13	693	189	23	572
Herrick, James A., Cleveland, Ohio. Core for casting steel	282,518	Aug. 7	50	15	24	509
Herrick, William H., Grinnell, Iowa. Apparatus for distilling water and other fluids	284,011	Aug. 23	1891	530	24	865
Herrick, William H., Grinnell, Iowa. Door-check	289,259	Nov. 27	1825	504	25	852
Herring, Andrew J., Bozeman, Montana Ter. Packing and storing box	287,435	Oct. 30	2034	569	25	406
Herring, Elijah R., assignor of one-half to D. H. Glenn, Westminster, S. C. Horse-detcher	287,284	Oct. 23	1905	521	25	365
Herring, Henry M., North Attleborough, Mass. Ornamental chain	273,733	Mar. 13	639	170	23	952
Herring, Henry M., assignor to F. L. Shephardson & Co., North Attleborough, Mass. Brace-let-chain	271,845	Feb. 6	314	86	23	496
Herring, John. (See Hickok, Stephen O., assignor.)						
Herring, Lewis, <i>et al.</i> (See Fairchild, George S., assignor.)						
Herring, William A., Allen, Mich. Evaporator	287,026	Oct. 23	1579	435	25	305
Herrington, George H., Wichita, Kans. System of delivery and transportation	280,620	July 3	338	94	24	60
Herrington, Henry D., Hoosic, N. Y. Potato-planter	288,237	Nov. 13	556	154 155	25	613
Herrman, Louis, and J. B. Lavin, Boston, Mass., assignors to themselves and L. J. Herrman. Car-coupling	278,014	May 22	1837	501	23	1961
Herrman, Louis, assignor to M. Herrman, Boston, Mass. Car-coupling	285,813	Oct. 2	39	13	25	9
Herrman, Louis J. (See Herrman and Lavin, assignors.)						
Herrman, Mary. (See Herrman, Louis, assignor.)						
Herrmann, Fred W., Atlantic, Iowa. Harrow-tooth holder	289,260	Nov. 27	1826	504	25	852
Herrmann, John and P., Evansville, Ind. Wagon-axle	287,675	Oct. 30	2414	651	25	469
Herrmann, Louis A. F., Paris, France. Electric cable or conductor	280,474	July 3	176	47	24	32
Herrmann, Peter. (See Herrmann, John and P.)						
Herron, Hiram C., Cleveland, Ohio. Portable roof	284,846	Sept. 11	847	238	24	1054
Herron, James, <i>et al.</i> (See Herron, Michael, assignor.)						
Herron, John, <i>et al.</i> (See Herron, Michael, assignor.)						
Herron, John, and R. T. Wray, Dunbar, Pa. Coke-oven door and frame therefor	287,285	Oct. 23	1906	521	25	365
Herron, Michael, assignor of two-thirds to J. and J. Herron, Bordentown, N. J. Chain-wheel for sand-dredgers	274,601	Mar. 27	1769	490	23	1161
Herron, Rufus H., <i>et al.</i> (See Hunzeker, Rudolph S., assignor.)						
Herron, Samuel, Coalton, Ky. Miner's pick	286,815	Oct. 16	1301	354	25	251
Herron, William A., <i>et al.</i> (See Hunzeker, Rudolph S., assignor.)						
Herschel, William D., assignor to M. A. Humphreys, Philadelphia, Pa. Trammel	272,047	Feb. 13	576	156	23	552
Hersee, Thompson, Buffalo, N. Y. Car-brake	270,798	Jan. 16	1201	347	23	250
Hersey, Cyrus W., Peabody, Mass. Whiffletree	281,065	July 10	895	249	24	165
Hersey, Elias, <i>et al.</i> (See Bowie, Orin R., assignor.)						
Hersey, F. L. (See Womelsdorf, James W., assignor.)						
Hershberger, Daniel, assignor of one-half to J. Brunner, Millville, Ind. Automatic gate	281,692	July 24	1704	463	24	315
Hershey, Benjamin, Erie, Pa. Ore-separator	289,261	Nov. 27	1828	505	25	852
Hershey, Benjamin, and C. A. Hitchcock, Erie, assignors of one-half to J. A. Ege and B. F. Thornton, Bradford, Pa.; said Hershey assignor of one-twentieth to said Hitchcock. Ore-separator	276,534	Apr. 24	2133	594	23	1615
Hershey, Christian H., Philadelphia, Pa. Holder for towels, napkins, &c.	275,040	Apr. 3	209	57	23	1262
Hershey, Martin E., Harrisburg, Pa. Reversing-gear for steam-engines	285,812	Oct. 2	38	13	25	9
Hershey, Martin E., Harrisburg, Pa. Draft attachment for portable engines	289,098	Nov. 27	1630	454	25	816
Hersom, M. V. B., <i>et al.</i> (See Weale, Henry P., assignor.)						
Herts, Abram C., Philadelphia, Pa. Lady's dress	280,174	June 26	1911	537	23	2473
Hervey, Nelson B., Santa Rosa, Cal. Device for removing tires	275,909	Apr. 17	1356	373	23	1474
Herwig, Philip F. (See Brigg, William W., assignor.)						
Herzig, Emil. (See Weller, Chester A., assignor.)						
Herzog, F. Benedict, New York, N. Y. Telephone signaling apparatus	289,834	Dec. 11	577	161 162	25	994
Herzog, F. Benedict, assignor of one-half to J. O. Noakes, New York, N. Y. Thill-coupling	282,080	July 31	2197	603	24	406
Herzog, F. Benedict, assignor to E. E. Oudin, New York, N. Y. Imitation stained glass	286,434	Oct. 9	822	223	25	160
Herzog, Philip, Minneapolis, Minn. Armor for prison-cells	271,633	Feb. 6	62	17	23	451
Hesch, Jacob, Titnsville, Pa. Apparatus for boiling acids and chemicals	275,041	Apr. 3	210	57	23	1262
Hess, Albert T., Des Moines, Iowa. Electric hotel-annunciator and fire-alarm	271,707	Feb. 6	143	40	23	465
Hess, Albert T., Des Moines, Iowa. Electric hotel-annunciator and fire-alarm	288,570	Nov. 13	980	269 270	25	686
Hess, Alfred. (See Shoemaker and Hess, assignors.)						
Hess, Bernhard, Baireuth, Bavaria, Germany. Manufacture of artificial stone and artificial emery	283,603	Aug. 21	1365		24	759
Hess, Charles A. (See Gruenbaum, Jacob, assignor.)						
Hess, Elmer J. (See Shoemaker and Hess.)						
Hess, J. Theodore, <i>et al.</i> (See Ainsworth, Robert H., assignor.)						
Hess, Julius, Detroit, Mich. Refrigerator-room	285,893	Oct. 2	147	42	25	29
Hess, William L., Belle Plaine, Iowa. Combined stove-pipe drum, shelf, and damper	272,048	Feb. 13	576	156	23	552
Hesse, Frederick G., Oakland, Cal. Fluid-pressure gage	275,765	Apr. 10	1176	322 323	23	1435
Hesse, Frederick G., Oakland, Cal. Fluid-meter	282,985	Aug. 14	599	169	24	614
Hessel, John F., Champaign, Ill. Harness-pad	286,435	Oct. 9	824	223	25	160
Hesseltine, Francis S., Melrose, Mass. Umbrella-holder	287,676	Oct. 30	2414	651	25	469
Hesser, Charles F., <i>et al.</i> (See Gearing, Charles, assignor.)						
Hessler, George W., Scranton, Pa. Wall-pocket	279,754	June 19	1410	394	23	2378
Hester, Abraham and H. L., Concord, Mich. Sheep-feeding device	284,301	Sept. 4	179	51	24	934
Hester, Henry L. (See Hester, Abraham and H. L.)						
Hester, Joseph G., assignor to J. Lansburgh, Washington, D. C. Pen-holder	276,535	Apr. 24	2136	594	23	1616
Hester, Joseph G., assignor to J. Lansburgh, Washington, D. C. Writing-pen and holder	278,239	May 22	2115	583	23	2010
Hesthal, August, San Francisco, Cal. Preparing skins	282,316	July 31	2506		24	457
Heston, David, assignor to Brown, Heston & Co., Philadelphia, Pa. Paper box	279,755	June 19	1411	394	23	2379
Heston, David, assignor to Brown, Heston & Co., Philadelphia, Pa. Paper box	279,756	June 19	1412	394	23	2379
Heston, David, and D. J. Brown, assignors to Brown, Heston & Co., Philadelphia, Pa. Paper box	279,757	June 19	1413	395	23	2379
Heston, William, Mount Union, Ohio. Oiling-pump for steam-engines	271,238	Jan. 30	1741	503 504	23	355



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Heston, William, Mount Union, assignor of one-half to J. E. Ingersoll, Bedford, Ohio. Vapor-burner.....	270,587	Jan. 16	936	271	23	201
Hetfield, Levi, Plainfield, N. J. Dumping-car.....	280,621	July 3	339	95	24	60
Hottinger, M., <i>et al.</i> (See Held, August S., assignor.)						
Hottinger, Matthias, <i>et al.</i> (See Tobias, Cyrus, assignor.)						
Heusch, Rudolph, assignor of one-half to M. Goldsmith, Washington, D. C. Winding-indicator for watches.....	289,533	Dec. 4	200	56, 57	25	921
Hensch, Anton. (See Winnen and Hensch.)						
Heusser, Kate, <i>et al.</i> (See Hartman, Henry, assignor.)						
Heverling, John B., assignor to H. Zegenhine, St. Louis, Mo. Machine for shaping barrel-staves.....	283,886	Aug. 28	1712	482	24	833
Hewett, Lewis W., New York, N. Y., and S. J. Leonard, assignors to P. B. Shaw, Williamsport, Pa. Car-starter.....	275,211	Apr. 3	425	{ 116 117 }	23	1299
Hewett, Lewis W., New York, N. Y., and T. Millen, Jersey City, N. J., assignors to P. B. Shaw, Williamsport, Pa. Car-starter.....	280,744	July 3	492	139	24	87
Hewins, Herbert L. (See Lothrop and Hewins.)						
Hewitt, Edward, deceased, New York, N. Y., M. Hewitt, administratrix. Plate-pressing and embossing machine.....	272,878	Feb. 27	1656	{ 463 464 }	23	752
Hewitt, Minnie, administratrix. (See Hewitt, Edward.)						
Hewitt, Robert, Jr. (See Clarke, Charles L., assignor.)						
Hewitt, Robert, Jr., New York, N. Y. Electric temperature-indicator.....	281,877	July 24	1943	531	24	358
Hewitt, William, London, Ontario, Canada. Lightning-rod joint.....	287,286	Oct. 23	1907	521	25	365
Hewitt, William, London, Ontario, Canada. Lightning-rod coupling.....	287,929	Nov. 6	174	50	25	538
Hewitt, William, assignor to Trenton Iron Company, Trenton, N. J. Making barbed fence-wire.....	276,039	Apr. 17	1510	416	23	1501
Hewlett, Francis L. (See Chamberlin, Volney R., assignor.)						
Hewlett, Oscar H., and C. A. Needham, assignors to E. P. and C. A. Needham, New York, N. Y. Cash-carrier.....	273,841	Mar. 13	778	211	23	975
Hewson, William S., assignor to L. G. Burnham, J. G. Reed, and T. S. Peck, Burlington, Vt. Coal and ash sifter.....	284,847	Sept. 11	848	238	24	1055
Hey, George W., <i>et al.</i> (See Bustin, John H., assignor.)						
Hey, George W., assignor of one-half to C. H. Duell, Syracuse, N. Y. Door-hanger.....	271,980	Feb. 6	486	131	23	525
Hey, George W., assignor of one-half to C. H. Duell, Syracuse, N. Y. Door-hanger.....	271,981	Feb. 6	488	132	23	525
Hey, George W., assignor of one-half to C. H. Duell, Syracuse, N. Y. Cheese-hoop.....	277,838	May 15	1617	441	23	1917
Hey, George W., assignor of one-half to C. H. Duell, Syracuse, N. Y. Cheese-press.....	277,839	May 15	1619	441	23	1918
Hey, George W., assignor of one-half to C. H. Duell, Syracuse, N. Y. Trunk-hinge.....	282,635	Aug. 7	195	56	24	534
Hey, George W., assignor of one-half to C. H. Duell, Syracuse, N. Y. Door-hanger.....	286,539	Oct. 9	946	255	25	182
Hey, James H., assignor of one-half to W. S. Forshee and J. W. McMakin, Cincinnati, Ohio. Clothes-washer.....	273,360	Mar. 6	158	45	23	861
Hey, James H., and A. N. Verdin, Cincinnati, Ohio. Feed-bag for horses.....	285,814	Oct. 2	40	13	25	9
Heybrock, Lewis G., Omaha, Neb. Steam-tuyere.....	270,063	Jan. 2	278	82	23	57
Heyd, Hermann, Hohenbuch, Wurtemberg, Germany. Car-brake.....	289,534	Dec. 4	203	57	25	922
Heyer, Ludwig, assignor to F. O. Spielhagen, Berlin, Germany. Preparing water-tight fabrics.....	288,635	Nov. 20	1066	.....	25	708
Heyl, Frederick, Irvington, assignor to G. D. Drake, Newark, N. and M. S. Drake, Irvington, N. J. Chamber-pail and other vessels. (Reissue).....	10,369	Aug. 21	1531	432	24	791
Heyl, Henry R., Philadelphia, Pa. Suspension device.....	284,129	Aug. 28	2036	566	24	890
Heylman, John W., assignor to E. J. Hall, Buffalo, N. Y. Feed-water heater.....	272,689	Feb. 20	1392	391	23	698
Heyne, Georg, Offenbach-on-the-Main, Germany. Screw-machine.....	289,655	Dec. 4	351	{ 99 100 }	25	949
Heynemann, Lionel H., San Francisco, Cal. Safety appliance for elevators.....	269,855	Jan. 2	43	14	23	11
Heynsinger, Isaac W., Philadelphia, Pa. Lighting and heating attachment for gas-brackets.....	271,708	Feb. 6	144	40	23	465
Heynsinger, Isaac W., Philadelphia, Pa. Machine for inserting and clinching staples.....	274,941	Apr. 3	73	20	23	1238
Heynsinger, Isaac W., Philadelphia, Pa. Suspension-wrench for gas and other cocks.....	275,042	Apr. 3	211	57	23	1262
Heynsinger, Isaac W., Philadelphia, Pa. Postage-stamp holder.....	284,737	Sept. 11	714	200	24	1032
Heynsinger, Isaac W., Philadelphia, Pa. Method of and appliance for disposing of dead bodies.....	285,034	Sept. 18	1089	304	24	1105
Heynsinger, Isaac W., Philadelphia, Pa. Combined bit-brace and washer-cutter.....	286,610	Oct. 16	1042	282	25	206
Heyward, Charles P. (See McCord, John, assignor.)						
Hiams, George F., Troy, N. Y. Spring-mattress.....	270,799	Jan. 16	1202	347	23	251
Hiatt, Edwin, New Castle, Ind. Post-driving machine.....	286,816	Oct. 16	1301	334	25	251
Hiatt, Edwin, New Castle, Ind. Apparatus for elevating hay and other substances.....	287,930	Nov. 6	176	50	25	538
Hibbard, Angus S., Milwaukee, Wis., assignor to Western Electric Company, Chicago, Ill. Circuit for telephone-exchanges.....	274,602	Mar. 27	1770	490	23	1161
Hibbard, Erastus, South Barre, N. Y. Machine for finishing staves.....	281,066	July 10	896	249	24	165
Hibbard, George E., assignor of one-half to N. C. Gridley, Evanston, Ill. Mechanical stoker.....	282,519	Aug. 7	51	15, 16	24	509
Hibbard, George E., assignor of one-half to N. C. Gridley, Evanston, Ill. Rotary engine.....	282,520	Aug. 7	53	16	24	509
Hibbard, Thomas, Boston, Mass. Laying underground pipes.....	289,000	Nov. 27	1515	419	25	796
Hibbs, George D., Newark, N. J. Weighing apparatus.....	273,528	Mar. 6	367	98	23	897
Hice, Henry, <i>et al.</i> (See Rote, Charles V., assignor.)						
Hickey, Philip, Boston, Mass. Match-plane.....	280,175	June 26	1912	537	23	2473
Hickman, Elijah, Red Bluff, Cal. Grain-header.....	286,436	Oct. 9	825	{ 223 224 }	25	160
Hickman, Francis, New York, N. Y. Hose-nozzle.....	270,064	Jan. 2	279	82	23	57
Hickman, Francis, New York, N. Y. Hose-coupling.....	270,065	Jan. 2	279	82	23	57
Hickman, Francis, New York, N. Y. Cock and faucet.....	270,066	Jan. 2	280	83	23	57
Hickok, Barton H., Eldon, Mo. Bed-spring.....	276,818	May 1	367	97	23	1690
Hickok, Samuel S., Rochester, N. H., assignor of one-half to Athol Machine Company, Athol, Mass. Fruit-gatherer.....	272,690	Feb. 20	1394	391	23	699
Hickok, Stephen O., assignor to himself and J. Herring, Allen, Mich. Spring-toothed sulky-harrow.....	270,067	Jan. 2	281	83	23	57
Hicks, Alonzo. (See Evans, Abner, Jr., assignor.)						
Hicks, Alonzo, West New Brighton, N. Y., assignor to E. W. Corey, Boston, Mass. Game apparatus.....	290,328	Dec. 18	1191	334	25	1112
Hicks, Charles R. (See Hoyt, David, assignor.)						
Hicks, Edgar S., Brooklyn, N. Y. Mast and spar.....	273,529	Mar. 6	369	98	23	897
Hicks, George C., Chicago, Ill. Method of and means for retaining heat in steam-boilers.....	287,829	Nov. 6	48	14	25	516
Hicks, George C., Chicago, Ill. Tube-closer for steam-boilers.....	287,931	Nov. 6	177	50, 51	25	538
Hicks, Henry C., Minneapolis, Minn. Stock-car.....	279,162	June 12	698	190	23	2252
Hicks, Henry C., Minneapolis, Minn. Stock-car.....	281,067	July 10	897	249	24	166
Hicks, Henry C., Minneapolis, Minn. Stock-car.....	288,335	Nov. 13	683	188	25	634
Hicks, James J., Hatton Garden, county of Middlesex, England. Clinical thermometer.....	280,037	June 26	1765	495	23	2446

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Hicks, John H. (See Porter, Thomas J., assignor.)						
Hicks, John H., Gadsden, Ala. Cotton planter and cultivator.	275,651	Apr. 10	1029	278	23	1410
Hicks, John W., Winona, Miss. Machine for cutting circles.	290,882	Dec. 25	1918	520	25	1246
Hicks, Joshua, Sandford, Ind. Rat-proof building.	282,636	Aug. 7	196	57	24	534
Hicks, Napoleon B., San Bernardino, Cal. Fruit-pitter.	281,507	July 17	1459	400	24	270
Hicks, Nebemiah. (See Metcalf and Hicks.)						
Hicks, Peter, Napa, Cal. Adjustable horseshoe.	279,758	June 19	1414	395	23	2379
Hicks, William S., New York, N. Y., and H. Isley, Jersey City, N. J. Pencil-case.	280,313	June 26	2088	587	23	2504
Hickson, Frederick A., Rochester, N. Y. Milk-can.	280,820	July 10	601	168	24	113
Hiemenz, John W., Lancaster, Pa. Friction-lock for lever fan-blowers, &c.	277,487	May 15	1206	324	23	1846
Hien, Philip, and A. H. Grimm, Rock Island, Ill. Cultivator.	284,960	Sept. 11	981	276	24	1079
Hiester, Charles E., Harrisburg, Pa. Hammock.	278,431	May 29	2389	652	23	2066
Hiester, Charles E., Harrisburg, Pa. Velocipede.	285,130	Sept. 18	1200	336 337	24	1123
Hiester, Charles E., Harrisburg, Pa., assignor of one-third to C. S. Mixter, Boston, Mass. Tricycle.	271,583	Jan. 30	2183	628	23	432
Higbe, James M., Manson, Iowa. Cut-off-valve gear.	275,337	Apr. 3	595	159	23	1327
Higby, Charles W. (See Smith, Emmet L., assignor.)						
Higby, Charles W., Jackson, Mich. Corset.	275,652	Apr. 10	1030	278	23	1410
Higby, Charles W., Jackson, Mich. Corset.	275,653	Apr. 10	1031	278	23	1410
Higdon, John C., Kansas City, Mo. Automatic stove-damper.	283,106	Aug. 14	758	213	24	642
Higgin, William H. (See Potter and Higgin.)						
Higgins, Albert J., Alfred, Me. Oil-can holder.	282,986	Aug. 14	602	170	24	614
Higgins, Alfred, and F. Wilkinson, Manchester, county of Lancaster, England. Bleaching and dyeing fibrous materials.	273,078	Feb. 27	1885	529	23	791
Higgins, Barlow, Elliottstown, Ill. Automatic damper.	286,817	Oct. 16	1304	355	25	252
Higgins, Campbell P., Philadelphia, Pa. Tube-expander.	275,766	Apr. 10	1177	323	23	1435
Higgins, Campbell P., Philadelphia, Pa. Gage-cock.	280,176	June 26	1914	538	23	2473
Higgins, Campbell P., Philadelphia, Pa., assignor to Babcock & Wilcox Company, New York, N. Y. Tube-scraper.	272,437	Feb. 20	1073	303	23	643
Higgins, Charles J., Farmingdale, Me. Lantern.	287,932	Nov. 6	179	51	25	539
Higgins, Charles W. (See Houlehan, James, assignor.)						
Higgins, Jonathan R., Lima, Ohio. Chimney-flue stopper.	282,726	Aug. 7	312	88	24	554
Higgins, Mary E., Cadillac, Mich. Underwaist for children.	277,726	May 15	1484	402	23	1893
Higgins, Mary E., Cadillac, Mich. Underwaist.	288,802	Nov. 20	1275	349	25	744
Higgins, Mary E., Cadillac, Mich. Underwaist.	288,803	Nov. 20	1276	350	25	744
Higgins, Norman L., Elmira, N. Y. Wagon running-gear.	282,637	Aug. 7	197	57	24	534
Higgins, Oliver, and W. S. and J. Grim, Napoleon, Ohio. Acoustic telephone.	273,079	Feb. 27	1886	530	23	791
Higgins, Rozander S., Benton Harbor, Mich. Sulky-plow.	285,749	Sept. 25	1952	552	24	1264
Higgins, Sylvester W., St. Louis, Mo. Fountain-pen.	271,455	Jan. 30	2023	584	23	405
Higgins, Walter B., assignor of one-half to S. M. Baldwin, San Francisco, Cal. Roller-skate.	280,821	July 10	603	168	24	113
Higgins, Walter S. (See Higgins and Grim.)						
Higgs, Joseph W., Sharon, Pa. Roll for rolling car-couplings.	289,001	Nov. 27	1517	419 420	25	796
Higgs, Paget, and W. Courtney, New York, N. Y. Insulator for the suspension of electrical wire conductors.	260,933	Jan. 2	130	39	23	27
Highfield, William E., assignor of one-half to J. H. McVaugh, Philadelphia, Pa. Combined punching and countersinking machine.	289,835	Dec. 11	581	162	25	994
Highill, William M. (See Allmon, Wonnack, and Highill.)						
Higinbotham, John D., and G. F. Ball, Adrian, Mich. Weed-puller.	287,677	Oct. 30	2415	651	25	469
Higley, Eben N., Great Falls, assignor of one-half to Trefethen, Saltmarsh & Willey, Dover, N. H. Glass for the manufacture of water, drain, and sewer pipes.	288,056	Nov. 6	334	171	25	564
Hilbers, Henry, Flushing, N. Y. Apparatus for drying wall-paper.	277,033	May 8	656	171	23	1744
Hilbert, Charles, assignor to himself, J. J. Mahaney, and J. Stern, Sing Sing, N. Y. Inhaler.	276,968	May 1	567	148	23	1723
Hildenbrand, George F., W. Klein, and C. Trumper, New York, N. Y. Locked bung.	284,848	Sept. 11	848	239	24	1055
Hildenbrand, George F., assignor to C. L. Gross, New York, N. Y. Valve and spigot wrench for barrels.	290,183	Dec. 11	994	281	25	1070
Hildreth, Joseph E. (See Allton, Hiram, assignor.)						
Hildreth, Robert H. J., Greenville, Ala. Bee-hive.	270,666	Jan. 16	1040	298	23	219
Hildwein, Robert, Cleveland, Ohio. Screw-threading device.	289,415	Dec. 4	50	14.15	25	895
Hilgenstock, Gustav, Hoerde, Germany. Tuyere for blast-furnaces.	283,107	Aug. 14	758	213	24	642
Hill, Alexander, Bright Seat, Md. Wire-stretcher.	286,302	Oct. 9	663	177	25	130
Hill, Andrew L., Decatur, Ill. Hame-tug.	279,759	June 19	1414	395	23	2379
Hill, Andrew L., assignor to J. L. Knieper, Decatur, and J. Barrick, Blue Mound, Ill. Egg-carrier.	272,548	Feb. 20	1210	338	23	667
Hill, Charles F., Phelps, N. Y. Saw-filing machine.	283,393	Aug. 21	1119	316	24	714
Hill, Daniel, New Vienna, Ohio. Field-drag.	289,656	Dec. 4	354	100	25	949
Hill, De Witt C., Willimantic, Conn. Moving grate for boiler-furnaces.	276,691	May 1	202	52	23	1659
Hill, Edward J., and J. L. Clark, Westminster, England. Boat-detaching apparatus.	272,253	Feb. 13	827	231	23	596
Hill, Edward K., Worcester, Mass. Bicycle-spring.	275,910	Apr. 17	1356	374	23	1474
Hill, Edwin H., Worcester, Mass. Method of and mechanism for straightening metal bands.	290,231	Dec. 18	1064	298	25	1091
Hill, Francis H. (See Goff, Mortimer, assignor.)						
Hill, Frank A., Benicia, Cal. Plow and cultivator frame.	283,394	Aug. 21	1120	317	24	715
Hill, Frederick D., assignor of two-thirds to G. W. Nelson and J. S. Freer, New York, N. Y. Burglar-alarm.	284,012	Aug. 28	1892	530	24	865
Hill, George, New York, N. Y. Drawing-roller for spinning and drawing frames.	270,432	Jan. 9	740	217	23	153
Hill, George E. (See Smith, Hugh, assignor.)						
Hill, George W., Stark's Point, Wash. Ter. File-handle.	275,911	Apr. 17	1358	374	23	1474
Hill, Henry H., et al. (See Kelley, John, assignor.)						
Hill, James F., Dalton, Ga. Cultivator and seed-planter.	281,878	July 24	1946	531 532	24	358
Hill, James F., assignor of two-thirds to J. F. Dunn and M. Folk, Fleetwood, Pa. Washing-machine.	281,996	July 24	2084	572	24	382
Hill, John, Minneapolis, Minn. Insole for boots or shoes.	275,767	Apr. 10	1178	323	23	1435
Hill, John, Independence, Kans. Bagasse-furnace.	276,400	Apr. 24	1970	545	23	1587
Hill, John, Columbus, Ga. Automatic fire-extinguisher.	283,242	Aug. 14	921	256 257	24	671
Hill, John C., and J. Doody, Brooklyn, N. Y. Hat-stiffening machine.	289,911	Dec. 11	677	188	25	1011
Hill, John L., Brooklyn, N. Y. Railway-switch.	278,548	May 29	2527	690	23	2090
Hill, John T., Meadville, Pa. Lamp.	270,312	Jan. 9	573	168	23	122
Hill, John W., Cairo, Ill. Combined cradle and seesaw.	273,530	Mar. 6	371	98	23	898
Hill, Joseph, Williamsport, Pa. Lever-clutch.	278,137	May 22	1985	546	23	1987
Hill, Joseph W., Jersey Shore, Pa. Harness-tug attachment.	275,043	Apr. 3	212	57	23	1262



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Hill, L., Jr., <i>et al.</i> (See McGregor, Rob Roy, assignor.)						
Hill, Louis C., Myrtle Creek, Oreg. Fruit-stonor	272,549	Feb. 20	1210	339	23	667
Hill, Samuel C. (See Webb, Samuel D., assignor.) (Reissue.)						
Hill, Samuel C., S. D. Webb, and R. M. Odell, Washington, D. C. Car-ventilator	282,880	Aug. 7	496	139	24	588
Hill, Samuel L., Brooklyn, N. Y. Steam-generator	284,204	Sept. 4	61	17	24	915
Hill, Thomas, <i>et al.</i> (See Little, James K., assignor.)						
Hill, Thomas, Jersey City, N. J. Dumping-cart	283,604	Aug. 21	1366	382	24	759
Hill, Thomas, assignor of two-thirds to P. B. Williams and C. Smith, Quincy, Ill. Power-elevator	279,243	June 12	783	216	23	2267
Hill, Thomas H., Philadelphia, Pa. Automatic paper-bag filler	277,133	May 8	793	208	23	1768
Hill, Warren. (See Stiles, George A., assignor.)						
Hill, Wilber F., North Manchester, Conn. Paper-cutting machine	272,438	Feb. 20	1075	303	23	643
Hill, William E., <i>et al.</i> (See Randall, Francis W., assignor.)						
Hill, William E., Kalamazoo, Mich. Sawing-machine	276,401	Apr. 24	1970	545 546	23	1587
Hill, William E., Kalamazoo, Mich. Steam-engine	277,034	May 8	657	171	23	1744
Hill, William H. (See Crocker, Benjamin S., assignor.)						
Hill, William H., Chicago, Ill. Cover for harvesters	285,410	Sept. 25	1534	432 433	24	1189
Hill, William S., Cutler, Ill. Door-bolt	284,961	Sept. 11	982	276	24	1079
Hiller, John M., Earlville, Ill. Road-cart	288,336	Nov. 13	685	188	25	634
Hilliard, Charles H., and W. C. Green, Chicago, Ill. Pencil-holder	273,277	Mar. 6	39	12	23	841
Hilliard, John W., Hawley, Minn. Automatic feed-regulator for grinding-mills	286,818	Oct. 16	1305	355	25	252
Hillman, Jotham R., Hopewell, N. Y. Apparatus for bleaching fruit, &c.	275,044	Apr. 3	213	58	23	1262
Hillman, William, Haynesville, Me. Carriage or wagon jack	288,057	Nov. 6	334	94	25	564
Hills, Frederick C., Newton, Mass. Refrigerating-car	279,163	June 12	700	190	23	2252
Hillsley, John T. (See Lilley and Hillsley.)						
Hilton, William, Barton, Ohio. Coal-mining machine	287,436	Oct. 30	2095	569 570	25	407
Hilton, William D. (See Folsom, Andrew, assignor.)						
Himelberger, Jacob, Holt, Mich. Flooring-jack	285,894	Oct. 2	148	42	25	29
Himmer, Vitalis, assignor to Time Telegraph Company, New York, N. Y. Circuit-controller for electric clocks	274,323	Mar. 20	1386	381	23	1087
Himmer, Vitalis, assignor to Time Telegraph Company, New York, N. Y. Circuit-controller for electric clocks	274,324	Mar. 20	1388	381	23	1088
Himmer, Vitalis, assignor to Time Telegraph Company, New York, N. Y. Electric clock	274,325	Mar. 20	1391	381	23	1088
Hinchcliffe, Alfred, Lawrence, Mass. Welt-cutter	281,365	July 17	1283	356	24	239
Hinchliffe, William, Nashville, Tenn. Machine for rolling cotton-batting	276,402	Apr. 24	1972	546	23	1588
Hinckley, Howard V. (See Beard and Hinckley.)						
Hinden, Mathias J., assignor to himself, M. Flanagan, and A. Parent, Detroit, Mich. Hydrogen-lamp	275,045	Apr. 3	214	58	23	1263
Hindes, Frank. (See Dods and Hindes.)						
Hindley, Robert C., Racine, Wis. Skate	286,199	Oct. 9	513	141 142	25	105
Hindley, Robert C., Racine, Wis. Skate	287,933	Nov. 6	188	51	25	539
Hinds, Charles H. (See Vance and Hinds.)						
Hinds, Charles H., New York, N. Y. Joint for electric-light brackets	282,317	July 31	2507	689	24	457
Hinds, Charles H., New York, N. Y. Joint for electric lights	282,318	July 31	2508	689	24	457
Hinds, Charles H., New York, N. Y. Electric gas-burner	282,890	Aug. 7	497	140	24	588
Hinds, Joseph E., Brooklyn, N. Y. Printing-machine. (Reissue.)	10,330	May 22	2220	608 609	23	2027
Hinds, Melvin B. (See Cutter, William P., assignor.)						
Hinds, William H. H. (See Fogg, Leonard C., assignor.)						
Hine, Ethel C., <i>et al.</i> (See Eldridge, Stuart, assignor.)						
Hine, John H. (See Armstrong and Hine.)						
Hine, L. G., <i>et al.</i> (See Rogers, James H., assignor.)						
Hines, Dauphin S., <i>et al.</i> (See Leavitt, Erasmus D. Jr., assignor.)						
Hines, Dauphin S., Brooklyn, W. A. Perry, Bay Ridge, and C. C. Worthington, Irvington, N. Y. Double-acting pump	289,535	Dec. 4	205	57, 58	25	922
Hinkley, George M., Milwaukee, Wis. Device for oscillating the guides of reciprocating saw mills	273,361	Mar. 6	159	45	23	861
Hinks, Joseph, Birmingham, county of Warwick, England. Lamp	274,326	Mar. 20	1393	381 382	23	1089
Hinks, Joseph, Birmingham, county of Warwick, England. Lamp	274,327	Mar. 20	1395	382	23	1089
Hinkston, Forest J. (See Krill, F. Adon, assignor.)						
Hinrichs, Charles F. A. (See Angell, Albert, assignor.)						
Hinsdale, Charles C., Cleveland, Ohio. Telegraph-insulator	287,830	Nov. 6	50	15	25	516
Hinton, Joseph R. H., assignor to Continental Cash Car Company, Baltimore, Md. Stop or brake mechanism and wire-support for cash-carrier systems	286,133	Oct. 2	432	118	25	80
Hinton, Joseph R. H., assignor to Continental Cash Car Company, Baltimore, Md. Parcel-carrier	287,129	Oct. 23	1707	467	25	330
Hipkiss, Samuel, Stoneham, Mass. Roller-skate	289,099	Nov. 27	1640	454	25	817
Hipp, John J., Timberville, Ohio. Hame-tug	290,427	Dec. 18	1330	368	25	1136
Hippling, William, assignor to Ginn & Co., New York, N. Y. Machine for use in the manufacture of tin cans	281,508	July 17	1461	401	24	270
Hipwell, Thomas, Astoria, assignor to Manhattan Brass Company, New York, N. Y. Lamp-burner	283,108	Aug. 14	759	214	24	642
Hirayama, Jinta, Otamachi, Yokohama, Japan. Daylight fire-works	282,891	Aug. 7	498	140	24	588
Hires, Charles E. (See Tubbs and Swartz, assignors.)						
Hirley, James V., Cincinnati, Ohio. Support for electric wires and lamps	286,437	Oct. 9	836	224	25	161
Hirsch, Charles, assignor of one-half to J. J. Lanz, Buffalo, N. Y. Stop-cock	283,887	Aug. 28	1713	483	24	834
Hirsch, Solomon, Berne, Ind. Sawing-machine	290,051	Dec. 11	843	239	25	1042
Hirsch, Henry, New York, N. Y. Picture-holding cap for watch-cases	276,403	Apr. 24	1973	546	23	1588
Hirst, Geoffrey, Whitby, county of York, England. Manufacturing inlaid articles	285,619	Sept. 25	1783	507	24	1235
Hise, George J., and J. H. Fenton, Chicago, Ill. Rubber bumper for horses' heads	275,654	Apr. 10	1032	279	23	1411
Hise, George J., and J. H. Fenton, Chicago, Ill., assignors to said Fenton. Quarter-boot for horses	275,655	Apr. 10	1033	279	23	1411
Hiser, Daniel B., Wooster, Ohio. Burial-casket	288,804	Nov. 20	1277	350	25	745
Hitchcock, Albert L., Pawtucket, R. I. Coal elevator and bucket	287,831	Nov. 6	51	15	25	516
Hitchcock, Alonzo, New York, N. Y. Draftsman's T-square	274,194	Mar. 20	1216	335	23	1059
Hitchcock, Arthur C., assignor of one-half to F. E. Baker, Decorah, Iowa. Fire-escape	276,969	May 1	568	148	23	1723
Hitchcock, Caleb B. (See Cloves, James H., assignor.)						
Hitchcock, Charles A. (See Horsley and Hitchcock.)						
Hitchcock, Charles A. (See Lord, Andrew H., assignor.)						
Hitchcock, Charles B., Indianapolis, Ind. Cigar-lighter cutter	269,934	Jan. 2	131	39	23	27

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Hitchcock, Charles B., Indianapolis, Ind. Ore-concentrating apparatus .....	279,164	June 12	701	191	23	2252
Hitchcock, Charles B., Indianapolis, Ind. Valve .....	284,635	Sept. 11	581	163	24	1008
Hitchcock, Charles B., Indianapolis, Ind. Toe-weight .....	288,636	Nov. 20	1068	293	25	708
Hitchcock, Frank I., Bridgeport, Conn. Weighing-scale .....	285,815	Oct. 2	41	13	25	9
Hitchcock, Henry, Genesee, assignor of one-half to A. Carpenter, Flint, Mich. Fire-escape .....	282,892	Aug. 7	499	140	24	588
Hitchcock, Jonathan. (See White and Hitchcock.)						
Hitchcock, Luke R., and J. W. Lufkin, Four Mile, N. Y. Sucker-rod extractor for oil and other wells .....	280,314	June 26	2089	588	23	2504
Hitchcock, William F. (See Rock, Frederick, assignor.)						
Hiter, Chesterfield J. (See Talbott and Hiter.)						
Hitt, Adrian, Rushville, assignor to himself and T. McManus, Sexton, Ind. Road-cart .....	288,805	Nov. 20	1278	350	25	745
Hitt, Richard T. (See Wasson and Hitt.)						
Hittel, Peter, Tonawanda, N. Y. Tool-holder for cutter-heads .....	270,313	Jan. 9	573	{ 168 169 }	{ 23 23 }	122
Hittinger, Christ, Dayton, Ohio. Car-stove extinguisher .....	289,657	Dec. 4	355	100	25	950
Hix, Nelvil W. H., et al. (See Pendleton, John H., assignor.)						
Hixon, Edgar L., et al. (See Becker, Franck, assignor.)						
Hixon, Edgar L., et al. (See White, Jarvis N. B., assignor.)						
Hoadley, John C. (See McKay and Hoadley.)						
Hoadley, John C., Boston, Mass., assignor to G. McKay, Newport, R. I. Shoe-sewing machine .....	273,531	Mar. 6	372	99	23	898
Hoadley, Robert. (See Hull and Hoadley.)						
Hoag, Andrew J. (See Shepard, Hoag, and Thomson.)						
Hoag, Andrew J., assignor to Nichols, Shepard & Company, Battle Creek, Mich. Traction-wheel .....	273,532	Mar. 6	373	99	23	898
Hoag, Sidney W., Sr., assignor of three-fourths to H. B. Piper, New York, N. Y. Valve .....	272,879	Feb. 27	1662	464	23	733
Hoag, Sidney W., Sr., assignor of one-half to H. B. Piper, New York, N. Y. Elevator .....	279,648	June 19	1291	359	23	2358
Hoagland, James W., et al. (See Corbin, Elijah H., assignor.)						
Hoagland, John. (See Pearce and Hoagland.)						
Hoagland, John, assignor to Pearce & Hoagland, Providence, R. I. Bar for watch-chains .....	271,069	Jan. 23	1536	443	23	312
Hoagland, John, assignor to Pearce & Hoagland, Providence, R. I. Ornamental breastpin .....	279,564	June 19	1195	331	23	2341
Hoague, John H., Chicopee, Mass. Hand-drill .....	281,068	July 10	898	250	24	166
Hoar, William C., Spencer, Mass. Boot or shoe sole stamp .....	277,727	May 15	1485	402	23	1893
Hobbs, Alfred C., Bridgeport, Conn. Machine for heading cartridge-shells .....	273,734	Mar. 13	639	{ 170 171 }	{ 23 23 }	952
Hobbs, Charles L., Wheeling, W. Va. Air-pipe coupling .....	278,961	June 5	427	117	23	2196
Hobbs, Clarence W., Deering, Me. Box .....	273,278	Mar. 6	40	12	23	841
Hobbs, Elijah M., Santa Rosa, Cal. Car-coupling .....	287,934	Nov. 6	182	52	25	539
Hobbs, Horatio. (See Gordon and Hobbs.)						
Hobbs, James W., assignor of one-half to B. J. Curry, Huntsville, Ala. Cotton-press .....	273,080	Feb. 27	1887	530	23	792
Hobbs, John, Boston, Mass. Apparatus for manufacturing artificial butter .....	271,239	Jan. 30	1741	504	23	355
Hobbs, John, Boston, Mass. Manufacturing artificial butter .....	271,240	Jan. 30	1742	504	23	355
Hobbs, John, Boston, Mass. Apparatus for treating artificial butter, &c .....	271,241	Jan. 30	1743	504	23	355
Hobbs, John, Boston, Mass. Apparatus for treating artificial butter, &c .....	271,242	Jan. 30	1744	505	23	356
Hobbs, John, Boston, Mass. Apparatus for manufacturing artificial butter .....	271,243	Jan. 30	1745	505	23	356
Hobbs, John, Boston, Mass. Apparatus for treating artificial butter .....	271,244	Jan. 30	1746	505	23	356
Hobbs, John, Boston, Mass. Refining fats .....	280,822	July 10	604		24	113
Hobbs, John, Boston, Mass. Deodorized fat or oxyline .....	289,100	Nov. 27	1642		25	817
Hobbs, Joseph D., Mount Pleasant, Iowa. Ditching-plow .....	278,549	May 29	2531	690	23	2091
Hobbs, Josiah. (See Tucker, William, assignor.)						
Hobbs, Willis F. (See Wilmot, Samuel R., assignor.)						
Hobbit, Laban, Atlanta, Ill. Horse-power hay-derrick .....	277,728	May 15	1485	402	23	1894
Hobson, James, assignor to S. S. Hall, Bury, near Manchester, England. Pile-wire motion for looms .....	281,069	July 10	899	250	24	166
Hobson, John B., San Francisco, Cal. Process of and apparatus for obtaining boracic acid from native borate of lime .....	289,836	Dec. 11	583	162	25	995
Hobson, Joseph W., assignor to Carr & Hobson, (limited,) New York, N. Y. Lawn-mower .....	275,338	Apr. 3	596	160	23	1327
Hochhausen, William, New York, N. Y. Electric-arc lamp .....	271,456	Jan. 30	2024	{ 584 585 }	{ 23 23 }	406
Hochhausen, William, New York, N. Y. Automatic cut-out for electric lamps .....	271,457	Jan. 30	2028	585	23	406
Hochhausen, William, New York, N. Y. Electric-arc lamp .....	271,458	Jan. 30	2030	585	23	407
Hockensmith, Franklin C., Irwin, Pa. Axle-lubricator .....	273,990	Mar. 13	954	263	23	1005
Hodgdon, William H. (See Westgate, Joseph D., assignor.)						
Hodge, Chester A. (See Smith, Wilson R., assignor.)						
Hodge, Chester A., Beloit, Wis. Device for converting motion .....	282,727	Aug. 7	313	89	24	554
Hodge, William, Uxbridge, Ontario, Canada. Carriage-top .....	270,220	Jan. 9	470	138	23	102
Hodge, William, Uxbridge, Ontario, Canada. Carriage-top .....	274,496	Mar. 27	1636	435	23	1138
Hodges, Charles C., et al. (See McCoy, Elijah, assignor.)						
Hodges, Charles C., assignor to Detroit Lubricator Company, Detroit, Mich. Lubricator .....	273,768	Apr. 10	1179	323	23	1435
Hodges, Henry C., et al. (See McCoy, Elijah, assignor.)						
Hodges, Horace F., Chelsea, Mass. Speed-regulator .....	271,245	Jan. 30	1747	505	23	356
Hodges, Horace F., Chelsea, Mass. Rotary motor .....	271,459	Jan. 30	2034	586	23	407
Hodges, Horace F., Chelsea, assignor to C. F. Payne, Groveland, and G. H. Spencer, Fitchburg, Mass. Oil-cup .....	286,438	Oct. 9	828	224	25	161
Hodges, Horace F., Chelsea, assignor to C. F. Payne, Groveland, and G. H. Spencer, Fitchburg, Mass. Lubricator .....	290,428	Dec. 18	1330	369	25	1136
Hodges, Horace F., Chelsea, assignor to C. F. Payne, Groveland, and G. H. Spencer, Fitchburg, Mass. Pressure-regulating valve .....	290,429	Dec. 18	1331	369	25	1136
Hodges, John, Westfield, N. J. Safety appliance for elevators .....	287,287	Oct. 23	1908	522	25	365
Hodges, John, Westfield, N. J. Safety appliance for elevators .....	288,806	Nov. 20	1279	{ 350 351 352 }	{ 25 25 25 }	745
Hodges, Pliny F., Chicago, Ill. Knotting mechanism for grain-binders .....	286,819	Oct. 16	1306	{ 353 354 355 }	{ 25 25 25 }	252
Hodges, Pliny F., Chicago, Ill. Knotting mechanism for grain-binders .....	286,820	Oct. 16	1308	{ 356 357 358 }	{ 25 25 25 }	252
Hodges, Robert, Philadelphia, Pa. Try-square .....	288,807	Nov. 20	1281	351	25	745
Hodgkins, Truman A. (See Brigham, Jonathan W., assignor.)						
Hodgson, Alfred, London, assignor to I. Chorlton, Jr., Manchester, England. Folding bedstead .....	283,485	Aug. 21	1236	347	24	735
Hodgson, Isaac, Indianapolis, Ind. Pneumatic alarm-lock for jails .....	275,656	Apr. 10	1034	{ 280 281 }	{ 23 23 }	1411
Hodgson, John G. (See Norton and Hodgson.)						
Hodkinson, James, and F. P. Miller, Chambersburg, Pa. Brick-machine .....	288,337	Nov. 13	685	189	25	635
Hodson, Thomas T., Lansing, Mich. Boat-hull .....	290,232	Dec. 18	1006	298	25	1091



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Hoe & Co., R. (See Crowell, Luther C., assignor.)						
Hoe & Co., R. (See Crowell, Luther C., assignor.) (Reissue.)						
Hoe & Co., R. (See Vienot, Jules P., assignor.)						
Hoe, Stephen S., Tarrytown, N. Y. Electrotypc-plate	286,821	Oct. 16	1311	357	25	253
Hoelemaker, John A. (See O'Harra, George W., assignor.)						
Hoeffler, George F., Chicago, Ill. Rail-joint fastener	273,735	Mar. 13	640	171	23	952
Hoeffler, George F., San Francisco, Cal. Fruit-jar	282,193	July 31	2361	650	24	431
Hoeftich, Jacob N., Philadelphia, Pa. Life-preserver	278,432	May 29	2391	652	23	2066
Hoehn, Charles W., Bloomington, Ill. Soldering-lamp	276,404	Apr. 24	1974	546	23	1588
Hoeland, Frederick A. (See Isley, William H., assignor.)						
Hoelle, Jacob. (See Eliel, Albert L., assignor.)						
Hoem, August, Baltimore, Md. Hat-lining	277,729	May 15	1486	402	23	1894
Hoem, August, Baltimore, Md. Lithographic process	277,730	May 15	1487	403	23	1894
Hoev, John J., assignor to Stedman & Fuller, Lawrence, Mass. Machine for setting card-teeth	271,460	Jan. 30	2038	586	23	408
Hoever, William A., Pittsburg, Pa. Glue-stock washer	276,040	Apr. 17	1511	416	23	1501
Hoever, William A., Pittsburg, Pa. Apparatus for drying glue, &c	276,405	Apr. 24	1975	547	23	1588
Hoever, William A., Pittsburg, Pa. Vacuum-pan	277,280	May 8	955	257	23	1797
Hoff, Augustus and H., Brooklyn, N. Y. Leather case	274,603	Mar. 27	1771	490	23	1161
Hoff, Charles, assignor of one-half to P. Renner, Cincinnati, Ohio. Coal-hod	279,871	June 19	1551	434	23	2403
Hoff, Henry. (See Hoff, Augustus and H.)						
Hoffman, Antony A., New York, N. Y. Toy savings-bank	272,049	Feb. 13	577	156	23	552
Hoffman, Austin D. (See Hofmann and Hoffman.)						
Hoffman, Austin D., assignor to National Feather Duster Company, Chicago, Ill. Feather-splitting and grinding machine	279,386	June 12	979	272	23	2298
Hoffman, Edward J., assignor of one-half to D. P. and P. J. Magner, Sioux City, Iowa. Device for preventing incrustation	270,569	Jan. 9	912	263	23	187
Hoffman, Herman F., Torrington, Conn. Handsaw	280,938	July 10	734	204	24	135
Hoffman, Horace J., Neillsville, Wis. File for papers	274,604	Mar. 27	1772	491	23	1162
Hoffman, Jacob R., Port Wayne, Ind. Emery-wheel for sharpening saws	271,634	Feb. 6	63	18	23	451
Hoffman, John F., Cincinnati, Ohio. Composition roof	285,131	Sept. 18	1201	337	24	1124
Hoffman, Joseph, assignor to J. Reckendorfer, New York, N. Y. Pencil	270,567	Jan. 9	910	262	23	187
Hoffman, Joseph, assignor to J. Reckendorfer, New York, N. Y. Combination-instrument	273,232	Feb. 27	2087	586	23	827
Hoffman, Joseph, assignor to H. Berolzheimer, New York, N. Y. Automatic holder for knives and pencils	290,683	Dec. 25	1664	459	25	1200
Hoffman, Joseph, assignor to H. Berolzheimer, New York, N. Y. Lead and crayon holder	290,684	Dec. 25	1666	459	25	1200
Hoffman, Lazarus, Columbus, Ohio. Glove or mitten	280,823	July 10	605	169	24	113
Hoffman, Leonhart, Tekamah, Nebr. Sickle-eye for mowing and reaping machines	274,942	Apr. 3	76	20	23	1238
Hoffman, Ross J., Binghamton, N. Y. Lubricator	286,005	Oct. 2	278	78	25	52
Hoffman, Ross J., Binghamton, N. Y. Lubricator	288,434	Nov. 13	817	221	25	658
Hoffman, William M., assignor to Schoellkopf & Co., Buffalo, N. Y. Putting-out machine	288,941	Nov. 20	1440	397	25	775
Hoffmann, Charles, New York, N. Y. Lamp	286,006	Oct. 2	278	78	25	52
Hoffmann, Charles, Milwaukee, Wis. Machine for stripping pails, tubs, &c	290,329	Dec. 18	1191	334	25	1112
Hoffmann, George A., Jr., Monongahela City, Pa. Composition for fire-brick	276,041	Apr. 17	1512		23	1501
Hoffmann, William R., Oregon, Mo. Music-holder	289,658	Dec. 4	356	100	25	950
Hofmann, Ernst, Barnhart's Mills, Pa. Carpet-stretcher	276,406	Apr. 24	1976	547	23	1588
Hofmann, George, Jr., and A. D. Hoffman, Chicago, Ill. Fire-escape	276,585	May 1	55	16	23	1637
Hofmann, Leonhard, Cincinnati, Ohio. Saw-guard	284,849	Sept. 11	850	239	24	1055
Hofstatter, Theodore, Jr., New York, N. Y. Boring-machine	284,850	Sept. 11	850	239	24	1055
Hogan, George, New Brighton, N. Y. Indicator for schools	276,819	May 1	367	97	23	1690
Hogan, Matthew, Hartford, Conn. Water-cock	275,487	Apr. 10	818	221	23	1374
Hogan, Peter, Albany, N. Y. Process of and apparatus for manufacturing fertilizers	281,693	July 24	1705	464	24	315
Hogboom, Levi S., and F. B. Smith, Three Rivers, Mich. Bran-duster	279,387	June 12	981	272	23	2298
Hoggson, Samuel J., and G. C. Pettis, New Haven, Conn. Covering key-boards of musical instruments	274,328	Mar. 20	1307	383	23	1089
Hohenstein, Karl A., Brooklyn, N. Y. Fire-proof compound	289,269	Nov. 27	1829		25	853
Hohl, Martin, Lebanon, Ind. Refrigerator and beer cooler	281,879	July 24	1947	532	24	358
Hoborst, Frederick, Brooklyn, N. Y. Awning	289,772	Dec. 4	494	137	25	972
Hoit, David. (See Scanlan, John, assignor.)						
Hoit, David, West Albany, assignor of one-half to C. R. Hicks, Troy, N. Y. Coal-car	272,550	Feb. 20	1211	339	23	667
Hoit, Charles W. (See Clement, Charles E., assignor.)						
Hoke, John I., South Bend, Ind. Sulky-plow	286,540	Oct. 9	948	255	25	183
Hoke, Walter S., assignor of one-half to C. S. Westcott, Philadelphia, Pa. Umbrella	276,407	Apr. 24	1977	547	23	1588
Hoke, Walter S., assignor of one-half to C. S. Westcott, Philadelphia, Pa. Catch for umbrella-handles	276,536	Apr. 24	2138	594	23	1616
Holben, Wayne, Allentown, Pa. Washing-machine	289,416	Dec. 4	52	15	25	896
Holbon, Robert, assignor of one-half to C. B. Greely, Alpena, Mich. Wiper for the commutators of dynamo-electric machines	287,678	Oct. 30	2417	652	25	470
Holbrook, Byron, assignor of two-thirds to C. W. and N. R. Allen, Jr., Kenosha, Wis. Preparing tan-bark	284,738	Sept. 11	716	200	24	1032
Holbrook, Charles A., New York, N. Y., assignor to E. Miller & Co., Meriden, Conn. Convertible lamp and gas fixture	286,007	Oct. 2	280	79	25	53
Holbrook, James A., and G. Montglas, Grenoble, France. Glove-blank	283,605	Aug. 21	1367	382	24	760
Holbrook, Walter A., Milwaukee, Wis. Fire-escape	289,101	Nov. 27	1642	455	25	817
Holbrook, Zephaniah S., Chicago, Ill. Carrying system	282,319	July 31	2509	689	24	457
Holbrook, Zephaniah S., Chicago, Ill. Automatic cash-carrier	282,320	July 31	2511	690	24	458
Holbrook, Zephaniah S., Chicago, Ill. Automatic cash-carrier	282,321	July 31	2516	690	24	459
Holbrook, Zephaniah S., Chicago, Ill. Carrying system	282,893	Aug. 7	500	140	24	589
Holcomb, Abel P., and A. Heine, Silver Creek, N. Y. Centrifugal flour-bolt	271,846	Feb. 6	315	87	23	496
Holcomb, Abel P., and A. Heine, Silver Creek, N. Y. Centrifugal flour-bolt	280,622	July 3	342	95	24	61
Holcomb, Abel P., and A. Heine, Silver Creek, N. Y. Centrifugal flour-bolt	285,620	Sept. 25	1784	507	24	1236
Holcombe, Alfred B., Lambertville, N. J. Wood-splitting machine	269,856	Jan. 2	44	14	23	11
Holcombe, Clifford A. (See Holcombe, William H. and C. A.)						
Holcombe, William H. and C. A., Beloit, Wis. Windmill	271,635	Feb. 6	64	18	23	451
Holcombe, William H. and C. A., Beloit, Wis. Pump	281,695	July 24	1707	464	24	315
Holcombe, William H. and C. A., Beloit, Wis. Geared windmill	283,109	Aug. 14	760	214	24	642
Holden, Ezra, Chicago, Ill. Toy	276,586	May 1	55	16	23	1637
Holden, George R. (See Warren, Edward K., assignor.)						
Holden, Henry H., assignor to W. Cooper and R. Stonehouse, Strathroy, Ontario, Canada. Power-motor	278,962	June 5	428	117	23	2196
Holden, Hiram, Jr., Spencer, Mass. Tension device for sewing-machines	277,281	May 8	956	257	23	1797

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Holden, James, Providence, R. I. Barrel-truck.....	253,888	Aug. 28	1714	483	24	834
Holden, Joel M. (See Burton and Holden.)						
Holden, Magdalene, Philadelphia, Pa. Flower-pot.....	289,102	Nov. 27	1644	455	25	617
Holden Manufacturing Company. (See Kipp, August E., assignor.)						
Holden, Orel J., Tarrytown, and L. Griswold, assignors, by mesne assignments, to New World Sewing Machine Company, New York, N. Y. Sewing-machine.....	272,050	Feb. 13	579	{ 156 157 }	23	552
Holden, Orel J., Tarrytown, and L. Griswold, assignors, by mesne assignments, to said Holden and A. H. Jocelyn, New York, N. Y. Tension device for sewing-machines.....	272,051	Feb. 13	582	157	23	553
Holden, Warren, assignor to Fowler Brothers, Providence, R. I. Bracelet.....	281,628	July 17	1612	441	24	294
Holden, William G., assignor of one-half to E. H. Wheeler, Corpus Christi, Tex. Device for attaching pumps to oil and other cans.....	279,165	June 12	702	191	23	2253
Holder, Mary G., New York, N. Y. Ointment.....	272,138	Feb. 13	694		23	572
Holeman, Adam, Broussou, Kans. Gate-latch.....	283,243	Aug. 14	924	257	24	671
Holiday, Henry M., Olivet, Mich. Thill-coupling.....	286,439	Oct. 9	829	225	25	161
Holland, Charles. (See Carley, Benjamin, assignor.)						
Holland, Charles, New York, N. Y. Hydrocarbon-furnace.....	275,382	Apr. 10	681	180	23	1351
Holland, Charles, New York, N. Y. Hydrocarbon-furnace.....	275,488	Apr. 10	819	222	23	1374
Holland, Charles, New York, N. Y. Hydrocarbon-furnace.....	275,489	Apr. 10	820	222	23	1374
Holland, Charles, New York, N. Y. Process of and furnace for burning hydrocarbon fluids.....	275,490	Apr. 10	822	223	23	1375
Holland, Frank, Manchester, Conn. Fountain-pen.....	276,692	May 1	203	52	23	1659
Holland, Harold, Lynn, Mass. Wheel-runner.....	272,691	Feb. 20	1395	391	23	699
Holland, Harold, Lynn, Mass. Hoeshoe.....	278,015	May 22	1838	501	23	1061
Holland, Isaac, St. Peters, Mo. Car-coupling.....	289,002	Nov. 27	1517	420	25	796
Holland, John, Limerick, Maine. Bed-blanket.....	271,461	Jan. 30	2039	587	23	408
Holland, John, Cincinnati, Ohio. Stylographic fountain-pen.....	275,912	Apr. 17	1350	374	23	1475
Holland, John, Cincinnati, Ohio. Pencil-case.....	279,388	June 12	983	273	23	2299
Holland, John, assignor to American Iridium Company, Cincinnati, Ohio. Alloying iridium.....	285,895	Oct. 2	149		25	29
Holland, John, assignor to American Iridium Company, Cincinnati, Ohio. Draw-plate.....	285,896	Oct. 2	150	42	25	29
Holland, Joseph J., Bryan, Tex. Combined corn and cotton-seed planter.....	274,195	Mar. 20	1218	335	23	1059
Holland, Timothy. (See Loftus, John, assignor.)						
Holland, Timothy, Troy, N. Y. Steam-boiler.....	278,963	June 5	429	117	23	2197
Holland, Timothy, Troy, N. Y. Valve.....	282,894	Aug. 7	503	141	24	589
Holland, Timothy, Troy, N. Y. Lubricator.....	290,685	Dec. 25	1668	460	25	1201
Holland, Virgil C. (See Sarlis and Holland.)						
Holland, Wiley S., Gatewood, Mo. Velocipede.....	285,035	Sept. 18	1091	304	24	1105
Hollander, Alva L., Somerville, Mass. Box for matches, &c.....	270,067	Jan. 16	1042	298	23	220
Hollar, William H., York, Pa. Burglar-proof safe.....	290,652	Dec. 11	844	240	25	1022
Hollenback, Wesley. (See Gray and Hollenback.)						
Hollenbeck, Westley, <i>et al.</i> (See Gray, Josiah, assignor.)						
Hollett, Ira W., Chicago, Ill. Paper-pail or box.....	279,244	June 12	784	216	23	2267
Holley, George G., assignor to Snell Manufacturing Company, Fiskdale, Mass. Wringer-plate for twisting augurs.....	276,043	Apr. 17	1514	{ 416 417 }	23	1501
Holley, Ralph F., assignor to W. Richmond, Lockport, N. Y. Wick-trimming shears.....	271,982	Feb. 6	469	132	23	525
Holliday, Thomas, Huddersfield, county of York, England. Production of azo colors on cotton fabrics.....	271,636	Feb. 6	66		23	451
Hollingshead, William B., New York, N. Y. Compound electric conductor.....	284,423	Sept. 4	324	90	24	958
Hollis, John W., Cincinnati, Ohio. Car-coupling.....	269,857	Jan. 2	45	14	23	11
Hollister, Albert G., Hartford, Conn. Pump.....	287,935	Nov. 6	183	52, 53	25	539
Hollister, James, St. Paul, Minn. Neck-yoke.....	269,858	Jan. 2	46	14	23	12
Hollister, James D., Savannah, Ga. Tail-light bracket for railway-trains.....	288,058	Nov. 6	335	94	25	564
Hollister, Justin, Seely, Kans. Fence.....	283,606	Aug. 21	1368	382	24	760
Holloway, Charles T., Baltimore, Md. Velocipede.....	274,196	Mar. 20	1219	335	23	1059
Holloway, Leroy F., and N. Griswold, Janesville, Wis. Cooking-stove.....	283,244	Aug. 14	924	{ 257 258 }	24	671
Holloway, Nathan. (See Link, Frederic W., assignor.)						
Holloway, Thomas G., Boston, Ga., assignor of one-half to A. G. Steele. Baling-press.....	285,621	Sept. 25	1786	508	24	1236
Hollowed, John, <i>et al.</i> (See Byrnes, Joseph, assignor.)						
Holly, Solomon T., Rockford, Ill. Hose-carriage.....	274,771	Mar. 27	1965	{ 546 547 }	23	1196
Holman, Calvin J., Chicago, Ill. Hand-truck.....	270,068	Jan. 2	282	83	23	57
Holman, Ezekiel, Sandy, Utah Ter. Combined roasting and smelting furnace.....	286,822	Oct. 16	1312	{ 357 358 }	25	253
Holman, Jerome B., <i>et al.</i> (See Schaeppi, Julius, assignor.)						
Holman, John W., <i>et al.</i> (See Rote, Charles V., assignor.)						
Holman, Thomas, Salem, Oreg. Screen-cleaning device.....	271,847	Feb. 6	318	87	23	497
Holman, William J., Fort Wayne, Ind., assignor of one-half to M. C. White, Minneapolis, Minn. Bridge.....	290,054	Dec. 11	846	{ 240 241 }	25	1043
Holmer, John B., Chicago, Ill. Cigar-holder.....	276,042	Apr. 17	1513	416	23	1501
Holmes, Booth & Haydens. (See Phillips, Herbert O., assignor.)						
Holmes, Charles P., Gouverneur, N. Y. Car-axle lubricator.....	273,991	Mar. 13	955	263	23	1005
Holmes, Charles P., Gouverneur, N. Y. Railway-car-axle lubricator.....	278,964	June 5	430	118	23	2197
Holmes & Co., M. M. (See Reeves, Charles W., assignor.)						
Holmes, Daniel B., <i>et al.</i> (See Spooner, Samuel P., assignor.)						
Holmes, Edward C., Newark, N. J. Catch for bag-frames.....	272,880	Feb. 27	1664	465	23	753
Holmes, Fred H., Hyde Park, Mass. Hydrocarbon apparatus for heating and lighting.....	269,760	June 19	1415	396	23	2379
Holmes, Frederick H., West Brompton, county of Middlesex, England. Siren for signaling.....	281,070	July 10	900	{ 250 251 252 }	24	166
Holmes, Isaac Q., Clarksville, Ark. Breech-loading fire-arm.....	273,684	Mar. 6	573	152	23	932
Holmes, Isaac Q., Clarksville, Ark. Nut-lock.....	284,013	Aug. 28	1893	530	24	866
Holmes, Isaac Q., Clarksville, Ark. Moth-catcher for bee-hives.....	284,014	Aug. 28	1894	531	24	866
Holmes, Isaac Q., Clarksville, Ark. Wrench.....	284,015	Aug. 28	1895	531	24	866
Holmes, James S. (See Liss and Mahar, assignors.)						
Holmes, Jason F. (See Wyatt and Holmes.)						
Holmes, Jesse, Stoughton, Mass. Crimping-machine.....	276,408	Apr. 24	1978	{ 547 548 }	23	1588
Holmes, John, Newark, N. J. Lamp-wick trimmer.....	278,965	June 5	431	118	23	2197
Holmes, John G. (See Haigh, Joseph P., assignor.)						
Holmes, Joseph A., Greenland, N. H. Elevator-bucket.....	290,053	Dec. 11	845	240	25	1042
Holmes, Joseph W., Batavia, N. Y. Solar theodolite.....	275,913	Apr. 17	1360	{ 374 375 }	23	1475
Holmes, Josephine M., Sioux City, Iowa. Sad-iron holder.....	289,536	Dec. 4	506	58	25	922
Holmes, Nelson, Ypsilanti, Mich. Washing-machine.....	285,411	Sept. 25	1535	433	24	1169



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Holmes, Robert. (See Rowe, Holmes, and Dawson.)						
Holmes, Thomas J., Boston, Mass. Manufacture of compound tubes	275,826	Apr. 17	1256	345	23	1456
Holmes, William C., assignor to himself and J. F. Nutting, Atlanta, Ga. Leveling-instrument.	284,424	Sept. 4	325	90	24	953
Holmgren, Julius H., assignor to himself and R. Bloss, Muskegon, Mich. Railway-track joint.	278,016	May 22	1839	501	23	1961
Holt, Gardner L., Springfield, Mass., assignor to W. H. Robertson, Brooklyn, N. Y. Watch-key or holding-tool	278,550	May 29	2532	691	23	2091
Holt, George H., West Chelmsford, Mass. Pump	279,949	June 26	1652	463	23	2427
Holt, John P., Cleveland, Ohio. Portable forge	280,824	July 10	605	169	24	113
Holt, Noah W., Buffalo, N. Y. Drive-chain	270,433	Jan. 9	740	217	23	154
Holt, Noah W., Buffalo, N. Y. Tightening device for belt-pulleys	273,081	Feb. 27	1888	530	23	792
Holt, Noah W., Buffalo, N. Y. Roller-mill	286,440	Oct. 9	829	225	25	161
Holt, Noah W., Buffalo, N. Y. Feed mechanism for roller-mills	288,808	Nov. 20	1282	351	25	745
Holt, Noah W., Buffalo, N. Y., assignor, by mesne assignments, to G. T. Smith Middlings Purifier Company, Jackson, Mich. Dust-collector	273,533	Mar. 6	374	99	23	898
Holt, Orrin S., Chippewa Falls, Wis. Car-truck	287,936	Nov. 6	184	53	25	539
Holt, Peter, Philadelphia, Pa. Cap for steam-pipe clothing	276,044	Apr. 17	1514	417	23	1501
Holt, Robert A. (See Gleason and Holt.)						
Holt, Theodore, Lexington, Tex. Plow-gage	285,264	Sept. 18	1356	382	24	1153
Holt, Thomas, Jr., assignor of one-half to J. Terhune, Midland Park, N. J. Truck	281,071	July 10	904	252	24	167
Holt, William, Chicago, Ill. Burner for vapor-stoves, &c.	283,395	Aug. 21	1121	317	24	715
Holtou, Merritt A., Fitchburg, Mass. Machine for forming blanks for shoe-tips	271,848	Feb. 6	318	88	23	497
Holtzclaw, John W. (See Harris, William W., assignor.)						
Holtzer, Charles W., Brookline, Mass. Fixture or bracket for electric lamps	282,521	Aug. 7	55	16	24	509
Holyoke Machine Company. (See Alden, Albert S., assignor.)						
Holyoke Water Power Company. (See Emerson, James, assignor.)						
Holzer, William, assignor, by mesne assignments, to Edison Lamp Company, Harrison, N. J. Manufacture of incandescing lamps	289,837	Dec. 11	584	162	25	995
Holzer, William, assignor, by mesne assignments, to Edison Lamp Company, Harrison, N. J. Manufacture of incandescing electric lamps	289,838	Dec. 11	585	163	25	996
Homan & Co. (See Vicken, George P., assignor.)						
Honigmann, Friedrich, Aachen, Germany. Air-compressing engine	288,435	Nov. 13	818	221	25	658
Honigmann, Moritz, Aix-la-Chapelle, Germany. Utilization of exhaust-steam	287,937	Nov. 6	186	53	25	540
Hooper, John H., Kentland, Ind. Cultivator	279,245	June 12	786	216	23	2267
Hood, Harrison P., Indianapolis, Ind. Handle attachment	275,914	Apr. 17	1362	375	23	1475
Hood, Harrison P., assignor to E. C. Atkins, Indianapolis, Ind. Saw-handle	284,739	Sept. 11	717	200	24	1032
Hood, Henry A. (See Gill, Thomas, assignor.)						
Hooker, George W. (See Weld, Calvin J., assignor.)						
Hooker, John D., San Francisco, Cal. Toy dart	282,638	Aug. 7	198	57	24	534
Hooker, Thomas, Syracuse, N. Y. Twist-drill	274,943	Apr. 3	77	21	23	1238
Hooker, William D., St. Louis, Mo. Packing for pistons and plungers	280,032	June 26	1765	496	23	2446
Hooker, William D., St. Louis, Mo. Steam-pump regulator	288,436	Nov. 13	820	222	25	658
Hooper, Charles J., Edinburg, Miss. Feed mechanism for cotton-seed mills	288,809	Nov. 20	1283	352	25	746
Hooper, Frank B. (See Ladd, Daniel E., assignor.)						
Hooper, Henry. (See Deegan, Matthew F., assignor.)						
Hooper, Henry O., Fresno, Cal. Hammer	271,709	Feb. 6	146	40	23	465
Hooper, Jethro M., Fort Smith, Ark. Key-board attachment for musical instruments	290,430	Dec. 18	1332	369	25	1136
Hooper, Lorenzo D., Coffeyville, Kans. Rotary steam-engine	287,379	Oct. 23	2022	550	25	386
Hooper, Will P. (See Marquart and Hooper.)						
Hoopes, David R., Oskaloosa, Iowa. Grinding-mill	281,072	July 10	906	253	24	167
Hoopes, William H., and G. Paist, Baltimore, Md. Contractible core or center	278,551	May 29	2533	691	23	2091
Hoosier Drill Company. (See Conner, Albert C., assignor.)						
Hoosier Drill Company. (See Westcott, John M., assignor.)						
Hoover, Abel, et al. (See Aldrich, Wales, assignor.)						
Hoover, Cornelius S., Lancaster, Pa. Millstone-dressing machine	271,849	Feb. 6	319	88	23	497
Hoover, Cornelius S., Lancaster, Pa. Millstone-dressing machine	278,335	May 29	2271	621	23	2045
Hoover, David W., Gas Point, Cal. Extension-ladder and truck	280,475	July 3	177	47	24	32
Hoover, John R., Elizabeth, N. J. Feed-regulator for hemp drawing and spinning machines	275,046	Apr. 3	215	58	23	1263
Hoover, Samuel, et al. (See Myers, John G. L., assignor.)						
Hoover, William L., and J. Nowcomb, Indianapolis, Ind. Fanning-machine	278,795	June 5	161	47	23	2150
Hope, Alexander C., Carterville, Ill. Elevator safety-catch	289,110	Aug. 14	761	214	24	642
Hope, Charles, assignor of one-half to W. Werts, Camden, N. J., and W. H. Mattson, Philadelphia, Pa. Machine for threading sheet-metal screws	270,314	Jan. 9	574	169	23	122
Hope, John, Providence, R. I. Engraving-machine	281,509	July 17	1464	402	24	270
Hope, John, Providence, R. I. Pantograph engraving-machine	281,510	July 17	1465	402	24	270
Hopedale Machine Company. (See Getchell, Seth S., assignor.)						
Hopedale Machine Company. (See Tarr, Gardiner L., assignor.)						
Hopf, George, Chicago, Ill. Vent for beer-barrels	281,694	July 24	1707	464	24	315
Hopkins, Alfred N., Birmingham, England. Japanning metal sheets or plates	278,707	June 5	40	12	23	2131
Hopkins, Alfred N., Birmingham, and G. Hatton, Hagley, England. Ornamenting surfaces of tin-plate and other sheet metal	286,823	Oct. 16	1313	425	25	253
Hopkins, Andrew J., Rochester, N. Y. Pump	274,446	Mar. 20	1554	426	23	1117
Hopkins, Cabel B., Payne's Depot, Ky. Automatic money-changer	288,942	Nov. 20	1441	397	25	775
Hopkins, David A., Park Ridge, N. J. Journal-bearing	286,927	Oct. 16	1443	396	25	275
Hopkins, David A., Park Ridge, N. J. Journal-bearing. (Reissue)	10,426	Dec. 18	1623	447	25	1187
Hopkins & Dickinson Manufacturing Company. (See Lincoln, Thomas, assignor.)						
Hopkins, Ervin, Jr., et al. (See Beck, Marshall, assignor.)						
Hopkins, George. (See Foakes, Edward, assignor.)						
Hopkins, George M., Brooklyn, assignor to Economic Motor Company, New York, N. Y. Gas-engine	284,555	Sept. 4	478	134	24	985
Hopkins, George M., Brooklyn, assignor to Economic Motor Company, New York, N. Y. Gas-engine	284,556	Sept. 4	481	135	24	986
Hopkins, George M., Brooklyn, assignor to Economic Motor Company, New York, N. Y. Gas-engine	284,557	Sept. 4	481	135	24	986
Hopkins, George M. and I. N., Brooklyn, assignors to Economic Motor Company, New York, N. Y. Gas-engine	284,851	Sept. 11	851	239	24	1055
Hopkins, Harvey L., Chicago, Ill. Harvester-cntter	273,082	Feb. 27	1889	531	23	792
Hopkins, Harvey L., Chicago, Ill. Harvester-cutter	273,083	Feb. 27	1891	531	23	792
Hopkins, Henry C., Covington, Ky. Clothes-wringer	270,800	Jan. 16	1204	348	23	251

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Hopkins, Henry C., Covington, Ky. Clothes-wringer.....	278,966	June 5	431	118	23	2197
Hopkins, Henry C., Covington, Ky. Mounting wheels on their shafts.....	282,322	July 31	2520	691	24	459
Hopkins, I. Newton. (See Hopkins, George M. and I. N.)						
Hopkins, Joseph W., New York, assignor to G. W. Garnar, Flushing, N. Y. Printing-press.....	271,333	Jan. 30	1865	541	23	376
Hopkins, Uri M., Lovett, Ind. Harrow.....	281,187	July 10	1050	290	24	193
Hopkins, Sylvanus C., Boston, Mass. Folding camp-chair.....	271,246	Jan. 30	1748	506	23	356
Hopkins, William, and C. Fockler, Dubuque, Iowa. Steam heating-boiler.....	272,692	Feb. 20	1395	392	23	699
Hopkins, William P., Lawrence, Mass., assignor to G. McKay, Newport, R. I., and J. W. Brooks, Cambridge, Mass., trustees. Nailing-machine.....	289,103	Nov. 27	1645	455	25	818
Hopkinson, John, Westminster Chambers, county of Middlesex, England. Apparatus for measuring and recording electric currents.....	277,731	May 15	1488	403 404 496 497	23	1894
Hopkinson, John, and A. Muirhead, Westminster, England. Dynamo-electric machine.....	280,039	June 26	1767	496 497	23	2446
Hopmann, Charles, <i>et al.</i> (See Ehrhardt, John, assignor.)						
Hopmann, Herman, <i>et al.</i> (See Ehrhardt, John, assignor.)						
Hoppe, Henry A., St. Louis, Mo. Fruit-jar cover.....	275,047	Apr. 3	216	58	23	1263
Hoppe, Louis, Princeton, Minn. Steam-boiler.....	287,832	Nov. 6	52	16	25	516
Hopper, John F. E. (See Larsen, George, assignor.)						
Hopper, Thomas C. and W. E., Philadelphia, Pa. Gas-governor.....	283,245	Aug. 14	926	258	24	672
Hopper, Walter E. (See Hopper, Thomas C. and W. E.)						
Hoppes, John J., Springfield, Ohio. Feed-water heater.....	273,084	Feb. 27	1893	531	23	792
Hoppin, Howard, and A. L. Brown, Providence, R. I. Book, album, &c.....	285,897	Oct. 2	151	42, 43	25	30
Hopping, Jacob O., Sagg, N. Y. Thill-coupling.....	278,138	May 22	1987	546	23	1987
Hopson, John M. (See Beardsley and Hopson.)						
Horack, Charles L., Brooklyn, N. Y. Automatic fire-extinguisher.....	270,801	Jan. 16	1204	348	23	251
Horack, Charles L., Brooklyn, N. Y. Automatic fire-extinguisher.....	270,952	Jan. 23	1394	402	23	289
Horack, Charles L., Brooklyn, N. Y. Automatic fire-extinguisher.....	272,693	Nov. 20	1397	392	23	699
Horack, Charles L., Brooklyn, N. Y. Automatic fire-extinguisher.....	288,059	Nov. 6	336	94	25	564
Horak, F. J. (See Bilan, Louis, assignor.)						
Hörcher, Johann S. G. F., Altona, Prussia, Germany. Carriage.....	282,081	July 31	2199	604	24	407
Hore, Charles E., Brooklyn, N. Y. Soap compound.....	275,212	Apr. 3	427		23	1329
Horlick, William, Racine, Wis. Granulated food for infants and process of preparing the same.....	278,967	June 5	432		23	2197
Hörmann, Arnold, Hoboken, N. J. Drawing-table.....	274,605	Mar. 27	1772	491 492	23	1162
Horn, Charles C., Waterbury, Conn. Machine for scalping ingots.....	284,302	Sept. 4	180	51	24	934
Horn, William J., Chicago, Ill. Engine-lubricator.....	290,055	Dec. 11	848	241	25	1043
Hornbeck, Cornelius F., Owego, N. Y. Wheel-harrow.....	272,254	Feb. 13	828	231	23	596
Hornbeck, Lorenzo D., assignor of one-half to J. S. Graham, Paxton, Ill. Neck-yoke.....	270,802	Jan. 16	1207	348	23	251
Hornberger, H. O. (See Sims, James C., assignor.)						
Hornberger, Jacob, New York, N. Y. Hand-mirror.....	286,699	Oct. 16	1162	312	25	226
Hornberger, Louis, assignor to E. Miller & Co., Meriden, Conn. Extension-chandelier.....	290,883	Dec. 25	1920	530	25	1246
Horne, Edward G., Calloway, Tex., assignor to Carver Gin and Machine Company, Memphis, Tenn. Cotton-gin hopper.....	272,694	Feb. 20	1399	392 393	23	700
Horne, George W., New York, N. Y. Safety-switch stand.....	290,194	Dec. 11	1006	283	25	1072
Horne, George W., assignor to E. Rochat, New York, N. Y. Feed-bag attachment.....	273,842	Mar. 13	780	211	23	976
Horne, William C., Aldermanbury, London, England. Manufacture of luminous paper, &c.....	290,772	Dec. 25	1766		25	1223
Horner, Albert N., Baltimore, Md. Stocking-supporter.....	272,695	Feb. 20	1400	393	23	700
Horner, Angel. (See Scharnweber, William, assignor.)						
Horner Brothers. (See Bairstow, William H., assignor.)						
Horner, John C., Leon, Iowa. Whiffletree-hook.....	272,255	Feb. 13	829	232	23	597
Horner, Malachi L., Auburn, N. J. Tooth for thrashing-machines.....	282,027	July 24	2125	582	24	387
Horner, William H., and F. Hyde, Baltimore, Md. Waterproofing fabrics.....	273,233	Feb. 27	2069		23	827
Hornung, Anton N., Chicago, Ill. Barber's chair.....	286,611	Oct. 16	1046	282	25	206
Horrall, William A., assignor of one-half to W. H. Farris, Washington, Ind. Cotton-planter.....	286,700	Oct. 16	1162	313	25	226
Horrocks, William, Ilion, N. Y. Cabinet for type-writers and sewing-machines.....	281,765	July 24	1802	492	24	332
Horsford, Eben N., Cambridge, Mass., and C. A. Catlin, Providence, R. I. Preparing alkalino bicarbonates.....	270,668	Jan. 16	1043		23	220
Horsman, Edward J. (See Crandall, William E., assignor.)						
Horton, Bertrand J., Pawtucket, R. I. Necktie-fastener.....	283,889	Aug. 28	1714	483	24	834
Horton, David K., Boston, Mass. Game-counter.....	280,375	July 3	43	12	24	10
Horton, Edward E., Toronto, Ontario, Canada. Type-writer.....	285,265	Sept. 18	1357	383	24	1153
Horton, Edward E., Toronto, Ontario, Canada. Type-writer.....	286,624	Oct. 16	1314	358	25	233
Horton, Everett, New Haven, Conn. Machine for ornamenting metal surfaces.....	278,139	May 22	1987	546	23	1987
Horton, Everett, New Haven, Conn. Ornamenting metal surfaces.....	278,532	May 29	2534	691	23	2091
Horton, George W., Cincinnati, assignor of one-half to L. Emerson, College Hill, Ohio. Automatic fire-extinguisher.....	280,376	July 3	44	12	24	10
Horton, James A., Reading, Mass. Friction-movement.....	277,282	May 8	957	257	23	1797
Horton, Numan N., Kansas City, Mo. Sash-holder.....	276,409	Apr. 24	1980	548	23	1589
Hortch, William J. (See Dempster and Horton.)						
Horton, William J. (See Risse and Horton.)						
Hosack, John, Raymond's, Ohio. Harness-buckle.....	277,901	May 22	1698	463	23	1938
Hosch, Ferdinand, Brooklyn, N. Y. Machine for cleaning fur robes.....	286,928	Oct. 16	1444	397 53 54 55	25	275
Hösch, Friedrich C., Nuremberg, Bavaria, Germany. Photo-mechanical printing in colors.....	287,938	Nov. 6	187		25	540
Hosea, Lewis M. (See Breen, Peter, assignor.)						
Hosea, Lewis M., <i>et al.</i> (See Gearing, Charles, assignor.)						
Hosea, Lewis M. (See Kearney, Frank, assignor.)						
Hose, Robert H., Cincinnati, Ohio. Hand-net frame.....	273,279	Mar. 6	40	13	23	841
Hosford, Seymour A., assignor to J. C. Rae, Elmira, N. Y. Seal-lock.....	269,935	Jan. 2	131	39	23	27
Hosie, James P. (See Hosie, John H. and J. P.)						
Hosie, John H. and J. P., Scranton, Pa. Coal-crushing roller.....	279,761	June 19	1416	396	23	2380
Hoskins, Clannar P. (See Pearson, Robert P., assignor.)						
Hoskins, Joshua A., Janesville, Wis. Potato-planting attachment for corn-planners.....	290,233	Dec. 18	1066	298	25	1091
Hoskins, Leander M., Madison, Wis. Windmill.....	274,329	Mar. 20	1398	383	23	1090
Hosmer, Giles S., Mendville, Pa. Fence.....	283,486	Aug. 21	1237	347	24	735
Hosner, Riley J., assignor of one-half to E. Mack, Romeo, Mich. Stamp-puller.....	285,898	Oct. 2	152	43	25	30
Hotchkiss, Almerino, St. Louis, Mo. Device for cresting fences.....	282,895	Aug. 7	504	141	24	589
Hotchkiss, Benjamin B., Paris, France. Wire-wound gun.....	269,936	Jan. 2	133	40	23	28
Hotchkiss, Benjamin B., Paris, France. Breech-loading cannon.....	270,589	Jan. 16	938	271 272	23	201
Hotchkiss, Benjamin B., Paris, France. Torpedo-boat.....	278,708	June 5	41	12, 13	23	2132



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Hotchkiss, Benjamin B., New York, N. Y. Breech-loading cannon .....	270,590	Jan. 16	942	{ 272 273	23	202
Hotchkiss, Benjamin B., New York, N. Y. Breech-loading cannon .....	270,953	Jan. 23	1397	403	23	290
Hotchkiss, Benjamin B., New York, N. Y. Machine-gun. (Reissue) .....	10,260	Feb. 6	524	141	23	531
Hotchkiss, Benjamin B., New York, N. Y. Shell .....	272,052	Feb. 13	583	157	23	553
Hotchkiss, Clark B. (See Ramsay, Charles W., assignor.) .....						
Hotchkiss, James F., Plainfield, N. J. Boiler-cleaner .....	276,410	Apr. 24	1981	548	23	1589
Hotchkiss, James F., Plainfield, N. J. Boiler-cleaner .....	276,411	Apr. 24	1982	549	23	1589
Hotchkiss, Leman, <i>et al.</i> (See Robinson, Charles K., assignor.) .....						
Hotchkiss, Nellie L., <i>et al.</i> (See Robinson, Charles K., assignor.) .....						
Hotchkiss, Timothy D. Higganum, Conn. Cutting-pliers .....	280,825	July 10	606	169	24	113
Hotchkiss, Walter R., <i>et al.</i> (See Paul, George D., assignor.) .....						
Hottinger, John, St. Louis, Mo. Machine for describing or cutting ellipses .....	288,810	Nov. 20	1284	352	25	746
Houchin, Thomas W., New York, N. Y. Gas-lighting torch .....	273,085	Feb. 27	1894	{ 531 532	23	793
Houchin, Thomas W., New York, N. Y. Folding pocket cook-stove .....	274,330	Mar. 20	1399	{ 353 354	23	1090
Houchin, Thomas W., New York, N. Y. Telescopic safety-torch for lighting gas .....	282,522	Aug. 7	58	17	24	510
Houck, Austin S. (See Houck, Greuclee, and Houck.) .....						
Houck, Edwin, A. M. Greenlee, and A. S. Houck, Bedford, Iowa. Check-row planter .....	273,534	Mar. 6	377	100	23	899
Houck, Martin M. (See Lee, Charles E., assignor.) .....						
Hough, James M., Toledo, Ohio. Combined window-cornice and curtain-pole .....	282,323	July 31	2520	691	24	459
Hough, John T. (See Scanlan and Hough.) .....						
Houghtaling, Charles S., <i>et al.</i> (See Thomas, John W., assignor.) .....						
Houghtaling, Llewellyn A., Elmira, N. Y. Car-coupling .....	271,850	Feb. 6	321	89	23	497
Houghton, Alfred A., Buffalo, N. Y. Weighing-scale .....	270,221	Jan. 9	471	138	23	103
Houghton, Alfred A., Buffalo, N. Y. Counter-scale .....	276,180	Apr. 24	1684	465	23	1539
Houghton, Alfred A., Buffalo, N. Y. Scale .....	280,377	July 3	46	12	24	10
Houghton, Charles, Boston, Mass. Apparatus for filtering water .....	272,881	Feb. 27	1665	465	23	753
Houghton, Darius, Skowhegan, Me. Screw-cutting tool .....	272,139	Feb. 13	694	189	23	572
Houghton, Edward J. (See Strondley and Houghton.) .....						
Houghton, George. (See Fuller, Eben E., assignor.) .....						
Houghton, Henry H. (See True and Houghton.) .....						
Houghton, Samuel H., Harvard, Mass. Sheave for sliding doors .....	288,338	Nov. 13	687	189	25	635
Houlehan, James, assignor of one-half to C. W. Higgins, Toledo, Ohio. Wrench .....	278,553	May 29	2535	691	23	2092
Houlehan, James, assignor to G. G. Hadley and G. P. Merrill, Toledo, Ohio. Wrench .....	289,347	Nov. 27	1936	537	25	873
Hoult, David H., Lansdale, Pa. Safety railway-switch .....	280,476	July 3	178	47	24	32
Houman, Marinus, Paterson, N. J. Clothes-line support .....	286,441	Oct. 9	831	225	25	161
Houpe, Pleasant R., Oak Forest, N. C. Shingle-machine .....	276,412	Apr. 24	1984	550	23	1589
Haupt, John, Springtown, Pa. Compound feed-pump for steam-boilers .....	285,622	Sept. 25	1787	508	24	1236
Hause, Alfred B., assignor of two-thirds to J. B. Callen and H. E. McFarland, Junction City, Kans. Car-coupling .....	284,205	Sept. 4	62	17	24	915
Hause, George A. (See Morris, George M., assignor.) .....						
Hause, Henry A., Bridgeport, Conn., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machine .....	283,890	Aug. 28	1715	{ 483 484	24	834
Hause, James A., Bridgeport, Conn. Corset .....	273,280	Mar. 6	41	13	23	841
Hause, James A., Bridgeport, Conn. Apparatus for forming and shaping corsets .....	288,637	Nov. 20	1068	294	25	709
Hause, Joseph L., Hutchinson, Minn. Ditching-machine .....	289,839	Dec. 11	585	163	25	996
Honsel, George, <i>et al.</i> (See Ainsworth, Robert H., assignor.) .....						
Honsel, Joseph R., Watons town, assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dentist's flask .....	283,487	Aug. 21	1237	347	24	735
Houser, George H. (See Voorhis and Houser.) .....						
Houssart, Charles V. (See Cunningham, Houssart, and May.) .....						
Houston, Adelbert D., <i>et al.</i> (See Blair, James C., assignor.) .....						
Houston, Edwin J., Philadelphia, Pa., assignor to American Electric Company, New Britain, Conn. Dynamo-electric machine .....	272,256	Feb. 13	829	232	23	597
Houston, Edwin J., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, New Britain, Conn. Dynamo electric machine .....	283,343	Aug. 14	1051	{ 295 296	24	697
Houston, Edwin J., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, New Britain, Conn. Dynamo-electric machine .....	286,612	Oct. 16	1047	{ 282 283	25	206
Houston, James A., Boston, Mass. Store .....	276,587	May 1	56	16	23	1637
Houston, John, Brooklyn, N. Y. Sand-core for casting .....	283,344	Aug. 14	1053	296	24	697
Hovey, Charles F., assignor to Gilbert & Barker Manufacturing Company, Springfield, Mass. Apparatus for reducing the density of illuminating-gases .....	273,843	Mar. 13	781	212	23	976
Hovey, F. H. (See Blackburn, Frederick, assignor.) .....						
Hovey, Henry. (See Dow, Christopher C., assignor.) .....						
How, Edward, Erin, Ontario, Canada. Double-tree .....	285,206	Sept. 18	1378	383	24	1153
How, Woodbury S., Philadelphia, Pa. Insulation of electrical conductors .....	285,267	Sept. 18	1359	383	24	1153
How, Woodbury S., Philadelphia, Pa. Artificial tooth-crown .....	288,177	Nov. 6	476	131	25	590
How, Woodbury S., Philadelphia, Pa. Combined rasp and saw .....	289,104	Nov. 27	1646	456	25	818
How, Woodbury S., Cincinnati, Ohio. Mechanical movement .....	275,657	Apr. 10	1035	280	23	1411
How, Woodbury S., Cincinnati, Ohio, assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Artificial tooth .....	275,491	Apr. 10	823	223	23	1375
How, Woodbury S., Cincinnati, Ohio, assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Artificial tooth .....	276,245	Apr. 24	1763	491	23	1553
How, Woodbury S., Cincinnati, Ohio, assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Artificial tooth-crown .....	282,639	Aug. 7	198	57	24	534
Howard, Abel T. (See Sickles, Gerard, Jr., assignor.) .....						
Howard, Albion P., assignor of one-half to T. D. Murphy, Brooklyn, N. Y. Apparatus for heating the air in heat-flues of buildings .....	286,134	Oct. 2	434	118	25	80
Howard, Charles. (See Chandler and Williams, assignors.) .....						
Howard, Charles A., Pontiac, Mich. Bolster-spring for vehicles .....	282,987	Aug. 14	603	170	24	615
Howard, Charles P. (See Howard, James L. and C. P.) .....						
Howard & Co., Charles. (See Mallett, Francis W., assignor.) .....						
Howard & Co., James L. (See Howard, James L. and C. P., assignors.) .....						
Howard, Davis W., Boston, Mass. Cloak .....	272,440	Feb. 20	1077	303	23	643
Howard, Edward, Gasport, N. Y. Treating tobacco .....	273,362	Mar. 6	162	45	23	862
Howard, Frank A. (See Wellman, Willard F., assignor.) .....						
Howard, Fred. A., South Easton, Mass. Handle for carboys and other vessels .....	283,785	Aug. 28	1599	452	24	815
Howard, Harlan S., Charles City, Iowa. Harrow .....	273,535	Mar. 6	378	100	23	899
Howard, Hiram M. (See Potter, Samuel A., assignor.) .....						
Howard, Horace B., Belvidere, Ill. Spring bed-bottom .....	274,331	Mar. 20	1400	384	23	1090
Howard, Horatio P. (See O'Brien, Simon, assignor.) .....						
Howard, James, Philadelphia, Pa. Composition for preserving food .....	276,246	Apr. 24	1764	.....	23	1553

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Howard, James, and E. T. Bousfield, Bedford, England. Grain-binding machine .....	274,772	Mar. 27	1967	{ 547 548 }	23	1197
Howard, James L. and C. P., Hartford, Conn. Water-closet .....	284,016	Aug. 28	1896	531	24	866
Howard, James L. and C. P., assignors to J. L. Howard & Co., Hartford, Conn. Lamp for railway-cars and other purposes .....	271,462	Jan. 30	2040	587	23	408
Howard, Lyman D., and A. Chance, Philadelphia, Pa., assignors to American Lubricating Company of New Jersey. Car-axle lubricator .....	290,987	Dec. 25	2068	569	25	1270
Howard, Samuel F., trustee. (See Humphrey, Daniel W. G., assignor.) .....						
Howard, Stephen C., New York, N. Y. Sleeve-button .....	273,844	Mar. 13	782	212	23	976
Howard, Stephen M., Eatonton, Ga. Animal-poke .....	285,268	Sept. 18	1360	383	24	1153
Howard, William C. (See Wales, Sigourney, assignor.) .....						
Howard, William H., <i>et al.</i> (See Paitillo, Robert M., assignor.) .....						
Howarth, Daniel. (See Miller and Howarth.) .....						
Howden, James, Glasgow, county of Lanark, Scotland. Air-supplying device for steam-boiler furnaces .....	288,437	Nov. 13	821	223	25	659
Howdon, Robert J., assignor of one-half to Cincinnati Coffin Company, Cincinnati, Ohio. Soft-metal-casting apparatus .....	286,825	Oct. 16	1316	359	25	254
Howe, Albert D., Goshocton, Ohio, assignor of one-half to J. H. Askrens. Axle-lubricator .....	280,826	July 10	607	169	24	113
Howe, C. J. (See Shepherd, James R., assignor.) .....						
Howe & Co., Elbridge. (See Kimball, William B., assignor.) .....						
Howe, Edwin J., Newark, N. J. Fire-escape .....	275,658	Apr. 10	1037	280	23	1411
Howe, Edwin J., Newark, N. J. Combined water filter and cooler .....	289,263	Nov. 27	1830	505	25	853
Howe, Eugene L., assignor to Ewart Manufacturing Company, Chicago, Ill. Drive-chain .....	273,845	Mar. 13	783	212	23	976
Howe, George A., Boston, Mass. Drawers .....	277,283	May 8	958	257	23	1798
Howe, George H., Hoosic Falls, N. Y. Apparatus for adjusting harvester-reels .....	288,811	Nov. 20	1285	352	25	746
Howe, Hezekiah, Wellsville, N. Y. Heating apparatus .....	285,485	Sept. 25	1620	{ 454 455 }	24	1204
Howe, Jesse A., assignor of one-third to J. P. Lawrence, Norwalk, Ohio. Post-office box .....	273,992	Mar. 13	927	264	23	1006
Howe, John. (See Brissett and Howe.) .....						
Howe, John P., Cherokee, Iowa. Combined cultivator and harrow .....	281,221	July 10	1095	303	24	201
Howe Machine Company. (See Leavitt, Rufus, assignor.) .....						
Howe, Martin V. B., Erving, Mass. Chair-seat .....	275,383	Apr. 10	682	181	23	1351
Howe, Martin V. B., Erving, Mass. Office-stool .....	275,384	Apr. 10	683	181	23	1351
Howe, Martin V. B., Erving, Mass. Machine for sandpapering chair-seats .....	275,385	Apr. 10	684	181	23	1351
Howe, Martin V. B., Erving, Mass. Chair-seat .....	290,884	Dec. 25	1921	530	25	1246
Howe, Patrick, Boston, Mass. Cloth-cutting machine .....	280,827	July 10	607	170	24	114
Howe, Peter R., Fortsville, assignor of one-half to C. M. Mott, Glens Falls, N. Y. Auxiliary rifle-barrel and extractor therefor .....	282,194	July 31	2362	650	24	431
Howe, Solon G., assignor to G. L. Carrington and C. F. Elliot, Detroit, Mich. Mallet .....	276,247	Apr. 24	1765	491	23	1553
Howe, Thomas B., Scranton, Pa. Car-coupling .....	273,736	Mar. 13	641	171	23	952
Howe, Thomas B., Scranton, Pa. Car-stop .....	274,197	Mar. 20	1220	336	23	1059
Howe, Warren B., Chicago, Ill. Machine for forming wrappers for packages of small merchandise .....	270,669	Jan. 16	1044	299	23	220
Howe, William F., assignor to A. J. Reynolds, Chicago, Ill. Apparatus for malting .....	272,257	Feb. 13	833	{ 232 233 }	23	597
Howie, George B., Chicago, Ill. Horseshoe .....	287,833	Nov. 6	53	16	25	517
Howell, Martin A., Jr., Chicago, Ill. Manufacture of files .....	273,536	Mar. 6	378		23	899
Howell, Martin A., Jr., Chicago, Ill. File .....	273,537	Mar. 6	380	101	23	899
Howell, Martin A., Jr., Chicago, Ill. Flask for carburizing files or other cutting-tools .....	283,396	Aug. 21	1123	317	24	715
Howell, Stoddart, New Orleans, La. Constructing levees and embankments .....	277,732	May 15	1491	404	23	1894
Howell, William G., Philadelphia, Pa. Nail .....	271,983	Feb. 6	490	132	23	525
Howell, William G., assignor of one-half to W. Gerhard, Philadelphia, Pa. Pile of iron and steel .....	271,637	Feb. 6	66	18	23	452
Howell, William G., assignor to W. Gerhard, Philadelphia, Pa. Iron and steel fagot .....	276,139	Apr. 17	1634	450	23	1522
Howell, William G., assignor of one-half to W. Gerhard, Philadelphia, Pa. Pile of combined iron and steel .....	281,366	July 17	1285	356	24	239
Howell, William H. (See Hyam, Benjamin D., assignor.) .....						
Howell, William H., Thorold, Ontario, Canada. Pulp-grinder .....	272,258	Feb. 13	836	233	23	597
Howells, William C., Jefferson, Ohio. Fruit-gatherer .....	278,017	May 22	1840	501	23	1961
Hoces, Babcock & Ewell. (See Martin, Joseph B., assignor.) .....						
Hoces, John, Worcester, Mass. Filter .....	276,820	May 1	368	98, 99	23	1691
Hoces, John, Worcester, Mass. Filter .....	280,828	July 10	610	{ 170 171 }	24	114
Hoces, John, Worcester, Mass. Stop-cock .....	280,829	July 10	613	171	24	114
Howland & Co. (See Young, Cornelius, assignor.) .....						
Howland, Edmund S., Batavia, Ill. Metallic grinding-ring .....	286,613	Oct. 16	1049	283	25	207
Howland, Edward D., Farm Ridge, Ill. Tile and drain cutter .....	286,826	Oct. 16	1317	359	25	254
Howland, Edwin P., Washington, D. C. Inhaling air-chamber for dental and surgical operations, &c .....	280,040	June 26	1769	497	23	2447
Howland, Frederick L., <i>et al.</i> (See Howland, George H., assignor.) .....						
Howland, Frederick L., assignor of one-half to J. H. Abbott, Blue Earth City, Minn. Sorghum evaporator and rotary skimmer .....	270,545	Jan. 9	883	256	23	182
Howland, George H., assignor of two-thirds to F. L. Howland and P. B. Davy, Blue Earth City, Minn. Wheel-mounted manure-fork, &c .....	285,486	Sept. 25	1692	455	24	1205
Howland, Mark, Waterbury, Conn. Snow-shovel .....	288,812	Nov. 20	1287	353	25	746
Howland, Ray, Brooklyn, N. Y. Fire-escape .....	272,259	Feb. 13	837	233	23	598
Howland, Samuel D., <i>et al.</i> (See Hayes, William, Jr., assignor.) .....						
Howland, William H., San Francisco, Cal. Machine for grinding and pulverizing ores .....	281,511	July 17	1467	403	24	271
Howlett, Frank C., <i>et al.</i> (See Fitch, William E., assignor.) .....						
Howley, Thomas F. (See Phillips, John, assignor.) .....						
Howling, Richard M., Ballarat, Victoria. Spark-arrester .....	281,766	July 24	1803	492	24	333
Howse, Henry L., San Francisco, Cal. Cooking apparatus .....	271,463	Jan. 30	2041	587	23	408
Howser, Jonathan N., Sidney, Ill. Ear-corn cutter .....	277,284	May 8	959	258	23	1798
Howson, Henry, Philadelphia, Pa. Button-fastener .....	286,929	Oct. 16	1445	397	25	275
Hoxsio, Ezra. (See Hoxsio, George L. and E.) .....						
Hoxsio, George L. and E., Holloway, Mich. Valve-gear for steam-engines .....	273,846	Mar. 13	784	213	23	977
Hoxie, Elias, Red Creek, N. Y. Dash-board .....	280,378	July 3	46	13	24	10
Hoyda, Anton. (See Ekl, Skala, Hoyda, and Cizek.) .....						
Hoye, Stevie M., assignor of one-half to J. P. Lein, Birmingham, Conn. Machine for cutting shoe-soles .....	282,523	Aug. 7	59	17	24	510
Hoyer, Gustav, Schönebeck-on-the-Elbe, Prussia, Germany. Machine for cutting fabrics in measured lengths .....	280,178	June 26	1914	538	23	2473
Hoyt, Frederick J., New York, N. Y. Ore-furnace .....	272,929	Feb. 27	1749	489	23	767



*Alphabetical list of patentees—Continued.*

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Hoyt, Henry I. (See Boynton, Almanzor W., assignor.)						
Hoyt, Isaac N., Augusta, Wis. Car-coupling	281,271	July 17	1165	322	24	219
Hoyt, Lewis S., Stamford, Conn., assignor of one-half to J. M. Culver, North Abington, Mass. Stove-leg	278,433	May 29	2391	652	23	2066
Hoyt, Lewis S., assignor to himself and C. A. Shaw, Boston, Mass. Bottle-stopper	285,132	Sept. 18	1203	338	24	1124
Hoyt, Lucius H., Danbury, Conn. Apparatus for shaping hats	277,035	May 8	658	172	23	1745
Hoyt, Lucius P., Aurora, Ill. Endless-chain bed for wood-working machines	275,213	Apr. 3	427	117	23	1299
Hoyt, William E., Bellaire, Ohio. Warehouse-truck	286,303	Oct. 9	664	177	25	131
Hubbard, Alva. (See Hutchins, William H., assignor.)						
Hubbard, Frederick H., Brooklyn, N. Y. Apparatus for eradicating sewer-gas and destroying germs	274,332	Mar. 20	1402	385	23	1090
Hubbard, Frederick H., assignor to himself and H. F. Beebe, Brooklyn, N. Y. Disinfecting apparatus	282,195	July 31	2363	650	24	431
Hubbard, George K., La Grange, Ind. Bee-hive	270,803	Jan. 16	1208	348 349	23	252
Hubbard, George M., assignor to O. B. North & Co., New Haven, Conn. Breast-strap hook	271,851	Feb. 6	323	89	23	498
Hubbard, George M., assignor to O. B. North & Co., New Haven, Conn. Gag-runner	278,554	May 29	2535	692	23	2092
Hubbard, George W., Windsor, Vt. Nippers	287,437	Oct. 30	2097	570	25	407
Hubbard, John, Lima, Ohio. Glove-fastener	274,606	Mar. 27	1775	493	23	1162
Hubbard, Moses G., Norristown, Pa. Gleaner and binder	281,367	July 17	1285	356	24	239
Hubbard, Richard W. and W., Ashtabula, Ohio. Vehicle-axle	287,438	Oct. 30	2098	570	25	407
Hubbard, Wales, Wiscasset, Me. Paper-file holder	272,260	Feb. 13	838	234	23	598
Hubbard, Wales, Wiscasset, Me., assignor of one-fourth to J. H. May, Washington, D. C. Railway-car	282,324	July 31	2522	691 692	24	460
Hubbard, Walter E., New York, N. Y. Shirt	272,696	Feb. 20	1401	393	23	700
Hubbard, William. (See Hubbard, Richard W. and W.)						
Hubbard, William. (See Rosebrugh, Abner M., assignor.)						
Hubbell, Newton S., Mechanicsville, Iowa. Speculum and dilator	281,880	July 24	1948	532	24	358
Hubbell, Saunders, Jr., Mount Vernon, Ohio. Bolt	274,121	Mar. 20	1131	311	23	1043
Hubber, James W., San Francisco, Cal. Feed-water heater and purifier	277,285	May 8	960	258	23	1798
Hubel, Fred. A. (See Taylor, Harrison H., assignor.)						
Hubel, Fred. A., Detroit, Mich. Capsule-machine	290,583	Dec. 18	1534	422	25	1172
Hubel, Frederick A. (See Purdie, Charles F., assignor.)						
Hubel, Frederick A., and H. H. Taylor, Detroit, Mich., assignors to said Hubel. Capsule-machine. (Reissue)	10,316	Apr. 17	1645	453	23	1524
Huber, Berthold, Taunton, Mass. Printing-press	270,670	Jan. 16	1046	299	23	220
Huber, Berthold, Taunton, Mass. Printing-press	285,570	Sept. 25	1953	552 553	24	1264
Huber, Edward. (See Barnhart and Huber.)						
Huber, Edward, Marion, Ohio. Traction-engine	271,464	Jan. 30	2043	588	23	408
Huber, Edward, Marion, Ohio. Road-scraper	283,607	Aug. 21	1369	383	24	760
Huber, Edward, and F. Strobel, Marion, Ohio. Pitman	286,008	Oct. 2	281	79	25	53
Huber, Edward, and F. Strobel, Marion, Ohio. Straw-carrier for thrashing-machines	286,930	Oct. 16	1446	397	25	275
Huber, Emil. (See Gysin and Huber.)						
Huber, Louis C., Huber, Ky. Car-signal	280,179	June 26	1916	538	23	2474
Huber, Thomas, et al. (See Lippy, David, assignor.)						
Huber, William, et al. (See Lippy, David, assignor.)						
Hubert, Gustav, Grand Haven, Mich. Whiffletree and holdback attachment	282,325	July 31	2523	692	24	460
Hubert, H. Gengembre. (See Young and Hubert.)						
Hubert, Joseph, San Francisco, Cal. Dry ore concentrator	276,181	Apr. 24	1685	466	23	1539
Hubert, Philip G. (See Hall and Hubert.)						
Hubert, Philipp G., New York, N. Y. Fire-proof building	283,345	Aug. 14	1054	296	24	697
Huck, Charles, New Orleans, La. Telegraph and telephone cable	278,968	June 5	433	118	23	2197
Huck, Charles, New Orleans, La. Telephone and telegraph cable	284,425	Sept. 4	326	91	24	958
Huck, Charles, New Orleans, La. Telephone and telegraph cable	284,426	Sept. 4	327	91	24	958
Huckins, Irving W., assignor to J. Smith Woolen Machinery Company, Philadelphia, Pa. Mechanical movement device	277,733	May 15	1492	405	23	1894
Huddleston, Ivison H., New Berne, N. C. Composition of matter for greasing plug-to-bacco molds or shapes	281,997	July 24	2085	.....	24	382
Hudelson, David A., Dunreith, Ind. Cutter and fender attachment for plows	274,333	Mar. 20	1403	385	23	1090
Hudson, Arthur, Newton, Mass. Antimony-furnace	286,200	Oct. 9	515	142	25	105
Hudson, C. Columbus, Bridgeport, Conn. Vialing essential oils	272,960	Feb. 27	1750	489	23	767
Hudson, C. Columbus, Bridgeport, Conn. Trunk	272,961	Feb. 27	1751	489	23	767
Hudson, Harry A., Delawanna, N. J., assignor of one-half to J. H. Thorp, Baltimore, Md. Rein-holder	277,734	May 15	1493	405	23	1895
Hudson, John. (See Klugh and Hudson.)						
Hudson, John, Detroit, Mich. Hame-fastener	271,247	Jan. 30	1749	506	23	356
Hudson, John, Detroit, Mich. Line-loop	289,264	Nov. 27	1831	505	25	853
Hudson, John F., Brooklyn, N. Y. Fruit-cleaner	281,512	July 17	1468	403	24	271
Hudson, John W., assignor of one-half to H. W. Norton, Wellington, Ill. Vise	288,438	Nov. 13	823	223	25	659
Hudson, Robert, Gildersome, county of York, England. Dumping-wagon	288,813	Nov. 20	1288	353	25	746
Hudson, Samuel, Leicester, county of Leicester, England. Machine for blocking the quarters of boots	290,234	Dec. 18	1067	299	25	1091
Hudson, Samuel W., Hndsondale, Pa. Lifting-tongs	270,069	Jan. 2	283	84	23	58
Hudson, Samuel W., Hndsondale, Pa. Instrument for tamping the beds of railway-ties	273,363	Mar. 6	163	46	23	862
Hudson, Samuel W., Hndsondale, Pa. Apparatus for transmitting power	278,018	May 22	1840	502	23	1961
Hudson, Samuel W., Hndsondale, Pa. Water-elevator	278,796	June 5	162	47, 48	23	2150
Huebner, Friedrich, Milwaukee, Wis. Weighing-scale	276,693	May 1	204	52	23	1659
Hufeland, Philip, assignor to P. Wiederer, New York, N. Y. Hand-mirror	270,190	Jan. 2	426	123	23	87
Hufeland, Philip, assignor to P. Wiederer, New York, N. Y. Mirror and picture support	274,773	Mar. 27	1968	548	23	1197
Hufeland, Philip, assignor to P. Wiederer, New York, N. Y. Mirror and picture support	274,774	Mar. 27	1969	548	23	1197
Huff, Orison, Goodwin's Mills, Me. Rug-making machine	272,697	Feb. 20	1402	393 394 604 605	23	700
Huff, Peter, New York, N. Y. Platform-wagon	287,541	Oct. 30	2225	.....	25	433
Huff, William A. (See Battin, Joseph M., Jr., assignor.)						
Huffer, John H., Jacksonville, Oreg. Apparatus for removing sand-bars	285,487	Sept. 25	1623	455	24	1205
Huffer, John H., assignor of one-fourth to C. C. Beckman, Jacksonville, Oreg. Operating pumps in deep wells and mines	270,671	Jan. 16	1048	300	23	220
Huffer, John H., assignor of one-fourth to C. C. Beckman, Jacksonville, Oreg. Pumping apparatus for deep wells and mines	278,019	May 22	1841	502	23	1962
Huffman, William, Salt City, Kans. Veterinary medicine	279,166	June 12	703	.....	23	2253
Huffsteter, Christopher, Benton Harbor, Mich. Spring-vehicle	284,206	Sept. 4	63	17	24	915
Hufnagel, Harry, Brooklyn, N. Y. Grape-vine hair	279,389	June 12	984	273	23	2239

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Heger, William, Newark, N. J. File	274,775	Mar. 27	1970	548	23	1197
Huger, William, Newark, N. J. Button	280,623	July 3	344	95	24	61
Hughen, John H., Athens, Ga. Nail	269,859	Jan. 2	47	15	23	12
Hughes, Andrew S., Jackson, Iowa. Combined road-scraper, cart, and dump	279,093	June 5	593	161 162	23	2224
Hughes, Bennington R., assignor of one-half to T. Bradfield, Philadelphia, Pa. Trace-holder	286,701	Oct. 16	1164	313	25	226
Hughes, Charles T., Menlo Park, N. J. Electrical soldering-iron	287,380	Oct. 23	2023	550	25	386
Hughes, Cornelia B. (See Hughes, William W., assignor.)						
Hughes, Gibbard R., and T. Carwardine, Hampstead, county of Middlesex, assignor to Grapho Pen Manufacturing Company, (limited,) London, England. Apparatus for supply of ink to pens	281,998	July 24	2086	572	24	382
Hughes, Henry A., Camden, N. J., assignor of two-thirds to J. P. Scott and G. C. Potts, Philadelphia, Pa. Defecating and clarifying saccharine liquors	281,188	July 10	1051	.....	24	193
Hughes, Henry A., Camden, N. J., assignor of two-thirds to J. P. Scott and G. C. Potts, Philadelphia, Pa. Apparatus for preparing sulphureted cream of lime	290,642	Dec. 18	1609	442	25	1184
Hughes, Hugh H., Fair Haven, Vt. Commode-stool	284,852	Sept. 11	852	240	24	1056
Hughes, Jacob. (See Lippy and Hughes.)						
Hughes, James A., and R. C. Blackwell, assignors of one-third to W. H. Lewis, Henderson County, Ky. Feeder and band-cutter for thrashing-machines	283,710	Aug. 21	1496	422	24	784
Hughes, John W., et al. (See Hutchings, Richard J., assignor.)						
Hughes, Joseph D., assignor to June Manufacturing Company, Chicago, Ill. Clutch for fly-wheels for sewing-machines	270,672	Jan. 16	1049	300	23	221
Hughes, Michael, San Francisco, Cal. Plastic composition for tailors' cutting-boards and for other purposes	286,442	Oct. 9	832	.....	25	162
Hughes, Morris W. (See Elsingher, Daniel, assignor.)						
Hughes, William, et al. (See Schilling, William, assignor.)						
Hughes, William D., Washington, D. C. Door-lock	286,614	Oct. 16	1051	283	25	207
Hughes, William W., assignor to C. B. Hughes, Urbana, Ohio. Hand-truck	275,386	Apr. 10	685	182	23	1351
Hugo, Cornelius, Seneca, Kans. Sheet-metal-working tool	271,638	Feb. 6	67	18	23	452
Hugo, Joseph, New York, N. Y. Combined table-fan and caster-supporter	281,513	July 17	1469	403	24	271
Huginin, Robert B., Hartford, Conn. Roller sash-balance	286,931	Oct. 16	1447	397	25	275
Huke, Charles, Chicago, Ill. Work-holding device for metal-slotting machines	281,212	July 17	1166	322	24	219
Hulbert, Sylvester C. (See Shanahan, Winfield S., assignor.)						
Hulen, Louis F., New York, N. Y. Finger-ring and other jewelry	289,912	Dec. 11	679	188	25	1012
Huling, Charles C., assignor to C. Hassenforder, Philadelphia, Pa. Till-alarm	273,066	Feb. 27	1895	532	23	793
Hull, Aaron J. (See Mighell and Hull.)						
Hull, Albert T., assignor to E. D. Fisher, New York, N. Y. Hod-elevator	286,009	Oct. 2	282	79	25	53
Hull, Albert T., assignor to E. D. Fisher, New York, N. Y. Hod-elevator	290,235	Dec. 18	1068	299	25	1091
Hull, Charles B., Detroit, Mich. Porous cover for tobacco-jars	280,477	July 3	179	47	24	33
Hull, Daniel E., Adrian, Mich. Thill-coupling	279,246	June 12	787	216	23	2268
Hull, David F., Hagerstown, Md. Vehicle-axle	274,776	Mar. 27	1971	549	23	1197
Hull, David F., Hagerstown, Md. Grain-drill and fertilizer-distributor	282,456	July 31	2691	739	24	490
Hull, Duane, Millerton, N. Y. Lock nut and bolt	271,852	Feb. 6	323	89	23	498
Hull, George M., Denver, Mo. Wagon-body	276,821	May 1	371	99	23	1691
Hull, John S., Baltimore, Md. Vapor-burning heating and cooking apparatus	283,246	Aug. 14	927	258	24	672
Hull, John S., Baltimore, Md. Vapor-burning heating and cooking apparatus	283,247	Aug. 14	929	259	24	672
Hull, Lewis O., Fort Wayne, Ind. Pencil-holder	287,400	Oct. 23	2048	557	25	390
Hull, Richard L., Meriden, Conn. Lantern	289,348	Nov. 27	1936	538	25	873
Hull, Thomas P. (See Nellis, Charles S., assignor.)						
Hull, Wayne J. (See Varney and Hull.)						
Hull, Welcome H., and D. L. Smoke, White Hall, Va. Cider-mill	276,413	Apr. 24	1985	550	23	1590
Hull, Wesley, Fort Wayne, Ind. Dumping-wagon	290,666	Dec. 25	1670	460	25	1201
Hull, Wolcott A., New York, N. Y., and F. S. Truesdell, assignors to said Hull and Ansonia Brass and Copper Company, Ansonia, Conn. Lamp-fixture	283,591	Aug. 28	1719	485	24	835
Hull, Wolcott A., New York, N. Y., and R. Hoadley, said Hoadley assignor to Ansonia Brass and Copper Company, Ansonia, Conn. Ornament for shades	286,135	Oct. 2	435	119	25	81
Hullinger, Andrew. (See Vannamaker, Alfred, assignor.)						
Humans, William, Cambridgeport, assignor, by mesne assignments, of one-half to J. H. Coliamore, Boston, Mass. Electric annunciator and communicating apparatus	277,296	May 8	962	258	23	1798
Humber, Moses, Calliope, Iowa. Combined collar and hame	286,010	Oct. 2	284	79	25	53
Hume, Edwin J. (See Sloan, Alexander, assignor.)						
Hume, Frank, et al. (See Rogers, James H., assignor.)						
Hume, George H., Osawatomie, Kans. Fire-escape	279,762	June 19	1418	393	23	2380
Humiston, Ransom F., Boston, Mass. Compound for preserving food	270,899	Jan. 23	1329	.....	23	279
Hummel, Ferdinand, Sr., and W. Paducah, Ky. Nozzle for oil-cans	277,287	May 8	965	259	23	1799
Hummel, William. (See Hummel, Ferdinand, Sr., and W.)						
Humphrey, Benjamin F., Boston, Mass. Book-sawing machine	285,133	Sept. 18	1205	338 339	24	1124
Humphrey, Daniel W. G., Chelsea, assignor to S. F. Howard, trustee, Boston, Mass. Button-hole sewing-machine	273,087	Feb. 27	1896	532 533	23	793
Humphrey, Daniel W. G., Chelsea, assignor to S. F. Howard, trustee, Boston, Mass. Cutting mechanism for button-hole sewing-machines	273,088	Feb. 27	1902	533 534	23	794
Humphrey, Dennison, Corydon, assignor of one-half to F. A. Sibley, Newport, N. H. Hoe	275,915	Apr. 17	1363	375	23	1475
Humphrey, H. Hubert, et al. (See Wood, Alfred, assignor.)						
Humphrey, James, Brooklyn, N. Y. Bronzing-machine	275,214	Apr. 3	428	117	23	1300
Humphreys, Alexander C., Bayonne, N. J., assignor to Pintsch Lighting Company, of New Jersey. Torch and lamp opener	288,439	Nov. 13	824	223	25	659
Humphreys, Arthur C. (See Humphreys, David, assignor.)						
Humphreys, Charles I., Boston, Mass. Belt-fastener	270,673	Jan. 16	1050	300	23	221
Humphreys, David. (See Humphreys, Edward D., assignor.)						
Humphreys, David, Norfolk, Va. Separable button	274,607	Mar. 27	1775	493	23	1162
Humphreys, David, Norfolk, Va. Self-closing hatchway	274,777	Mar. 27	1971	549	23	1197
Humphreys, David, assignor to A. C. Humphreys, Norfolk, Va. Self-closing hatchway	286,136	Oct. 2	436	119	25	81
Humphreys, Edward D., assignor of one-half to D. Humphreys, Cincinnati, Ohio. Earth-scraper	273,538	Mar. 6	382	101	23	899
Humphreys, Martha A. (See Herschel, William D., assignor.)						
Humphries, George C., New York, N. Y. Crimp-protector	272,698	Feb. 20	1404	394	23	700
Humphries, William S. (See Lyle, Hugh F., assignor.)						
Hunger, Theodore, and F. Bullenkamp, Jr., Brooklyn, N. Y. Wagon end-gate	284,853	Sept. 11	853	240	24	1056
Hungerford, Arthur B., Lowell, assignor of one-half to J. L. Atwood, Clayton, N. Y. Sap-spout	286,443	Oct. 9	833	226	25	162
Hungerford, Elias B., Corning, N. Y. Rail-tie	276,414	Apr. 24	1986	550	23	1590
Hungerford, John B., Hillhouse, Ohio. Fence	284,207	Sept. 4	64	18	24	915



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Hunley, Booker T. M., Baltimore, Md. Boot or shoe fastener.....	281,073	July 10	906	253	24	167
Hunnicut, William H., West Liberty, assignor to J. M. Patterson, Windfall, Ind. Feed-cutter.....	270,435	Jan. 9	742	218	23	154
Hunscher, Ernest. (See Bowman and Hunscher.).....						
Hunsicker, Henry J., Laurelton, Pa. Shutter-worker.....	281,630	July 17	1614	442	24	294
Hunsicker, Irwin C. (See Nyce and Hunsicker.).....						
Hunt, Augustus. (See Evans, Othniel B., assignor.).....						
Hunt Brothers & Company. (See Rollins, Edward K., assignor.).....						
Hunt, Charles F. (See Jackson and White, assignors.).....						
Hunt, Charles W., West New Brighton, N. Y. Carrier or sheave-truck for hoisting machinery.....	282,640	Aug. 7	200	58	24	534
Hunt, Edwin. (See Hunt, Zebulon and E.).....						
Hunt, Frank M., Round Oak, Ga. Fly-fan.....	278,140	May 22	1988	546	23	1988
Hunt, George G., Bristol, Ill. Harvester.....	281,368	July 17	1286	356	24	240
Hunt, George G., Bristol, assignor of one-half to Plano Manufacturing Company, Plano, Ill. Reel for harvesters.....	286,304	Oct. 9	665	177	25	131
Hunt, George G., Bristol Station, assignor of one-half to Plano Manufacturing Company, Plano, Ill. Kuo'ting-hook for grain-binders.....	290,184	Dec. 11	995	281	25	1071
Hunt, George P., San Francisco, Cal., assignor to himself and J. J. Walton, New York, N. Y. Life-preserver.....	278,240	May 22	2117	583	23	2010
Hunt, George W. (See De Luze, Louis P., assignor.).....						
Hunt, George W., Philadelphia, Pa. Device for lighting the steps of cars, &c.....	278,141	May 22	1989	547	23	1988
Hunt, George W., Muscatine, Iowa. Wheel-plow.....	285,412	Sept. 25	1536	433	24	1190
Hunt, Henry C., Newark, N. J. Piston-rod packing.....	283,711	Aug. 21	1497	422	24	784
Hunt, Henry C., assignor of one-half to A. J. Halsey, Newark, N. J. Crayon or lead holder.....	286,615	Oct. 16	1053	283	25	207
Hunt, Henry C., assignor to himself, A. J. Halsey, Newark, N. J., and T. G. Budington, Brooklyn, N. Y. Governor for steam-engines.....	270,546	Jan. 9	884	256	23	182
Hunt, James, and B. C. Wilson, Philadelphia, Pa. Apparatus for bottling liquors.....	270,434	Jan. 9	741	218	23	154
Hunt, John A., assignor of one-half to J. Steiner, Greenville, Ala. Oil-mill box and fittings.....	277,840	May 15	1621	441	23	1918
Hunt, Joshua, Providence, R. I. Blind-stop.....	275,492	Apr. 10	824	223	23	1375
Hunt, Nathan, assignor of one-half to Buckeye Engine Company, Salem, Ohio. Eccentric strap for steam-engines.....	275,659	Apr. 10	1038	281	23	1411
Hunt, Reuben R., Lexington, Ky. Car-coupling.....	282,696	Aug. 7	505	142	24	590
Hunt, Robert H. H., San Francisco, assignor of two-thirds to J. B. McChesney and W. A. Knowles, Oakland, Cal. Fulling-mill.....	280,929	July 10	735	205	24	135
Hunt, Robert W. (See Williams, Samuel T., assignor.).....						
Hunt, Theodore. (See Bishop, Richard T., assignor.).....						
Hunt, Theodore, St. Louis, Mo. Hand-brake for cars.....	279,565	June 19	1196	331	23	2341
Hunt, Theodore, St. Louis, Mo. Composition for waterproofing and preserving walls of buildings.....	282,082	July 31	2199		24	407
Hunt, William L., Port Hope, Ontario, Canada. Telegraphic apparatus.....	270,674	Jan. 16	1051	300	23	221
Hunt, Zebulon and E., Hudson, N. Y. Stove attachment.....	284,017	Aug. 28	1898	{ 531 532 }	24	867
Hunter, Alpheus S., Newburg, N. Y., assignor to E. H. Barney and R. Gibson. Skate. (Reissue).....	10,293	Mar. 6	589	157	23	935
Hunter, Andrew, Chicago, Ill. Middlings-purifier.....	278,142	May 22	1990	547	23	1988
Hunter, Andrew, and E. Kuehne, Chicago, Ill. Flour-dressing machine.....	278,143	May 22	1991	547	23	1988
Hunter, Charles W., Snowville, Va. Egg-carrier.....	281,696	July 24	1708	464	24	316
Hunter, Edwin, assignor of one-half to A. Wolf, Allentown, and D. L. Hamaker, East Hempfield, Pa. Window-screen.....	288,943	Nov. 20	1445	398	25	776
Hunter, George D., Terre Haute, Ind. Spark-arrester.....	285,899	Oct. 2	153	43	25	30
Hunter, George D., Terre Haute, Ind. Spark-extinguisher.....	285,900	Oct. 2	156	44	25	31
Hunter, George W., Philadelphia, Pa. Revolving-cylinder engine.....	280,041	June 26	1770	497	23	2447
Hunter, George W., assignor of two-thirds to A. R. Bockins and A. Rex, Philadelphia, Pa. Rotary pump.....	273,737	Mar. 13	642	171	23	952
Hunter, Griffith, assignor to S. A. Hunter, Chicago, Ill. Apparatus for hoisting and laying stone.....	270,765	Jan. 16	1052	301	23	221
Hunter, James B., Ashley, Ill. Motor.....	286,702	Oct. 16	1164	313	25	226
Hunter, James H., East Corinth, Vt. Fruit-drier.....	287,542	Oct. 30	2227	605	25	434
Hunter, John E., Mechanicsburg, Ohio. Animal-poke.....	281,881	July 24	1949	532	24	358
Hunter, John M., Morristown, N. J. Safety-pocket.....	274,122	Mar. 20	1132	312	23	1043
Hunter, Monroe, Attica, Ind. Car-coupling.....	290,330	Dec. 18	1193	334	25	1113
Hunter, Rudolph M., Philadelphia, Pa. Printing-press.....	271,070	Jan. 23	1537	443	23	312
Hunter, Rudolph M., Philadelphia, Pa. Valve-gear.....	272,053	Feb. 13	585	158	23	553
Hunter, Rudolph M., Philadelphia, Pa. Electric underground conductor.....	272,441	Feb. 20	1078	304	23	643
Hunter, Rudolph M., Philadelphia, Pa. Grain-binder.....	273,089	Feb. 27	1906	{ 534 535 }	23	794
Hunter, Rudolph M., Philadelphia, Pa. Underground conductor.....	275,387	Apr. 10	688	182	23	1352
Hunter, Rudolph M., Philadelphia, Pa. Railway telegraphic signal.....	277,569	May 15	1307	351	23	1862
Hunter, Rudolph M., and J. T. Stewart, Philadelphia, Pa. Process of and apparatus for packing bran.....	280,478	July 3	160	48	24	33
Hunter, S. A. (See Hunter, Griffith, assignor.).....						
Huntington, Alfred K., Hampstead, and W. E. Koch, Kensington, county of Middlesex, England. Extracting precious metals from ores.....	281,074	July 10	907	253	24	168
Huntington, Alfred K., Hampstead, and W. E. Koch, Kensington, county of Middlesex, England. Amalgamating apparatus.....	281,629	July 17	1613	441	24	294
Huntington, Frank A., San Francisco, Cal. Crushing-mill.....	277,134	May 8	795	{ 208 209 }	23	1768
Huntington, George F., Philadelphia, Pa. Gas-burner.....	283,608	Aug. 21	1370	383	24	760
Huntington, Joseph D., Chicago, Ill. Tool for facing emery-wheels.....	288,638	Nov. 20	1069	294	25	709
Huntington, Joseph D., Chicago, Ill. Obtaining rotating centers of emery and polishing wheels.....	290,056	Dec. 11	848	241	25	1043
Huntington, Lawson G., New York, N. Y. Switch and signal lantern.....	280,624	July 3	345	96	24	61
Huntington, Lawson G., New York, N. Y., assignor of one-half to T. B. Osborne, Plainfield, N. J. Lantern.....	276,182	Apr. 24	1687	466	23	1539
Huntington, Lawson G., assignor of one-half to A. M. Eagleson, New York, N. Y. Signal-lantern. (Reissue).....	10,408	Nov. 20	1472	406	25	781
Huntington, Thomas S., New York, N. Y., assignor to New Home Sewing Machine Company, Orange, Mass. Sewing-machine.....	276,537	Apr. 24	2139	595	23	1616
Huntley, Byron E. (See Vunk, George W., assignor.).....						
Huntley, Rollin D., assignor of one-half to A. O. Whittemore, Havana, N. Y. Door-knob.....	273,685	Mar. 6	574	152	23	932
Huntress, John H., assignor of two-thirds to C. Dutton and H. Merrill, Janesville, Wis. Harness-buckle.....	271,465	Jan. 30	2045	588	23	409

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Hunzeker, Rudolph S., assignor of one-half to W. A., R. H. Herron, and W. J. Patterson, Pittsburg, Pa. Spring and brace.	284,636	Sept. 11	583	164	24	1009
Hunzeker, Rudolph S., assignor of one-half to W. A. Herron, W. J. Patterson, and R. H. Herron, Pittsburg, Pa. Die for making carriage-springs.	285,623	Sept. 25	1788	508	24	1237
Hunzinger, George, New York, N. Y. Applying straw braid to furniture and cabinet-ware.	273,847	Mar. 13	785	213	23	977
Hunzinger, Jacob R., Olathe, Kans. Vehicle-spring.	275,769	Apr. 10	1180	324	23	1436
Hurd, Alouzo A. (See Bailey and Hurd.)						
Hurd, Edward B., Bridgeport, Conn. Starching-machine.	285,901	Oct. 2	158	44	25	31
Hurd, George W., Meadville, Mo. Neck-yoke.	287,834	Nov. 6	54	16	25	517
Hurd, Lorenzo D., Candor, assignor of one-third to J. C. Sampson, Elmira, N. Y. Running-gear for wagons.	283,712	Aug. 21	1498	422 423	24	785
Hurd, William F., et al. (See Thatcher and Johnson, assignors.)						
Huré, François, Paris, France. Lasting and tacking machine.	282,524	Aug. 7	60	18	24	510
Hurel, Armand M., Thellelement, France. Bottle for milk and other liquids.	288,238	Nov. 13	557	155	25	613
Hurlbut, Daniel N., Chicago, Ill. Underground line.	276,415	Apr. 24	1987	550	23	1590
Hurlbut, Ella C., New York, N. Y. Corset.	270,222	Jan. 9	472	138	23	103
Hurlbut Manufacturing Company. (See Vanorman, Oliver, assignor.)						
Hurley, Joseph G. (See Adams, Azro H., assignor.)						
Hurley, Michael, Chicago, Ill. Window-cleaner.	274,334	Mar. 20	1404	335	23	1091
Hurley, Susan A., Washington, D. C. Pulley and attachment for window-shade rollers.	272,882	Feb. 27	1667	465	23	753
Hurly, Michael, Quebec, Quebec, Canada. Heating railway-cars.	289,265	Nov. 27	1832	505	25	853
Hurst, Jakob. (See Hurst, William and J.)						
Hurst, John D., Salem, Oreg. Bolting-reel.	271,853	Feb. 6	324	89	23	498
Hurst, William and J., Syracuse, N. Y. Churn.	273,281	Mar. 6	42	13	23	842
Hurter, Ferdinand. (See Carey, Gaskell, and Hurter.)						
Hurter, Ferdinand. (See Gaskell and Hurter.)						
Hurtubes, Benjamin, Rahway, N. J. Window-sash.	276,416	Apr. 24	1989	551	23	1590
Husband, William P., Hartford, Conn. Spinning-ring.	273,090	Feb. 27	1913	536	23	796
Huse, Warren D. (See White and Huse.)						
Huse, Warren D., Laconia, assignor to O. Twombly, Lake Village, N. H., and T. S. Nowell, Boston, Mass. Knitting-machine.	271,071	Jan. 23	1539	443 444	23	313
Hussey, Charles A., assignor to Hussey Electric Company, New York, N. Y. Electric lamp.	269,937	Jan. 2	136	40	23	28
Hussey, Charles A., assignor to Hussey Electric Company, New York, N. Y. Electric-arc lamp.	269,938	Jan. 2	137	41	23	28
Hussey, Charles A., assignor to Hussey Electric Company, New York, N. Y. Electric-arc lamp.	269,939	Jan. 2	139	41	23	29
Hussey, Charles A., assignor to Hussey Electric Company, New York, N. Y. Electric-arc lamp.	270,676	Jan. 16	1053	301	23	221
Hussey Electric Company. (See Hussey, Charles A., assignor.)						
Hussey, John J., Bordeaux, S. C., assignor to himself and W. W. Tinsley, Huntsville, Tex. Salky-plov.	284,558	Sept. 4	483	136	24	986
Hussey, Levi, New York, N. Y., assignor of one-half to G. W. Donaldson, Cranford, N. J. Apparatus for reheating exhaust-steam and heating air.	276,568	May 1	57	16	23	1638
Hussey, Levi, New York, N. Y., assignor of one-half to G. W. Donaldson, Cranford, N. J. Apparatus for reheating exhaust-steam.	279,247	June 12	787	217	23	2268
Husted, Jethro B., Vergennes, Vt. Machine for assorting horseshoe-nails.	277,488	May 15	1207	324	23	1846
Husted, Harvey E., Monticello, Ill. Mechanical telephone.	285,269	Sept. 18	1361	384	24	1154
Huston, William. (See Wickersham and Huston.)						
Huston, William, et al. (See Mills, Isaac N., assignor.)						
Huston, William, assignor of one-half to H. N. Wickersham, Wilmington, Del. Ejector.	284,962	Sept. 11	983	277	24	1080
Hutchings, Richard J., Swansea, county of Glamorgan, England. Apparatus for pickling and swilling metal plates and other wares.	282,083	July 31	2200	604 605	24	407
Hutchings, Richard J., assignor of two-thirds to W. Trick, Swansea, county of Glamorgan, and J. W. Hughes, London, England. Apparatus for pickling and swilling metal plates and other wares.	282,084	July 31	2204	605 606	24	407
Hutchins, Abner B., Brooklyn, assignor to J. L. Sharp, New York, N. Y. Hydrocarbon-stove. (Reissue.)	10,273	Jan. 16	1300	374	23	268
Hutchins, Alphonso E. (See Bassett and Hutchins.)						
Hutchins, Charles W., Springfield, Mass. Lock bottle stand.	274,608	Mar. 27	1776	493	23	1162
Hutchins, Henry H., Fennville, Mich. Wire-stretcher.	274,198	Mar. 20	1221	336	23	1060
Hutchins, Horace H., Maquoketa, Iowa. Roofing compound.	270,436	Jan. 9	743	.....	22	154
Hutchins, William H., assignor of one-half to A. Hubbard, Baltimore, Md. Sectional steam-boiler.	288,178	Nov. 6	477	132	25	590
Hutchins, William J., assignor of one-half to I. B. Curtis, Joliet, Ill. Check-rower attachment for corn-planters.	269,940	Jan. 2	140	41, 42	23	29
Hutchinson, Charles G., Chicago, Ill. Bottle-stopper.	285,488	Sept. 25	1624	456	24	1205
Hutchinson, Elias S., Washington, D. C. Setting for hot-air furnaces.	273,993	Mar. 13	958	264	23	1006
Hutchinson, Elias S., Washington, D. C. Water-closet.	280,180	June 26	1916	539	23	2474
Hutchinson, Henry E., Brooklyn, N. Y. Match-box.	278,555	May 29	2536	692	23	2092
Hutchinson, Joseph. (See Smith and Hutchinson.)						
Hutchinson, Oliver S., New Lenox, Mass. Carriage-feeding device for saw-mills.	286,201	Oct. 9	516	142	25	106
Hutchinson, Robert H., New York, N. Y. Shirt.	286,011	Oct. 2	284	80	25	54
Hutchinson, Thomas O., Salem, assignor of one-half to A. C. Gibbs, Portland, Oreg. Hydraulic jack.	280,315	June 26	2090	588	23	2504
Hutchinson, William F., Lynn, Mass. Shaft-casing.	276,589	May 1	59	17	23	1638
Huth, Charles A., Maynard, Ohio. Car-coupling.	279,763	June 19	1419	396	23	2380
Hutson, Ezra, and E. Squires, Portland, Oreg. Driving-cart.	271,710	Feb. 6	147	41	23	466
Hutson, William L., assignor of two-thirds to N. R. Harris and T. A. Brooks, St. Lawrence, N. C. Wagon-brake.	285,624	Sept. 25	1789	508	24	1237
Huttinger, Ambrose, Liverpool, Ohio. Stove-pipe fastener.	275,660	Apr. 10	1039	281	23	1412
Hutton, David B., London, England. Instrument for ascertaining the pitch of screw-propellers.	284,427	Sept. 4	328	91	24	958
Hutton, George H., Baltimore, Md. Thill-coupling.	282,457	July 31	2693	739	24	490
Huyatt, Miles C. (See Smith, Wright D., assignor.)						
Huyck, Francis P., assignor of one-half to J. E. Hall, Swanton, Ohio. Reversible friction-clutch.	275,388	Apr. 10	690	183	23	1352
Huyler, John H. (See Gamblee and Haring, assignors.)						
Hyam, Benjamin D., Washington, D. C. Machine for expeditiously tanning hides, skins, &c.	290,885	Dec. 25	1922	531 532 385	25	1247
Hyam, Benjamin D., Washington, D. C., assignor of one-half to W. H. Howell, New York, N. Y. Machine for tanning leather.	274,336	Mar. 20	1405	386 387	23	1091
Hyatt, Ely E., Salona, assignor to Enterprise Manufacturing Company, Troy, Pa. Crank-coupling.	289,266	Nov. 27	1833	506	25	853



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Hyatt, Isaiah S., Morristown, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Manufacturing sheets of celluloid and other plastic material.....	275,215	Apr. 3	429	.....	23	1300
Hyatt, Isaiah S., Morristown, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Apparatus for molding celluloid and analogous plastic material.....	275,216	Apr. 3	430	{ 117 118 }	23	1300
Hyatt, Isaiah S., Morristown, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Manufacture of celluloid collars, cuffs, &c.....	276,248	Apr. 24	1766	492	23	1553
Hyatt, John W., Newark, N. J. Filtering agent.....	272,442	Feb. 20	1079	304	23	644
Hyatt, John W., Newark, N. J. Filter.....	273,539	Mar. 6	383	102	23	899
Hyatt, John W., Newark, N. J. Filter.....	273,540	Mar. 6	386	102	23	900
Hyatt, John W., Newark, N. J. Filter.....	273,541	Mar. 6	387	103	23	900
Hyatt, John W., Newark, N. J. Filter.....	273,542	Mar. 6	388	{ 103 104 }	23	900
Hyatt, John W., Newark, N. J. Filter.....	273,543	Mar. 6	391	105	23	901
Hyatt, John W., Newark, N. J. Machine for perforating sheet metal.....	283,488	Aug. 21	1239	348	24	735
Hyatt, John W., Newark, N. J. Filtering agent.....	283,489	Aug. 21	1240	348	24	735
Hyatt, John W., Newark, N. J. Differential-pressure gage.....	283,490	Aug. 21	1240	348	24	736
Hyatt, John W., Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Press or mold for coating articles with celluloid, &c.....	280,745	July 3	494	{ 139 140 }	24	88
Hyatt, John W., Newark, N. J., and C. S. Lockwood, assignors to Bonsilate Company, (limited,) Albany, N. Y. Securing glass to a backing.....	286,541	Oct. 9	950	256	25	183
Hyatt, John W., and F. V. Pool, Newark, N. J. Manufacture of pyroxyline.....	274,335	Mar. 20	1405	.....	23	1091
Hyatt, Thaddeus, New York, N. Y. Illuminating vault-cover or grating-tile and surfaces made of the same.....	272,383	Feb. 13	998	{ 278 279 280 }	23	624
Hyatt, Thaddeus, New York, N. Y. Illuminating vault-cover or grating-tile and surfaces made of the same.....	272,551	Feb. 20	1213	{ 339 340 }	23	667
Hyatt, Thaddeus, New York, N. Y. Sky or vault light roof and roof-pavement.....	284,559	Sept. 4	484	136	24	986
Hyatt, Thaddeus, New York, N. Y. Vault or combination skylight reflector-roof.....	284,963	Sept. 11	954	277	24	1080
Hyatt, Thaddeus, New York, N. Y. Vault-light roof and sidewalk for basements and rear extensions of buildings.....	285,358	Sept. 18	1464	412	24	1171
Hyatt, Thaddeus, New York, N. Y. Combination daylight-reflector.....	285,538	Sept. 25	1790	509	24	1237
Hyatt, Thaddeus, New York, N. Y. Illuminating vault-cover or grating-tile, &c.....	286,012	Oct. 2	285	80	25	54
Hyatt, Thaddeus, New York, N. Y. Vault-light roof and sidewalk for constructing basements, &c., to buildings.....	286,137	Oct. 2	437	119	25	81
Hyatt, Thaddeus, New York, N. Y. Illuminating vault-cover or grating-tile and surface made of the same.....	286,542	Oct. 9	951	256	25	183
Hyatt, Thaddeus, New York, N. Y. Vault-cover or illuminating grating-tile and surface made thereof.....	288,571	Nov. 13	981	270	25	687
Hyatt, Thaddeus, New York, N. Y. Vault-covering or illuminating-grating and surface made therefrom.....	288,572	Nov. 13	982	{ 270 271 }	25	687
Hyatt, Thaddeus, New York, N. Y. Illuminating sidewalk or roof to a continuous vault or gallery, &c.....	289,537	Dec. 4	208	58	25	922
Hyatt, Thaddeus, New York, N. Y. Illuminating grating-tile and constructions made therefrom.....	289,538	Dec. 4	208	58	25	923
Hyatt, Thaddeus, New York, N. Y. Concrete floor, roof, &c.....	290,886	Dec. 25	1927	532	25	1248
Hyde, Andrew, Hatfield, Mass. Fire-arm.....	273,282	Mar. 6	43	13	23	842
Hyde, Andrew, Hatfield, Mass. Wrench.....	286,543	Oct. 9	953	256	25	183
Hyde, Charles F. (See Brown and Hyde.).....	277,288	May 8	966	259	23	1799
Hyde, Charles F., Ottawa, Kans. Fence-wire with spur attachment.....	277,288	May 8	966	259	23	1799
Hyde & Co. (See Linton, Charles B., assignor.).....						
Hyde, David B. (See Tavener, Robert W., assignor.).....						
Hyde, David B., Springfield, Mass. Grinding-wheel frame.....	285,626	Sept. 25	1792	510	24	1237
Hyde, Elwin R., and A. Valentine, Springfield, Mass.; said Valentine assignor to said Hyde. Grindstone-hood.....	279,248	June 12	789	217	23	2268
Hyde, Francis. (See Horner and Hyde.).....						
Hyde, J. Burrows. (See Waring and Hyde.) (Reissue.).....						
Hyde, J. Burrows, et al. (See Cameron, James W., assignor.).....						
Hyde, J. Burrows, New York, N. Y. Feeding pulverized fuel.....	274,778	Mar. 27	1972	549	23	1198
Hyde, J. Burrows, New York, N. Y. Artificial fuel.....	274,779	Mar. 27	1974	.....	23	1198
Hyde, J. Burrows, New York, N. Y. Underground electric conductor or cable.....	277,036	May 8	660	172	23	1745
Hyde, J. Burrows, New York, N. Y. Machine for treating peat.....	279,390	June 12	984	274	23	2299
Hyde, J. Burrows, New York, N. Y. Insulating compound for electrical conductors and apparatus for compounding and applying the same.....	281,999	July 24	2087	572	24	382
Hyde, J. Burrows, New York, N. Y. Underground electric conductor.....	284,854	Sept. 11	854	240	24	1056
Hyde, J. Burrows, New York, N. Y. Apparatus for constructing electric conductors.....	284,855	Sept. 11	856	241	24	1056
Hyde, J. Burrows, New York, N. Y. Rotating furnace.....	285,627	Sept. 25	1792	510	24	1237
Hyde, J. Burrows, New York, N. Y. Apparatus for preparing and treating peat for fuel and other purposes.....	287,679	Oct. 30	2417	652	25	470
Hyde, J. Burrows, New York, N. Y. Insulating compound for electrical conductors and apparatus for compounding the same. (Reissue.).....	10,403	Nov. 6	503	139	25	595
Hyde, J. Burrows, New York, N. Y. Apparatus for applying insulating material to electric wires. (Reissue.).....	10,404	Nov. 6	504	139	25	595
Hyde, J. Burrows, New York, N. Y. Insulating compound for electric conductors.....	290,657	Dec. 11	850	.....	25	1043
Hyde, J. Burrows, New York, N. Y. Insulating compound for electric conductors and compounding the same.....	290,658	Dec. 11	850	.....	25	1043
Hyde, J. Burrows, New York, N. Y. Submarine electric conductor.....	290,881	Dec. 25	1918	530	25	1246
Hyde, James P., New York, N. Y. Preserving the seal in traps of water-closets, urinals, wash-basins, sinks, &c.....	288,573	Nov. 13	985	{ 271 272 }	25	688
Hyde, Kirkley, et al. (See Ladd, Austin S., assignor.).....						
Hyde, Kline & Co. (See Carman, Hiram, assignor.).....						
Hyde, Philip, et al. (See Brunell, Mineheart, assignor.).....						
Hyde, Thomas, Albany, N. Y. Water-closet.....	279,566	June 19	1197	331	23	2341
Hyde, Walter, Oakland, Cal. Swing.....	277,902	May 22	1698	463	23	1938
Hydraulic Press Brick Company. (See Graves, Willis N., assignor.).....						
Hydro-Carbon Barner and Fuel Company. (See Blumenberg and Whiting, assignors.).....						
Hydro Pneumatic Pump Company. (See Moore, Charles, assignor.) (Reissue.).....						
Hylo, Henry A., Redwood, N. Y. Mower and reaper.....	273,994	Mar. 13	959	{ 264 265 }	23	1006
Hyman, Jesse W., Englewood, N. J. Coloring photographs.....	273,995	Mar. 13	963	.....	23	1007
Hymers, Christopher, St. Louis, Mo. Self-adjusting fish-shaped fish-hook holder.....	273,996	Mar. 13	963	265	23	1007
Hyndman, Samuel E., Cincinnati, Ohio. Fence-post.....	289,349	Nov. 27	1937	538	25	873
Hynds, Michael, Montreal, Quebec, Canada. Counter-machine.....	285,134	Sept. 18	1207	339	24	1124
Hynson, Augustus R., St. Louis, Mo. Barrel-heater.....	284,018	Aug. 28	1899	532	24	867
Hyre, Clinton D., assignor of one-half to H. L. Hyre, Lexington, Ill. Eaves-trough hanger.....	283,692	Aug. 28	1720	485	24	835

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Hyre, Harrison L. (See Hyre, Clinton D., assignor.)						
Hyssong, Charles H., Altoona, Pa. Piston-valve .....	284,964	Sept. 11	985	277	24	1080
Iddings, Frank A., Warren, Ohio. Die for welding links .....	271,466	Jan. 30	2046	589	23	409
Iddings, Henry A., Warren, Ohio. Die for forming links .....	286,013	Oct. 2	288	81	25	54
Iddings, Henry A., Warren, Ohio. Machine for forming and cutting links .....	290,773	Dec. 25	1787	{ 493 } 494	{ 25 } 23	1223 2150
Ide, Albert L., Springfield, Ill. Support for electric lamps .....	278,797	June 5	164	48	23	
Ide, Bruce & Co., Geo. P. (See Ide, James M., assignor.)						
Ide, Bruce & Co., Geo. P. (See Weatherly, William L., assignor.)						
Ide, Ferdinand F., Springfield, Ill. Scale for weighing diamonds, balance-screws of watches, &c. ....	272,699	Feb. 20	1405	394	23	701
Ide, James M., assignor to G. P. Ide, Bruce & Co., Troy, N. Y. Collar .....	279,567	June 19	1198	331	23	2341
Idell, Frank E. (See Knowles and Idell.)						
Ignatius, Charles, Cincinnati, Ohio. Desk .....	287,543	Oct. 30	2228	605	25	434
Illig, Frank J. (See Illig, Peter J. and F. J.)						
Illig, Peter J. and F. J., Buffalo, N. Y. Double-seaming machine .....	282,525	Aug. 7	63	18	24	511
Illingworth, James A., Springfield, Mass. Upholstery-brush .....	275,827	Apr. 17	1258	346	23	1456
Illinois Iron & Bolt Company. (See Laue, Rufus, assignor.)						
Illinois Iron & Bolt Company. (See Southworth, Albert H., assignor.)						
Imboden, Adam H. (See Cash, Arthur W., assignor.)						
Imler, John, Zionsville, Ind. Combined rotary disk-harrow and seed-sower .....	282,526	Aug. 7	63	19	24	511
Imperial Electric Light Company. (See Perkins, Charles G., assignor.)						
Indestructible Safe and Fire Proof Company. (See Fowler, Nathaniel C., assignor.)						
Indestructible Water Pipe Company. (See Camp, Mortimer M., assignor.)						
Indianapolis Cabinet Company of Indiana. (See Recker, John P., assignor.)						
Indianapolis Machine and Bolt Works. (See Babcock, Erskine L., assignor.)						
Indianapolis Machine and Bolt Works. (See Fulton and Olson, assignors.)						
Indianapolis Machine and Bolt Works. (See Olsen, Olaf R., assignor.)						
Indicator Lock Company. (See Yoe, Philip, assignor.)						
Ingalls, Allen, Cooperstown, N. Y. Building block or brick .....	272,883	Feb. 27	1667	466	23	753
Ingalls, Enoch L. (See Avery, Asher W., assignor.)						
Ingalls, George M. (See Andrews, Edward W., assignor.)						
Ingalls, Joshua K., Glenora, N. Y. Illuminating-roof, &c. ....	271,854	Feb. 6	325	90	23	498
Ingalls, William A., assignor of one-half to G. E. Barstow, A. and D. T. Lyman, Providence, R. I. Safety-guard for elevators .....	289,350	Nov. 27	1938	538	25	873
Ingersoll, James E. (See Heston, William, assignor.)						
Ingersoll, Monroe, assignor of one-half to F. Robinson, Indianapolis, Ind. Combined swing and chair .....	289,267	Nov. 27	1834	506	25	854
Ingersoll, Robert H., New York, N. Y. Toy block .....	272,443	Feb. 20	1079	304	23	644
Ingersoll, William B., Chicago, Ill. Horse-power .....	279,764	June 19	1420	397	23	2380
Ingraham, John F., Allegheny, assignor to himself and J. H. Noble, Verona, Pa. Seal-lock .....	289,417	Dec. 4	53	15, 16	25	896
Ingraham, Samuel, Dowagiac, Mich. Heating-stove .....	289,840	Dec. 11	588	163	25	996
Inglis, Andrew, A. J., and C., Horicon, Wis. Wind-wheel .....	270,591	Jan. 16	945	273	23	202
Inglis, Andrew J. (See Inglis, Andrew, A. J., and C.)						
Inglis, Charles. (See Inglis, Andrew, A. J., and C.)						
Inglis, Charles A., assignor of one-fourth to H. Rohrer and J. Fetter, Lancaster, Pa. Road-guide .....	270,223	Jan. 9	473	139	23	103
Ingraham, Elias. (See Markley and Ingraham.)						
Ingraham, William S., Waukegan, Ill. Sickle-grinder .....	270,070	Jan. 2	284	84	23	58
Ingram, Edwin. (See Cross, George W., assignor.)						
Ingram, Edwin, Philadelphia, Pa., assignor to National Automatic Car Coupler Company, of New Jersey. Car-coupling .....	286,444	Oct. 9	833	226	25	162
Ingram, George A., Plymouth, Pa. Artificial limb .....	288,239	Nov. 13	558	155	25	614
Ingram, Milo E., assignor of two-thirds to J. A. Gilleland and C. Steffen, Jr., Allegheny, Pa. Slate and blackboard eraser .....	287,381	Oct. 23	2024	550	25	386
Ingram, William B., assignor to himself and W. J. Cox, Lilesville, N. C. Cotton-press .....	271,467	Jan. 30	2047	589	23	409
Inman, Horace, Amsterdam, N. Y. Paper-box covering and trimming machine. (Re-issue) .....	10,286	Feb. 13	1020	285	23	628
Innes, James M. (See Ufford, Stephen R. S., assignor.)						
Innis, William J., Oil City, Pa. Wheel and pulley .....	283,397	Aug. 21	1224	318	24	715
Innis, William J., Oil City, Pa. Pulley .....	285,816	Oct. 2	42	14	25	9
Innis, William J., Oil City, Pa. Pulley .....	285,817	Oct. 2	43	14	25	10
Insull, Samuel. (See Dyer and Seely, assignors.)						
International Fibre and Juice Extracting Company of New York. (See Sanford, Gelston, assignor.)						
International Fire Escape Company. (See Bixby, Arthur, assignor.)						
International Pavement Company. (See Cutter, William T., assignor.)						
International Transportation Company. (See Eiseman, Solomon M., assignor.)						
International Vapor Fuel and Carbon Iron and Manufacturing Company. (See Hayden, Henry F., assignor.)						
Inward, Charles, Osage, Iowa. Latch .....	288,639	Nov. 20	1071	294	25	709
Ireland, William, Jr., et al. (See Lau, Albert H., assignor.)						
Ireland, George H., Springfield, Mass. Combined toy and game .....	284,965	Sept. 11	986	{ 277 } 278	{ 24 } 23	1080 58
Ireland, Howard, Camden, N. J. Food-holder for bird-cages .....	270,071	Jan. 2	285	84	23	
Ireland, Joseph, Cleveland, Ohio. Oral annunciator .....	269,860	Jan. 2	47	15	23	12
Ireland, Joseph, Cleveland, Ohio. Oral annunciator .....	280,930	July 10	738	{ 205 } 206	{ 24 } 23	136 1300
Ireland, Thomas S. (See Morris, John B., assignor.)						
Ireton, William, assignor of one-half to F. Weckerly and S. E. Whitelock, Camden, N. J. Manufacture of pipe .....	273,738	Mar. 13	643	171	23	952
Ireton, William, and S. E. Whitelock, Camden, N. J. Molding apparatus for the manufacture of pipe .....	278,663	May 29	2667	730	23	2114
Irish, C. J., et al. (See Irish, Judah W., assignor.)						
Irish, Charles B., Grand Isle, Vt. Fruit-evaporator .....	273,091	Feb. 27	1913	536	23	796
Irish, Judah W., assignor of one-half to C. J. Irish and H. M. Cox, Kellogg, Iowa. Milk-cooler .....	276,590	May 1	60	17	23	1638
Iron Clad Manufacturing Company. (See Milligan, Henry C., assignor.)						
Iron Clad Manufacturing Company. (See Reynolds, Henry S., assignor.)						
Iron Clad Manufacturing Company. (See Shepard, Henry W., assignor.)						
Ironmonger, Francis M., Brooklyn, N. Y. Bleaching edible nuts .....	275,217	Apr. 3	432	.....	23	1300
Irvine, James. (See Kohnle and Hamilton, assignors.)						
Irvine, John J., Chattanooga, Tenn. Pulley .....	273,544	Mar. 6	393	105	23	901
Irvine, William F., Willis, Tex. Revolving boot and shoe box .....	270,437	Jan. 9	744	218	23	154



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Irvine, William M., and J. J. Waddill, Montgomery, Ala. Nut-lock.....	277,735	May 15	1494	405	23	1895
Irving, George Jr., Bridgeport, Conn. Boot-blackening frame.....	273,545	Mar. 6	394	105	23	901
Irwin, George L., assignor to himself and R. L. Orr, Allegheny, Pa. Drier for white lead and other materials.....	288,574	Nov. 13	987	272	25	688
Irwin, Hall M., Tyler, Tex. Sawing-machine.....	288,440	Nov. 13	846	224	25	659
Irwin, John W., assignor to P. Weyhrich & Co., Pekin, Ill. Harvester.....	273,686	Mar. 6	575	153	23	932
Irwin, Joseph I., <i>et al.</i> (See Reeves, Alfred B., assignor.)						
Irwin, Joseph I., <i>et al.</i> (See Reeves, Marshal T. and A. B., assignors.)						
Irwin, William A., Webster Grove, Mo. Combined wrench and stretcher.....	285,902	Oct. 2	159	44	25	31
Irwin, William J., assignor to himself and J. B. Lisle, Springfield, Ohio. Cotton-chopper.....	274,780	Mar. 27	1976	550	23	1198
Isaac, Robert R., Trenton, N. Y. Machine for sharpening mowing-machine knives.....	290,236	Dec. 18	1070	299	25	1092
Isaacs, William D., Newark, N. J. Umbrella or parasol.....	269,861	Jan. 2	49	15	23	12
Isard, Franklin, and W. S. Leiter, Seward, Nebr.; said Isard assignor to said Leiter. Window-screen.....	278,884	Feb. 27	1668	466	23	754
Isard, Robert S., Hudson, Ohio. Fire-escape.....	291,014	Dec. 25	2102	579	25	1275
Isbell, Robert H., New York, N. Y. Button.....	278,556	May 29	2538	692	23	2092
Isberg, Hans A., Long Island City, N. Y. Chair.....	283,111	Aug. 14	762	215	24	643
Isenberg, B. F., <i>et al.</i> (See Stephens, Abner L., assignor.)						
Isenhardt, George. (See Rickel, Tremont W., assignor.)						
Isett, Frederick S. (See Merriam, Charles R., assignor.)						
Isherwood, Thomas, Westerly, R. I. Weft-stop mechanism for looms.....	268,814	Nov. 20	1290	353	25	747
Iske, Albert. (See Iske, Anthony and A.)						
Iske, Anthony, assignor to A. D. Smith, Lancaster, Pa. Clothes-drier.....	277,736	May 15	1494	406	23	1895
Iske, Anthony, assignor of one-half to W. L. Nauman, Lancaster, Pa. Stock-releasing device.....	283,786	Aug. 28	1600	452	24	815
Iske, Anthony and A., Lancaster, Pa. Oscillating motor.....	271,639	Feb. 6	68	19	23	452
Iske, Anthony and A., assignors of one-third to R. M. Slaymaker, Lancaster, Pa. Fire-ladder.....	272,054	Feb. 13	586	158	23	553
Iske, Anthony and A., Lancaster, assignors of one-half to M. V. B. Steinmetz, Philadelphia, Pa. Fire-alarm.....	287,439	Oct. 30	2099	570	25	408
Isley, Henry. (See Hicks and Isley.)						
Isley, William H., Jersey City, N. J. Fire-escape.....	284,740	Sept. 11	718	201	24	1032
Isley, William H., assignor of one-half to F. A. Hoeland, Jersey City, N. J. Awning.....	284,741	Sept. 11	721	201	24	1032
Israel, Alexander C. (See Leet and Israel.)						
Israel, M., <i>et al.</i> (See Kraker, Michael, assignor.)						
Ithaca Calendar Clock Company. (See Chesebrough, Frederick, assignor.)						
Itsell, Stephen W., <i>et al.</i> (See Wood, Alfred, assignor.)						
Ittner, Anthony, St. Louis, Mo. Lubricator.....	284,303	Sept. 4	182	51	24	935
Ittner, Anthony, St. Louis, Mo. Mold and die for brick-making machines.....	288,240	Nov. 13	559	156	25	614
Ivens, Edmund M., New Orleans, La. Cotton-press.....	284,208	Sept. 4	65	18	24	916
Ivers & Pond Piano Company. (See Ivers, William H., assignor.)						
Ivers, William H., Dedham, assignor to Ivers & Pond Piano Company, Boston, Mass. Safety-gate for elevators.....	272,552	Feb. 20	1215	340	23	667
Ives, Blakeslee & Co. (See Williams, Edward G., assignor.)						
Ives, Charles, Kirkland, N. Y. Fire-escape.....	287,764	Oct. 30	2542	684	25	492
Ives, Edward R., Bridgeport, Conn., assignor to himself, C. Blakeslee, and E. G. Williams, Brooklyn, N. Y. Toy.....	290,185	Dec. 11	997	281	25	1071
Ives, Henry, assignor of one-half to H. Easton, Batavia, N. Y. Cultivator.....	290,059	Dec. 11	851	242	25	1043
Ives, Joseph S., New York, N. Y. Plate-printing press.....	276,591	May 1	61	17	23	1638
Ives, Samuel B., <i>et al.</i> (See Monilton, Fordyce M., assignor.)						
Ives, William A., New Haven, Conn. Bit-stock.....	270,072	Jan. 2	286	85	23	58
Ivett, Daniel R., Fort Fred Steele, Wyoming Ter. Sled-propeller.....	282,897	Aug. 7	506	142	24	590
Ivey, David. (See Bugg and Ivey.)						
Ivey, Edwin, and A. Uren, Seattle, Wash. Ter. Can-holder.....	283,112	Aug. 14	764	215	24	643
Ivins, Ellwood, and D. Snyder; said Snyder assignor to said Ivins; said Ivins assignor of one-third to O. H. Searle, Philadelphia, Pa. Button-fastening.....	287,774	Dec. 25	1789	494	25	1224
Iwan, Henry and L., Streator, Ill. Hoe.....	280,027	Oct. 23	1581	435	25	305
Iwan, Henry and L., Streator, Ill. Blasting-tool.....	288,706	Nov. 20	1157	318	25	723
Iwan, Louis. (See Iwan, Henry and L.)						
Jablochhoff, Paul, Paris, France. Electric battery.....	273,739	Mar. 13	644	172	23	953
Jabouin, Marion R., New York, N. Y. Window-cleaning guard.....	290,431	Dec. 18	1333	369	25	1137
Jackman, Lemuel N., Elgin, Ill. Instrument of precision.....	283,346	Aug. 14	1045	296	24	698
Jacks, Richard, Meadow Valley, Cal. Wagon-reach coupling.....	288,707	Nov. 20	1158	318	25	723
Jackson, Albert L. (See Burns, Daniel R., assignor.)						
Jackson, Amariah W., Chicago, Ill. Steam-engine.....	285,271	Sept. 18	1364	384	24	1154
Jackson, Amariah W., and C. S. White; said Jackson assignor to C. F. Hunt, Chicago, Ill. Steam-engine.....	276,970	May 1	569	148	23	1723
Jackson, Andrew. (See Buckley and Jackson.)						
Jackson, Andrew, San Francisco, Cal. Automatic time-globe.....	273,092	Feb. 27	1914	536 } 537 }	23	796
Jackson, Andrew, San Francisco, Cal., assignor of two-thirds to A. B. Pullman and M. E. Ward, Chicago, Ill. Indicator-padlock.....	287,028	Oct. 23	1581	436	25	305
Jackson, Andrew, Chester, Pa. Producing patterns upon printing-blocks.....	274,944	Apr. 3	77	21, 22	23	1238
Jackson, Andrew and W. B. Jefforis, Xenia, Ill. Shank-lasting tool.....	273,283	Mar. 6	44	14	23	842
Jackson, Byron, San Francisco, and G. W. T. Carter, Byron, Cal.; said Carter assignor to said Jackson. Pulley-block.....	275,916	Apr. 17	1364	375	23	1475
Jackson, Byron, and G. W. Bonds, San Francisco, Cal.; said Bonds assignor to said Jackson. Hoisting apparatus for wagon-derricks, &c.....	285,903	Oct. 2	160	45	25	31
Jackson, Calvin, Wankesha, Wis. Show-stand for sample-books.....	270,592	Jan. 16	947	274	23	203
Jackson, Calvin, Wankesha, Wis. Temporary binder.....	282,527	Aug. 7	64	19	24	511
Jackson, Charles, California, Ohio. Roasting and baking pan.....	288,640	Nov. 20	1071	294	25	709
Jackson, Charles A., assignor to D. F. Robinson, Lawrence, Mass. Telephone system.....	259,539	Dec. 4	209	59	25	923
Jackson, Charles A., assignor of one-half to D. F. Robinson, Lawrence, Mass. Electric motor.....	289,540	Dec. 4	210	59	25	923
Jackson, Charles A., assignor of one-half to D. F. Robinson, Lawrence, Mass. Electric motor.....	289,541	Dec. 4	211	59	25	923
Jackson, Charles P., Chicago, Ill. Ice-chest.....	274,337	Mar. 20	1411	387	23	1092
Jackson, Charles P., Chicago, Ill. Refrigerator-car.....	281,631	July 17	1615	442	24	294
Jackson, Charles P., Chicago, Ill. Refrigerator-car.....	282,196	July 31	2365	651	24	432
Jackson, Charles T., New York, N. Y. Electric burglar-alarm.....	269,862	Jan. 2	49	15	23	12
Jackson, Francis W., East Orange, N. J. Photographic-plate holder.....	277,737	May 15	1495	406	23	1895
Jackson, Frank, and E. R. Austin, Manchester, county of Lancaster, assignors to W. R. Comings, London, England. Rail-lifter.....	274,609	Mar. 27	1777	494	23	1163
Jackson, George, Cohoes, N. Y. Machine for napping and brushing knitted goods.....	277,489	May 15	1209	325	23	1847

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Jackson, George H. (See Luburg, Charles E., assignor.)						
Jackson, George R. (See Moore and Jackson.)						
Jackson, Harry K. (See Whitney and Jackson.)						
Jackson, Jacob A. (See Bales and Jackson.)						
Jackson, Jacob A., Des Moines, Iowa. Check or account book .....	290,432	Dec. 18	1334	370	25	1137
Jackson, Johiel. (See Bullock and Jackson.)						
Jackson, Johiel, Fort Atkinson, Wis. Buckboard-wagon .....	284,019	Aug. 28	1900	532	24	867
Jackson, John F., and D. M. Kirkpatrick, Kansas City, Mo. Gas-engine .....	283,398	Aug. 21	1125	318	24	716
Jackson, John W., Sharpville, Pa. Oil-can .....	281,189	July 10	1053	291	24	193
Jackson, Noah, Grelton, Ohio. Traction-engine .....	282,197	July 31	2366	651	24	432
Jackson, Peter H., San Francisco, Cal. Iron and illuminating stairs .....	269,863	Jan. 2	51	16	23	12
Jackson, Peter H., San Francisco, Cal. Girder and beam .....	279,249	June 12	790	{ 217 218 }	{ 23 23 }	2268
Jackson, Peter H., San Francisco, Cal. Skylight .....	282,641	Aug. 7	201	58	24	535
Jackson, Peter H., San Francisco, Cal. Building-front .....	289,105	Nov. 27	1646	{ 456 457 }	{ 25 25 }	818
Jackson, R. (See Lidren, Christopher, assignor.)						
Jackson, Relief. (See Lidren, Christopher, assignor.)						
Jackson, Samuel, Lawrence, Mass. Spinning-mule .....	273,997	Mar. 13	964	265	23	1007
Jackson, Stella A., New York, N. Y. Picture-mount .....	288,060	Nov. 6	338	94	25	565
Jackson, Surn, Stockton, Cal. Pump .....	270,900	Jan. 23	1329	{ 383 384 }	{ 23 23 }	279
Jackson, Thomas J., Reynoldsburg, Ohio. Seed-planter .....	290,887	Dec. 25	1929	533	25	1248
Jackson, Walter M., et al. (See Sloper, Byron, assignor.)						
Jackson, Walter M., Providence, R. I. Lubricant for the cocks and valves of gas apparatus .....	280,625	July 3	346	.....	24	61
Jackson, Walter M., Providence, R. I. Metrical carburetor .....	280,746	July 3	496	140	24	88
Jackson, Walter M., Providence, R. I. Metrical regulator for distributing hydrocarbon liquid to gas or air .....	280,747	July 3	499	141	24	88
Jackson, William A., et al. (See Chambers, Josephus C., assignor.)						
Jackson, William H. (See Morrison, Gardner L., assignor.)						
Jackson, William J., Huntsville, Ala. Thrashing-machine .....	285,036	Sept. 18	1092	304	24	1105
Jackson, William J., McComb, Miss. Folding desk and seat .....	288,441	Nov. 13	827	224	25	659
Jackson, William J., assignor to Osceola Manufacturing Company, (limited,) Osceola Mills, Pa. Car-axle lubricator .....	284,209	Sept. 4	66	18	24	916
Jackson, William P., Sedalia, Mo. Car-door fastening .....	276,592	May 1	63	18	23	1638
Jackson, William W., Chicago, Ill. Bung for casks, barrels, &c. ....	280,931	July 10	739	206	24	136
Jacob, Frank, Woolwich, county of Kent, assignor to Siemens Brothers & Company, (limited,) Westminster, England. Electric conductor .....	287,288	Oct. 23	1910	{ 522 523 }	{ 25 25 }	366
Jacobs, Benjamin F., San Francisco, Cal. Printer's proof-press .....	271,468	Jan. 30	2048	589	23	409
Jacobs, Charles P. (See Shellenberger, John, assignor.)						
Jacobs, Felix A., Columbus, Ohio. Packing wheelbarrows for transportation .....	274,781	Mar. 27	1976	550	23	1198
Jacobs, J. Eugene. (See Nash, Caleb P., assignor.)						
Jacobs, Jacob, New York, N. Y. Illuminating-tile .....	290,584	Dec. 18	1536	423	25	1172
Jacobs, James M., assignor to J. M. Jacobs & Son, Bluff Creek, Ind. Medicine for dyspepsia. ....	282,898	Aug. 7	506	.....	24	590
Jacobs, Joseph, San Francisco, Cal. Wheel-guard for railway-cars .....	277,490	May 15	1212	325	23	1847
Jacobs, Marion, Sturgis, Mich. Car-coupling .....	276,183	Apr. 24	1688	466	23	1539
Jacobs & Son, J. M. (See Jacobs, James M., assignor.)						
Jacobs, William B. (See Stevenson and Jacobs.)						
Jacobs, William E., Columbus, Ohio. Wheeled scraper or excavator .....	289,841	Dec. 11	590	164	25	997
Jacobsen, Emil, Berlin, Germany. Production of yellow coloring-matter .....	290,585	Dec. 18	1538	.....	25	1172
Jacobsen, James M., Preston, Iowa. Corpsel-lifter .....	286,202	Oct. 9	518	143	25	106
Jacobson, John, Boston, Mass. Manufacture of ornamental plaques .....	285,038	Sept. 18	1093	305	24	1105
Jacobus, Aaron D., Newark, N. J. Horse-bell .....	278,709	June 5	43	13	23	2132
Jacobus, Percival G. (See Emerson, George W., assignor.)						
Jacoby, Daniel W., Abilene, Kans. Check-rower .....	289,913	Dec. 11	680	189	25	1012
Jacoby, Frederick, Fort Wayne, Ind. Ice-box .....	271,072	Jan. 23	1541	444	23	313
Jacoby, John C., Polk, Ohio. Grain-drier .....	286,203	Oct. 9	518	143	25	106
Jacot, Georges F., Loclo, Switzerland. Watch-escapement .....	272,553	Feb. 20	1216	340	23	668
Jacotot, Pierre P., Orgex, France. Moving plow .....	280,479	July 3	182	48	24	33
Jacques, William W., assignor to American Bell Telephone Company, Boston, Mass. Electric cable .....	270,438	Jan. 9	744	218	23	154
Jadwin, Orlando H., New York, N. Y. Traction-cable railway .....	284,020	Aug. 28	1901	533	24	867
Jaeger, Gustav L. (See Endemann, Hermann, assignor.)						
Jaeger, Gustav L., New York, N. Y. Match-box .....	270,073	Jan. 2	287	85	23	58
Jaeger, Gustav L., New York, N. Y. Lead-pencil .....	272,700	Feb. 20	1406	394	23	701
Jaeger, Gustav L., New York, N. Y. Lead or crayon holder .....	273,093	Feb. 27	1917	537	23	797
Jaeger, Gustav L., New York, N. Y. Lead or crayon holder .....	273,546	Mar. 6	394	106	23	901
Jaeger, Gustav L., New York, N. Y. Match-making machine .....	273,848	Mar. 13	786	{ 213 214 }	{ 23 23 }	977
Jaeger, Gustav L., New York, N. Y. Match-making machine .....	273,849	Mar. 13	789	214	23	978
Jaeger, Gustav L., New York, N. Y. Match and box therefor .....	280,181	June 26	1918	539	23	2474
Jaeger, Gustav L., New York, N. Y. Match-box .....	281,075	July 10	908	253	24	168
Jaeger, Gustav L., New York, N. Y. Manufacture of matches .....	282,326	July 31	2325	692	24	460
Jaeger, Gustav L., New York, N. Y. Cell-case .....	282,899	Aug. 7	507	142	24	590
Jaeger, Julius, Rutherford Park, N. J. Insect-powder ejector .....	270,074	Jan. 2	288	85	23	59
Jaeger, Julius, Rutherford Park, N. J. Reflector .....	285,270	Sept. 18	1363	384	24	1154
Jaeschke, Henry, St. Louis, Mo. Combined musical instrument and stool .....	270,075	Jan. 2	289	85, 86	23	59
Jahnke, Charles. (See Warnick, Charles P., assignor.)						
James, Benjamin L., Denver, Colo. Calcimine compound .....	278,969	June 5	434	.....	23	2197
James, Charles B., St. Louis, Mo. Vehicle .....	270,076	Jan. 2	290	86	23	59
James, Charles H., Cincinnati, Ohio. Combined hose-reel and ladder-truck .....	275,493	Apr. 10	825	223	23	1375
James, Enoch, et al. (See Taylor, Charles, assignor.)						
James, Henry, Memphis, Tenn. Bolster-plate for vehicles .....	281,076	July 10	909	254	24	168
James, Joseph, et al. (See Taylor, Charles, assignor.)						
James, Joshua L., Forsyth, Ill. Gate .....	285,751	Sept. 25	1955	553	24	1265
James, Lycurgus L., Medora, Ind. Wagon-brake .....	271,855	Feb. 6	328	90	23	498
James, Morton F., Big Rapids, Mich. Barrel-cover .....	276,045	Apr. 17	1515	417	23	1502
James, Rees, Houghton, Mich. Soldering-copper .....	284,856	Sept. 11	857	241	24	1056
James, Samuel, Lebanon, Mo. Filter .....	284,428	Sept. 4	329	92	24	959
James, Thomas E., Rochester, N. Y. Ringing burglar-alarm .....	277,738	May 15	1496	406	23	1895
James, Thomas H., Republic, Mich. Car-coupling .....	287,130	Oct. 23	1708	468	25	330
Jameson, Alexander C., Indianapolis, Ind. Bung for beer-barrels .....	280,830	July 10	614	{ 171 172 }	{ 24 24 }	114



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Jameson, William W. (See Delany and Jameson.)						
Jamieson, James, assignor of one-half to J. G. Bowes, Hamilton, Ontario, Canada. Parlor-stove	282,085	July 31	2206	{ 606 607	24	407
Jamieson, John, Rockaway Beach, N. Y. Steam ice-cutting machine	273,998	Mar. 13	966	266	23	1007
Jamison, John P., Cambridgeport, Mass., assignor to New England Decorating Machine Company, Portsmouth, N. H. Ornamenting wood	271,469	Jan. 30	2049	590	23	409
Janes & Kirtland. (See Russell, Samuel, assignor.)						
Janggen, John. (See Oberle and Janggen.)						
Jansson, Olof, West Sweden, Wis. Pocket-inkstand	286,703	Oct. 16	1165	314	25	227
Jantzen, John H. (See Rhule, Jacob, assignor.)						
January & Wood. (See Jaquith, Gilman, assignor.)						
Jaquith, Gilman, assignor to himself and January & Wood, Maysville, Ky. Spinning-ring	280,626	July 3	346	96	24	61
Jaquith, Gilman, assignor to himself and January & Wood, Maysville, Ky. Whirl for bobbin-spindles	284,429	Sept. 4	330	92	24	959
Jarecki, Albert H. (See Jarecki, Charles and A. H.)						
Jarecki, Albert H., Erie, Pa. Safety-valve	287,131	Oct. 23	1709	468	25	330
Jarecki, Charles and A. H., Erie, Pa. Pop safety-valve	281,369	July 17	1287	357	24	240
Jarecki, Friderich, Erie, Pa. Lubricator	283,399	Aug. 21	1127	319	24	716
Jarecki, Friderich, Erie, Pa. Lubricator	283,400	Aug. 21	1128	319	24	716
Jarecki, Friderich, Erie, Pa. Lubricating apparatus	283,401	Aug. 21	1129	319	24	716
Jarratt, Jesse A., Concord, Ala. Fence	285,272	Sept. 18	1364	385	24	1154
Jarre, Etienne A. (See Jarre, Pierre J. and E. A.)						
Jarre, Pierre J. and E. A., Paris, France. Apparatus for filling target-balls	279,391	June 12	956	274	23	2299
Jarvis, Oscar F., Kansas City, Mo. Combined corn, cotton, and seed planter	283,347	Aug. 14	1056	297	24	698
Jarvis, Samuel E., Lansing, Mich. Engine-valve governor	273,999	Mar. 13	969	266	23	1008
Jarvis, Samuel E., Lansing, Mich. Steam-engine	275,3-9	Apr. 10	692	184	23	1353
Jarvis, Samuel E., Lansing, Mich. Balanced slide-valve	276,020	May 22	1843	503	23	1962
Jarvis, Samuel E., Lansing, Mich. Steam-engine governor	280,042	June 26	1771	497	23	2447
Jarvis, Solomon R., Philippi, W. Va. Harness-hook	274,782	Mar. 27	1977	550	23	1198
Jarvis, Thomas, Chicago, Ill. Combined window-platform and fire-escape	279,167	June 12	703	191	23	2253
Jarvis, Thomas, Chicago, Ill. Separable button	279,568	June 19	1199	332	23	2341
Jasnagzy, Joseph O., Brooklyn, and D. H. Frost, New York, N. Y. Case for toilet-sets	274,610	Mar. 27	1778	494	23	1163
Jasnowski, Philip, Detroit, Mich. Whip-socket	274,199	Mar. 20	1222	336	23	1060
Jasper, William, Santa Cruz, Cal. Hydrocarbon-burner and apparatus for burning hydrocarbons	275,390	Apr. 10	693	{ 184 185	23	1353
Jay, Isaac. (See Jay and Chambers.)						
Jay, James C. and I. and B. L. Chambers, Arapahoe, Nebr. Cultivator	282,198	July 31	2366	651	24	432
Jaynes, Alphonso L., Buffalo, N. Y. Spring bed-bottom	275,661	Apr. 10	1040	281	23	1412
Jeanjaquet, F. Eugene, Detroit, Mich. Machine for cutting watch-wheels	275,494	Apr. 10	826	224	23	1375
Jeanjaquet, F. Eugene, assignor of one-half to J. F. Guilloz, Detroit, Mich. Colter-cleaner	288,442	Nov. 13	828	224	25	660
Jebb, Thomas A. (See Norton, Thomas, assignor.)						
Jebb, Thomas A., Buffalo, N. Y. Process of and apparatus for recovering starch and other valuable substances from waste water in the manufacture of starch, &c.	270,439	Jan. 9	746	219	23	154
Jebb, Thomas A. and W. T., Buffalo, N. Y. Method of and apparatus for manufacturing distilled spirits from grain	276,046	Apr. 17	1516	417	23	1502
Jebb, William T. (See Jebb, Thomas A. and W. T.)						
Jebb, William T., Buffalo, N. Y. Process of and apparatus for manufacturing distilled spirits from grain	274,783	Mar. 27	1978	551	23	1198
Jeffers, William B. (See Jackson and Jeffers.)						
Jeffers, Joseph W., Baltimore, Md. Letter-box	284,857	Sept. 11	858	241	24	1056
Jeffers, L. G., Jr., et al. (See Cole, Thomas Z., assignor.)						
Jeffers, Loren G., et al. (See Cole, Thomas Z., assignor.)						
Jefferson, Cornelius. (See Jefferson, Joseph, C. L., and M.)						
Jefferson, Joseph, C. L., and M., Bradford, county of York, England. Machine for washing fibers	286,305	Oct. 9	666	{ 177 178	25	131
Jefferson, Lazarus. (See Jefferson, Joseph, C. L., and M.)						
Jefferson, Mordecai. (See Jefferson, Joseph, C. L., and M.)						
Jefferson, Thomas, New York, N. Y. Surfacing and ornamenting wall-paper	273,364	Mar. 6	164	.....	23	862
Jeffery, Edwin A., et al. (See Martin, Morris, assignor.)						
Jeffery, Frederick O., et al. (See Martin, Morris, assignor.)						
Jeffery, Thomas B., Chicago, Ill. Velocipede	275,917	Apr. 17	1364	376	23	1475
Jeffery, Thomas B., Chicago, Ill. Velocipede	282,528	Aug. 7	65	19	24	511
Jeffords, John E., Philadelphia, Pa. Beer-mug	272,261	Feb. 13	840	234	23	598
Jeffrey, Joseph A. (See Legg, Benjamin A., assignor.)						
Jeffries, Van Oram, Coshocton, Ohio. Fifth-wheel	275,495	Apr. 10	828	224	23	1376
Jegler, Theodor. (See Offermann and Jegler.)						
Jelinek, Anton, assignor of one-half to J. A. Craig, Chicago, Ill. Bread or cheese cutter	280,480	July 3	183	48	24	34
Jencks, John H., Waterbury, Conn. Cutting-pliers	276,417	Apr. 24	1989	551	23	1590
Jenifer, Gustave, et al. (See Pullen, Joseph, assignor.)						
Jenkins, Adaline M., administratrix. (See Jenkins, Harry M.)						
Jenkins, Alfred B., New York, N. Y. Steam-valve	273,284	Mar. 6	45	14	23	842
Jenkins, Charles, Boston, Mass. Valve	271,073	Jan. 23	1542	444	23	314
Jenkins, Edward W., Norristown, Pa. Grain-binder	280,481	July 3	184	49	24	34
Jenkins, Edward W., Norristown, Pa. Harvesting-machine	283,248	Aug. 14	930	259	24	673
Jenkins, Edward W., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Grain-binder	271,074	Jan. 23	1543	445	23	314
Jenkins, Edwin A., Law, Melbourne, and W. Price, Carlton, Victoria. Annealing chilled and other iron castings	282,728	Aug. 7	313	.....	24	555
Jenkins, Frank W., Brooklyn, N. Y. Direct-acting compound engine	287,289	Oct. 23	1911	523	25	366
Jenkins, Frank W., Brooklyn, N. Y. Apparatus for cutting packings	288,339	Nov. 13	687	{ 189 190	25	635
Jenkins, Harry M., deceased; A. M. Jenkins, San Francisco, Cal., administratrix. Sewing-machine needle	286,014	Oct. 2	289	81	25	24
Jenkins, Jabez, Philadelphia, Pa. Insole	280,627	July 3	347	96	24	61
Jenkins, Jabez, Philadelphia, Pa. Boot and shoe	283,249	Aug. 14	932	259	24	673
Jenkins, Joel, et al. (See Smith, Luella E., assignor.)						
Jenkins, Joel, Montclair, N. J. Safety-pin	276,971	May 1	570	149	23	1724
Jenkins, Joel, Montclair, N. J., assignor of one-half to G. P. Farmer, New York, N. Y. Safety-pin	281,190	July 10	1054	291	24	193
Jenkins, Morgan M. (See Adams and Jenkins.)						
Jenkins, Sylvester, Norristown, Pa. Key-board attachment for musical instruments	280,043	June 26	1772	498	23	2447
Jenkins, Thomas, Jr. (See Drummond and Jenkins.)						
Jenkins, William R., Jr., Bellefonte, Pa. Rake for ore-washers	271,856	Feb. 6	529	91	23	498
Jenkins, William R., Jr., Bellefonte, Pa. Car-wheel	276,047	Apr. 17	1518	418	23	1502

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Jenkinson, Richard C. (See Reichenbach, Oscar, assignor.) (Reissue.)						
Jenks, Charles W., Philadelphia, Pa. Bag or satchel	287,680	Oct. 30	2419	652	25	470
Jenks, Lemuel P., Boston, assignor of one-half to L. R. Binney, Shirley, Mass. Carpet-lining, &c.	271,075	Jan. 23	1546	445	23	314
Jenks, M. Woodburn, Decatur, Ill. Plaiting-machine	270,568	Jan. 9	911	263	23	187
Jenks, Scott, Cheshire, Mass., and H. W. Millar, assignors to said Jenks and C. and H. W. Millar, Utica, N. Y. Cheese-making apparatus	283,250	Aug. 14	933	260	24	673
Jenks, Scott, Cheshire, Mass., and H. W. Millar, assignors to said Jenks and C. and H. W. Millar, Utica, N. Y. Cheese-making apparatus	283,251	Aug. 14	935	260 261	24	673
Jenks, Stephen A. (See Booth, John, assignor.)						
Jenne, Charles H., Indianapolis, Ind. Spring-motor for road-wagons	287,939	Nov. 6	189	55, 56	25	540
Jenne, Homer E., Ben Lomond, Cal. Interest-indicator	287,290	Oct. 23	1914	524	25	366
Jenney, Edwin S., Syracuse, N. Y. Head-light	270,804	Jan. 16	1209	349	23	252
Jennings, Abraham G. (See Urbahn, Alwill, assignor.)						
Jennings, Arthur O. (See Kuhn, Edmund, assignor.)						
Jennings, Arthur O., Southport, assignor to Jerome & Co., New Haven, Conn. Clock-case	278,144	May 22	1993	548	23	1988
Jennings, Orlando B., Honey Creek, Wis. Manufacture of sugar from sugar-cane, sorghum, maize, and other plants	287,544	Oct. 30	2229	605 606	25	434
Jennings, Orlando B., Honey Creek, Wis. Evaporator for making sugar from saccharine juices, &c.	287,545	Oct. 30	2232	606	25	435
Jennings, Ralph S., Baltimore, Md. Preserving fish	273,094	Feb. 27	1918		23	797
Jennings, Wayland H., Rochester N. Y. Process of and apparatus for separating seeds from cucumbers, &c.	283,787	Aug. 28	1602	452	24	815
Jensen, Carl L., Philadelphia, Pa. Manufacture of pepsin	286,138	Oct. 2	439		25	82
Jensen, Carl L., Philadelphia, Pa. Vaginal syringe	287,681	Oct. 30	2419	652	25	470
Jensen, Jens, Racine, Wis. Facing-iron for wagon-bodies	280,182	June 26	1919	539	23	2474
Jensen, Jens, Racine, Wis. Neck-yoke	280,183	June 26	1920	540	23	2474
Jensen, Johannes M. (See Fallesen and Jensen.)						
Jensen, Mathias, assignor of seventeen twenty-sixths to A. T. Brakke, M. J. Kinney, Astoria, and S. Farrell, Portland, Oreg. Can-filling machine	281,767	July 24	1804	492 493	24	333
Jensen, Ole A., Chicago, Ill. Drawer	290,237	Dec. 18	1071	300	25	1092
Jensen, Fred., San Francisco, Cal. Separation of nitric acid from a mixture of nitric and sulphuric acids	284,742	Sept. 11	722	201	24	1033
Jerauld, Ensign L. (See Kendrick and Jerauld.)						
Jerome & Co. (See Jennings, Arthur O., assignor.)						
Jerzmanowski, Erazm. J., New York, N. Y. Generating gas	278,145	May 22	1993	548	23	1988
Jerzmanowski, Erazm. J., New York, N. Y. Process of and apparatus for manufacturing gas	278,146	May 22	1994	548	23	1989
Jerzmanowski, Erazm. J., New York, N. Y. Apparatus for producing gas	289,842	Dec. 11	593	164 165	25	997
Jerzmanowski, Erazm. J., New York, N. Y. Producing combustible gas	289,914	Dec. 11	681	189	25	1012
Jessup, John C., New York, N. Y. Color-can	286,015	Oct. 2	290	81	25	54
Jett, John, San Francisco, Cal. Combined stock and case for fire-arms	276,593	May 1	65	18	23	1639
Jettinger, Oscar. (See Unckrich, Ferdinand F. P., assignor.)						
Jewell, Delbert W., Alexander, N. Y. Piston-packing	271,076	Jan. 23	1547	446	23	315
Jewell, Omar H., Chicago, Ill. Lubricator	270,805	Jan. 16	1210	349	23	252
Jewell, Omar H., Chicago, Ill. Oil or water injector	271,077	Jan. 23	1548	446	23	315
Jewell, William M., Denver, Colo. Feed-mechanism for roller-mills	280,184	June 26	1920	540	23	2475
Jewett, Dewitt C., Sand Spring, Iowa. Hay-loader	271,470	Jan. 30	2050	590	23	410
Jewett, Edward M. (See Burk, John J., assignor.)						
Jewett, Frank F., Oberlin, Ohio. Bottle-stopper	276,822	May 1	372	99	23	1691
Jewett, Luther K., Fitchburg, Mass. Construction-car	279,950	June 26	1654	464	23	2427
Jewett, Luther K., Fitchburg, Mass. Car-truck	279,951	June 26	1655	464	23	2427
Jewett, Nathan, Toledo, Ohio, assignor of one-half to Plano Manufacturing Company, Plano, Ill. Cord-tyer for grain-binding machines	277,739	May 15	1497	406	23	1895
Jewett, Nathan, Toledo, Ohio, assignor to himself and Plano Manufacturing Company, Plano, Ill. Knot-tying device for grain-binders	284,430	Sept. 4	331	92	24	959
Jewett, Nathan, assignor of one-half to W. H. Cray and A. E. Rood, Toledo, Ohio. Harvester-reel	284,304	Sept. 4	183	51	24	935
Jewett, Thomas B., Steubenville, Ohio. Cultivator	274,784	Mar. 27	1980	551	23	1199
Jiencke, George, Philadelphia, Pa., assignor to American Spring Car Motor Company, Camden, N. J. Spring-motor	273,365	Mar. 6	165	46	23	862
Jillson, Alonzo, Racine, Wis. Hub for traction-wheels	278,021	May 22	1844	503	23	1962
Joadwine, John, Chicago, Ill. Detachable calk for horseshoes	276,694	May 1	205	53	23	1659
Jobbins, W. F. (See Freeman, Walter K., assignor.)						
Jobbins, William F. (See Beardslee, George W., assignor.)						
Jobbins, William F. (See Freeman, Warren P., assignor.)						
Jobbins, William F., East Orange, N. J. Electric lamp	270,806	Jan. 16	1211	349	23	252
Jocelyn, Albert H. (See Holden and Griswold, assignors.)						
Jocelyn, Albert H. (See Thomas, Eddy T., assignor.)						
Jochum, John, Brooklyn, N. Y. Operating cars on cable railways	288,815	Nov. 20	1291	354	25	747
Jocken, Sophia. (See Lauckner, Richard, assignor.)						
Joel, Samuel, New York, N. Y. Holder for the settings of stones	289,106	Nov. 27	1648	457	25	818
Johannes, Gerhard, and P. Cyphers, Hiawatha, Kans. Self-setting animal-trap	273,547	Mar. 6	395	106	23	901
Johannsen, Nicholas A. L. J., Brooklyn, N. Y. Duplex spring-balance	269,941	Jan. 2	143	42	23	30
Johansen, Johan C. (See Woodman and Johansen.)						
John, Harry. (See Allison, John, and Evans.)						
John, Lewis A., Dunlap, Kans. Combined harrow and cultivator	289,659	Dec. 4	357	101	25	950
Johns, Charles T., assignor of one-half to C. D. Everett, Cleveland, Ohio. Railway safety-switch	274,200	Mar. 20	1223	336	23	1060
Johns, Henry W., Stamford, Conn. Fire-proof cloth	290,238	Dec. 18	1072	300	25	1092
Johns, Henry W., Stamford, Conn. Asbestos cloth	290,239	Dec. 18	1073	300	25	1092
Johns, Will R., Rockford, Ill. Carpet-fastener	284,637	Sept. 11	583	164	24	1009
Johns, Will R., Rockford, Ill. Combined hay tedder and rake	290,775	Dec. 25	1789	494	25	1224
Johnsen, Carl, Christiania, Norway. Dividers	280,831	July 10	615	172 173	24	115
Johnsen, Nels E. (See Johnson and Johnson.)						
Johnson, Abijah, Denver, Colo. Fire-escape	287,940	Nov. 6	191	56	25	540
Johnson, Adalbert L., Atchison, assignor of one-half to H. R. Tomlinson, Lawrence, Kans. Washing-machine	281,882	July 24	1950	533	24	359
Johnson, Albert F. and F. B., assignors to Johnson Manufacturing Company, Brooklyn, N. Y. Automatic printing-telograph	275,339	Apr. 3	597	160 161 162	23	1327



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Johnson, Albert M., New Haven, Conn. Watchman's time-recorder.....	287,291	Oct. 23	1915	524	25	366
Johnson, Albert W., New Haven, Conn. Presser-foot for sewing-machines.....	282,642	Aug. 7	202	59	24	535
Johnson, Alfred. (See Costolo and Johnson.)						
Johnson, Allen P., et al. (See Sawtell, La Fayette, assignor.)						
Johnson, Andrew F., Stillwater, and J. P. Turner, St. Peter, Minn. Combined bag filling and weighing machine.....	290,240	Dec. 18	1074	300	25	1092
Johnson, Andrew J., Cuyahoga Falls, Ohio. Fire-escape.....	286,306	Oct. 9	667	178	25	131
Johnson, Arthur H., Woodland, Cal. Shoe for grain-separators.....	289,915	Dec. 11	682	189	25	1012
Johnson, Calvin P., and S. T. Walkley, Springfield, Mo. Car-coupling.....	275,662	Apr. 10	1041	281	23	1412
Johnson, Calvin P., and S. T. Walkley, Springfield, Mo. Car-coupling.....	275,663	Apr. 10	1042	282	23	1412
Johnson, Charles, Union City, Mich. Eccentric.....	282,327	July 31	2526	692	24	460
Johnson, Charles, Union City, Mich. Eccentric.....	287,440	Oct. 30	2100	571	25	408
Johnson, Charles, St. George, New Brunswick, Canada. Fire-escape.....	284,431	Sept. 4	332	92	24	959
Johnson, Charles C., assignor to J. Messinger, Springfield, Vt. Device for suspending lamps.....	271,579	Jan. 30	2177	627	23	431
Johnson, Charles F., Owego, N. Y. Force-feed fertilizer-distributor.....	285,413	Sept. 25	1537	434	24	1190
Johnson, Charles M. (See Allaire and Johnson.)						
Johnson, Charles M. (See McCarty and Johnson.)						
Johnson, Claude M. (See McMurtry and Johnson.)						
Johnson, Daniel A. (See Merrill, Rufus S., assignor.)						
Johnson, Daniel A., Boston, Mass. Thill-coupling.....	282,086	July 31	2207	607	24	408
Johnson, Daniel A., assignor of one-fourth to R. S. Merrill, Boston, Mass. Flying target.....	282,000	July 24	2089	573	24	382
Johnson, Edward H. (See Bergmann, Sigmund, assignor.)						
Johnson, Edward J., et al. (See Stoddard, Oscar, assignor.)						
Johnson, Edwin L., Shutesbury, Mass. Yoke for draft-animals.....	287,682	Oct. 30	2420	653	25	472
Johnson, Elmore, and J. Barnes, Burlington, Vt. Cooler for liquids and solids.....	290,687	Dec. 25	1671	460	25	1201
Johnson, Ephraim S., Jersey City, N. J. Chain-bar, &c.....	272,444	Feb. 20	1080	304	23	644
Johnson, Ephraim S., Jersey City, N. J. Pencil or crayon holder.....	290,988	Dec. 25	2069	569	25	1270
Johnson, Ernest V., assignor to Ottawa Tile Company, Chicago, Ill. Fire-proof ceiling.....	270,677	Jan. 16	1055	302	23	222
Johnson, Frank, Afton, N. Y. Horse-collar fastener.....	278,970	June 5	435	119	23	2197
Johnson, Frank B. (See Johnson, Albert F. and F. B.)						
Johnson, Frank C., Kishwaukee, Ill. Neck-yoke.....	282,529	Aug. 7	66	20	24	512
Johnson, Frank G., Brooklyn, N. Y. Pocket cigar-clipper.....	274,201	Mar. 20	1924	337	23	1060
Johnson, Frank G., Brooklyn, N. Y. Ballasting.....	284,210	Sept. 4	68	19	24	916
Johnson, Frank G., Brooklyn, and J. H. Hayward, Northfield, N. Y. Canopy for folding steamer-chairs.....	270,294	Jan. 9	474	139	23	103
Johnson, Frank G., Brooklyn, and J. H. Hayward, Northfield, N. Y. Arm for folding steamer-chairs.....	271,248	Jan. 30	1750	506	23	357
Johnson, Frank G., Brooklyn, and J. H. Hayward, Northfield, N. Y. Adjustable steamer-chair.....	271,857	Feb. 6	330	91	23	499
Johnson, Frank H., Biggsville, Ill. Cultivator.....	272,701	Feb. 20	1407	395	23	701
Johnson, Frederick H., Elizabeth, N. J., assignor to Van Campen, Johnson & Hance, New York, N. Y. Match-receptacle.....	282,731	Aug. 7	316	90	24	555
Johnson, Frederick M., Gardiner, Oreg. Ore concentrator and amalgamator.....	287,546	Oct. 30	2233	606	25	435
Johnson, George J. and E. H. Thomas, La Crosse, Wis. Draw-gear for railway-cars.....	290,241	Dec. 18	1076	301	25	1093
Johnson, Gordon B. (See Murphy, Daniel R., assignor.)						
Johnson, Hastings H. (See White, Clarence O., assignor.)						
Johnson, Henry, Washington, D. C. Folding commercial packing-box.....	284,211	Sept. 4	69	19	24	916
Johnson, Henry, assignor to M. N. Johnson, New York, N. Y. Paper-cutting machine.....	273,285	Mar. 6	46	14	23	842
Johnson, Henry C., Meadville, Pa. Fire-proof safe.....	281,514	July 17	1470	404	24	271
Johnson, Henry H. (See Van Benschoten and Johnson.)						
Johnson, Isaac W., New Richmond, Wis. Mortising-machine.....	286,016	Oct. 2	290	81	25	54
Johnson, Ithuel M., Corning, N. Y. Wagon-jack.....	276,594	May 1	66	18	23	1639
Johnson, Jacob, Newburyport, assignor of one-fourth to M. Scrannage, Medford, Mass. Time-signal.....	286,616	Oct. 16	1054	284	25	208
Johnson, Jacob K., Union Point, Ga. Mop-holder.....	285,039	Sept. 18	1094	305	24	1106
Johnson, James A., Charlestown, Ind. Land-roller.....	288,061	Nov. 6	339	95	25	565
Johnson, James M., Northumberland, N. H. Cooking-steamer.....	287,292	Oct. 23	1918	524	25	367
Johnson, Jeremiah, St. Joseph, Mo. Combined dirt-scraper, leveler, and ditching-machine.....	283,113	Aug. 14	765	215	24	643
Johnson, Jeremiah P., assignor to Johnson, Rose & Co., Detroit, Mich. Platform-spring.....	280,832	July 10	616	173	24	115
Johnson, Jerome F., et al. (See Bond, Nathan O., assignor.)						
Johnson, John, Brooklyn, N. Y. High-pressure filter-press.....	270,807	Jan. 16	1212	350	23	252
Johnson, John, Atkinson, Ill. Fence-post.....	286,017	Oct. 2	291	82	25	55
Johnson, John, and L. Wagner, assignors of one-third to G. Allen, Chicago, Ill. Valve.....	283,788	Aug. 28	1603	453	24	815
Johnson, John A. (See Conradson, Conrad M., assignor.)						
Johnson, John N. (See Stoddard and Johnson.)						
Johnson, Jonathan, Lowell, Mass. Heater.....	274,785	Mar. 27	1981	551	23	1199
Johnson, Joseph S., and M. Osborn, Dos Cabezas, Ariz. Ter. Shoe and die for amalgamating-pans.....	276,418	Apr. 24	1990	551	23	1591
Johnson, Joseph W. (See Thatcher and Johnson.)						
Johnson, Joshua, Briscoe Run, W. Va. Portable fence.....	283,114	Aug. 14	767	216	24	643
Johnson, Larence A., and N. E. Johnsen, Portland, Oreg. Dredging-machine.....	281,883	July 24	1952	533	24	359
Johnson, Lenson, Vincennes, Ind. Compound electrical conductor.....	288,443	Nov. 13	829	225	25	660
Johnson, Lewis C., Auburn, Ky. Conveyor for smoke and cinders.....	290,566	Dec. 18	1538	423	25	1172
Johnson, Louis K., Brooklyn, N. Y. Type holder and separator.....	277,740	May 15	1499	407	23	1896
Johnson, Louis K., Brooklyn, N. Y. Type and space holder.....	279,168	June 12	704	191	23	2253
Johnson, Louis K., and A. A. Low, Brooklyn, N. Y. Type-setting apparatus.....	271,711	Feb. 6	148	41	23	466
Johnson, Louis K., and A. A. Low, Brooklyn, N. Y. Type setting and distributing machine.....	275,664	Apr. 10	1043	282	23	1412
Johnson, Louis K., and A. A. Low, Brooklyn, N. Y. Type-distributing apparatus.....	282,988	Aug. 14	603	170	24	615
Johnson, Lyman P., Seneca Castle, N. Y. Reel for wire.....	280,628	July 3	348	96	24	61
Johnson, M. Nichols. (See Johnson, Henry, assignor.)						
Johnson, Madison L., Galena, Ill. Basket for burial-caskets.....	275,665	Apr. 10	1046	283	23	1413
Johnson Manufacturing Company. (See Johnson, Albert F. and F. B., assignors.)						
Johnson, Mathew, Ellenville, N. Y. Apparatus for making glass insulators.....	282,929	Aug. 14	605	171	24	615
Johnson, Mathew, Chicago, Ill. Tuning device for stringed instruments.....	288,062	Nov. 6	339	95	25	565
Johnson, Miles E., Palmer, Ill. Check-rod planter.....	288,444	Nov. 13	830	225	25	660
Johnson, Moses C., assignor to himself and W. N. Woodruff, Hartford, Conn. Wheel-hub.....	273,548	Mar. 6	397	106	23	902
Johnson, Moses C., assignor of one-half to W. N. Woodruff, Hartford, Conn. Pivoted hand-tool.....	273,548	Mar. 6	398	106	23	902
Johnson, Moses C., assignor to himself and W. N. Woodruff, Hartford, Conn. Vehicle-wheel.....	273,850	Mar. 13	790	214	23	978
Johnson, Percy H., Marlborough, Mass. Game.....	282,990	Aug. 14	607	172	24	615
Johnson, Peter. (See Hamilton, Jonathan R., assignor.)						
Johnson, Peter L., Springfield, Mass. Window-mirror.....	285,037	Sept. 18	1092	305	24	1105

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Johnson Railway Heater Company. (See Johnson and Buerkel, assignors.)						
Johnson, Roberto H., Palestine, Tex. Hand-car	270,678	Jan. 16	1056	302	23	222
Johnson, Richard, Belleville, Ill. Coal-mining machine	284,560	Sept. 4	485	136 137	24	986
Johnson, Richard A., Newnan, Ga. Hand seed-planter and fertilizer-distributor	287,132	Oct. 23	1710	468	25	330
Johnson, Richard J. (See Smith and Johnson.)						
Johnson, Richard W., et al. (See King, Josias R., assignor.)						
Johnson, Robert, and J. F. Buerkel, Boston, Mass. Heater	288,708	Nov. 20	1159	318	25	723
Johnson, Robert, and J. F. Buerkel, assignors to Johnson Railway Heater Company, Boston, Mass. Heater	279,486	June 12	1096	303	23	2317
Johnson, Robert M., Hainesport, N. J. Core-box	273,095	Feb. 27	1919	537	23	797
Johnson, Rose & Co. (See Johnson, Jeremiah P., assignor.)						
Johnson, Samuel, San Francisco, Cal. Sewer-gate	289,107	Nov. 27	1648	457	25	818
Johnson, Samuel, San Francisco, Cal. Sewer-gate	289,108	Nov. 27	1649	458	25	819
Johnson, Samuel W., Medford, Mass. Marine refrigerator	276,824	May 1	374	100	23	1691
Johnson, Samuel W., Belmont, Mass. Ice-machine	288,063	Nov. 6	340	95	25	565
Johnson Steel Street Rail Company. (See Moxham, Arthur J., assignor.)						
Johnson, Tom L., Indianapolis, Ind. Street-railway rail	272,554	Feb. 20	1217	340 341	23	668
Johnson, Tom L., Indianapolis, Ind. Curve, frog, &c., for street-railways	276,419	Apr. 24	1951	551	23	1591
Johnson, Walter, Jackson, Mich. Tool for compressing seals	278,434	May 29	2392	652 653	23	2067
Johnson, Warren S., Whitewater, assignor of one-half to W. Plankinton, Milwaukee, Wis. Electric tele-thermoscope	281,884	July 24	1953	534	24	359
Johnson, Warren S., Whitewater, assignor of one-half to W. Plankinton, Milwaukee, Wis. Electric meter	286,445	Oct. 9	835	226	25	162
Johnson, Wiley T. (See Tate and Johnson.)						
Johnson, William, Lamberville, N. J. Vise	277,570	May 15	1308	351	23	1862
Johnson, William E. (See Lange, Edward, assignor.)						
Johnson, William H., Manchester, county of Lancaster, England. Wire-netting	278,147	May 22	1996	549	23	1989
Johnson, William H., assignor to T. A. Galt and G. S. Tracy, Sterling, Ill. Automatic check-row planter	272,702	Feb. 20	1408	395	23	701
Johnson, William H., assignor to T. A. Galt and G. S. Tracy, Sterling, Ill. Corn-planter	284,858	Sept. 11	859	241	24	1056
Johnson, William J., Boston, Mass. Press for drying matrices	271,858	Feb. 6	332	91	23	499
Johnson, William J., Columbus, Miss. Ornamental chain	290,688	Dec. 25	1673	461	25	1202
Johnson, William M., et al. (See Hartman, Henry, assignor.)						
Johnson, William O., Kaufman, Tex. Treadle	289,418	Dec. 4	55	16	25	896
Johnson, William S., Washington, D. C. Electrical signaling device	283,736	Aug. 21	1526	431	24	790
Johnston, Abner, Cornwall, N. Y. Fruit-gathering vessel	280,185	June 26	1921	540	23	2475
Johnston, Abner, Cornwall, assignor of two-thirds to N. Secor, New York, N. Y. Belt-coupling	280,186	June 26	1923	541	23	2475
Johnston, Abner, Cornwall, assignor of one-half to N. Secor, New York, N. Y. Car-coupling	288,816	Nov. 20	1292	354	25	747
Johnston, Alexander H., Detroit, Mich. Load-binder	289,109	Nov. 27	1650	458	25	819
Johnston, Algernon K. (See Nugent, Edward, assignor.)						
Johnston, Allen, Ottumwa, Iowa. Machine for barbing wire	273,286	Mar. 6	48	15	23	843
Johnston, Andrew M. (See Allen, William, assignor.)						
Johnston, Andrew M. (See Kimball, Frank H., assignor.)						
Johnston, Edward H., assignor to Wharton Railroad Switch Company, Philadelphia, Pa. Machine for beveling the edges of metal plates	275,666	Apr. 10	1046	283	23	1413
Johnston, George, Detroit, Mich. Eyeglasses	271,712	Feb. 6	110	41	23	466
Johnston Harvester Company. (See Cooley, Orville, assignor.)						
Johnston, Hector M., Eau Claire, Wis. Pump	276,048	Apr. 17	1519	418	23	1502
Johnston, James J., assignor to United States Improvement Company, (limited), Columbia, Ohio. Hard soap	273,235	Feb. 27	2092		23	827
Johnston, James J., assignor to United States Improvement Company, (limited), Columbia, Ohio. Healing-soap	273,236	Feb. 27	2093		23	827
Johnston, James J., assignor to United States Improvement Company, (limited), Columbia, Ohio. Fodder-cutter	273,237	Feb. 27	2093	587	23	827
Johnston, James J., assignor to United States Improvement Company, (limited), Columbia, Ohio. Sash-weight	273,238	Feb. 27	2095	587	23	828
Johnston, James J., assignor to United States Improvement Company, (limited), Columbia, Ohio. Toilet-soap	273,239	Feb. 27	2096		23	828
Johnston, James P., Melville, Ga. Fertilizer-distributor	280,932	July 10	741	206 207	24	136
Johnston, John F., Brooksby Chemical Works, Bow Common Lane, county of Middlesex, England. Oil-drier	285,135	Sept. 18	1210	339 340	24	1125
Johnston, John J., San Francisco, Cal. Machine for soldering tin cans	276,823	May 1	373	99	23	1691
Johnston, John T. (See Murphy and Johnston.)						
Johnston, Robert E., Middletown, Ohio. Cord-coating machinery	289,773	Dec. 4	495	137 138	25	972
Johnston Ruffler Company. (See Thomas and Brevoort, assignors.)						
Johnston, Samuel L., assignor to J. B. Rooney, Walpole, Mass. Machine for making loom-harness straps	272,055	Feb. 13	587	158	23	554
Johnston & Son, J. R. (See Birch, John, assignor.)						
Johnston, T. S., et al. (See Stephens, Abner L., assignor.)						
Johnston, Thomas, assignor to Chadborn & Coldwell Manufacturing Company, Newburg, N. Y. Lawn-mower handle	271,471	Jan. 30	2051	591	23	410
Johnston, W. H. (See Wunderlich, Jacob H., assignor.)						
Johnston, William, Philadelphia, Pa. Variable coupling-joint for shafting	276,420	Apr. 24	1992	552	23	1591
Johnston, William, Essex, Iowa. Force-pump	284,859	Sept. 11	860	242	24	1057
Johnston, William A., Clifton, N. Y., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental-engine suspension-bracket	286,704	Oct. 16	1166	314	25	227
Johnston, William A., Clifton, A. W. Browne, Westfield, N. Y., E. T. Starr and J. W. Gilbert, assignors to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental-engine hand-piece	287,683	Oct. 30	2421	653	25	471
Johnston, William M. (See Jope and Johnston.)						
Johnston, William P. (See McDonald, Alexander E., assignor.)						
Johnstone, Henry L., Palmetto, Ga. Car-coupling	286,307	Oct. 9	668	178	25	131
Johnstone, John, Detroit, Mich. Oil-stove	281,515	July 17	1471	404	24	272
Johnstone, William H., Philadelphia, Pa. Stretcher	273,287	Mar. 6	52	16	23	843
Johnstone, William H., Philadelphia, Pa. Conduit for electric wires	274,611	Mar. 27	1779	494	23	1163
Johnstone, William H., Philadelphia, Pa. Underground conduit for electric wires	279,392	June 12	967	273	23	2299
Johm, Joseph A., New York, N. Y. Shuttle-movement for sewing-machines	282,729	Aug. 7	314	89	24	555
Joiner, Brantley P., Florence, Ala. Stock-car	276,595	May 1	66	18	23	1639



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Jolley, William F., Middlesex, N. Y. Fire-escape.	274,338	Mar. 20	1412	357	23	1092
Jolly, George W., Paraiso Springs, assignor of one-half to I. J. Hattabaugh, San José, Cal. Animal-trap.	289,268	Nov. 27	1835	506	25	854
Joly, Charles C. (See Lloyd, Edwin L., assignor.)						
Jonas, Bernhard W., et al. (See Lederer, Charles, assignor.)						
Jonas, Frank B. (See Christmas and Jonas.)						
Jones, A. Sheridan, Olivet, Dak. Ter. Magazine fire-arm.	270,808	Jan. 16	1214	350	23	253
Jones, Addison, Omaha, Nebr. Seal-holding attachment for hasp-locks.	288,641	Nov. 20	1072	295	25	709
Jones, Albert L., Brooklyn, N. Y. Fabric for window-shades, &c.	283,893	Aug. 28	1721	455	24	835
Jones, Alexander, et al. (See Barnard, Charles S., assignor.)						
Jones, Andros B., Southborough, Mass. Boot or shoe holding jack.	279,169	June 12	705	192	23	2253
Jones, Augustus H. (See Miller and Jones.)						
Jones, Augustus H., assignor to C. Parker Company, Meriden, Conn. Extension lamp-fix- ture.	271,334	Jan. 30	1866	541	23	376
Jones, Augustus H., assignor to Foster Hardware Company, Meriden, Conn. Call-bell.	277,741	May 15	1500	407	23	1896
Jones, Augustus H., assignor to Foster Hardware Company, Meriden, Conn. Call-bell.	280,748	July 3	500	142	24	89
Jones & Brother, C. E. (See Jones and Billings, assignors.)						
Jones, C. D. (See Pond, Orlando M., assignor.)						
Jones, Charles A., Hathorley Court, Gloucester, county of Gloucester, England. Step-lad- der.	286,617	Oct. 16	1055	284	25	208
Jones, Charles E., and C. H. Billings, assignors to C. E. Jones & Brother, Cincinnati, Ohio. Hub-band.	270,547	Jan. 9	886	257	23	183
Jones, Charles H., Chicago, Ill. Type-planer.	284,638	Sept. 11	584	164	24	1009
Jones, Charles T., Utica, N. Y. Sewing-machine.	285,136	Sept. 18	1211	341	24	1125
Jones, Christopher C., Savannah, Ga. Rotary engine.	275,667	Apr. 10	1047	284	23	1413
Jones Combination Shingle and Sheathing Company. (See Jones, Henry A., assignor.)						
Jones, Daniel, Boston, Mass. Sucker-rod.	273,234	Feb. 27	2091	566	23	827
Jones, Edgar A., Three Rivers, Mich. Bench clothes-wringer.	273,885	Feb. 27	1660	466	23	754
Jones, Edgar A., Three Rivers, Mich. Bed-spring.	276,421	Apr. 24	1993	552	23	1501
Jones, Edwin R., Martin's Ferry, Ohio. Clover thrasher and buller.	278,336	May 29	2274	621	23	2045
Jones, Erwin, Brooklyn, N. Y. Combined show-case and separator.	273,703	Feb. 20	1411	395	23	702
Jones, Evan, Pittsburg, Pa. Glass-furnace.	281,697	July 24	1700	465	24	316
Jones, Florentine A., New York, N. Y. Recording pressure-gage.	287,685	Oct. 30	2428	653	25	472
Jones, Florentine A., New York, N. Y. Recording pressure-gage.	287,686	Oct. 30	2428	654	25	472
Jones, Florentine A., New York, N. Y., and S. Glines, Boston, Mass. Recording pressure- gage.	287,684	Oct. 30	2426	653	25	472
Jones, Frank, assignor of two-thirds to S. S. Martin and O. J. Pierson, Middlebury, Ind. Paint for roofing and other purposes.	278,664	May 29	2669		23	2115
Jones, Frederick L., Fentonville, Mich. Overcheck-terret for bridles.	288,709	Nov. 20	1160	318	25	723
Jones, George M. (See Kelly, John T., assignor.)						
Jones, Harry, Richmond, assignor of one-half to R. R. Rouse, Indianapolis, Ind. Chain- pump.	282,900	Aug. 7	508	142	24	590
Jones, Harry A. (See Jones, Lewellyn D., assignor.)						
Jones, Henry A., Brooklyn, assignor to Jones Combination Shingle and Sheathing Com- pany, New York, N. Y. Roofing-shingle.	279,487	June 12	1097	303	23	2317
Jones, Henry B., Philadelphia, Pa. Inkstand.	284,348	Aug. 14	1058	297	24	698
Jones, Henry C., Wilmington, Del. Dishing metal plates.	270,077	Jan. 2	291	86	23	59
Jones, Henry G., Darby, Pa. Automatic railway signal and alarm.	282,730	Aug. 7	314	90	24	555
Jones, Henry L., Buffalo, N. Y. Iron fence.	281,077	July 10	910	254	24	168
Jones, Henry M., Meriden, Conn. Corner-plate for frames.	287,441	Oct. 30	2101	571	25	408
Jones, Hezekiah D., assignor of one-fourth to H. E. Bibbens, Onarga, Ill. Check-row at- tachment for corn-planters.	274,612	Mar. 27	1780	494 495	23	1163
Jones, Hilliard M., Stockton, Cal. Coupling-link.	271,713	Feb. 6	151	42	23	466
Jones, Horace E., Caribon, Me. Mouth-piece for cornets.	275,918	Apr. 17	1366	376	23	1476
Jones, Idwal M., assignor of one-half to I. Winsor, Providence, R. I. Pipe-nipple holder.	289,419	Dec. 4	56	16	25	896
Jones, J. Thomas, Utica, N. Y. Friction-clamp for fire-escapes.	284,305	Sept. 4	184	52	24	935
Jones, Jacob G., Baltimore, Md., assignor of one-half to H. K. Thurber, New York, N. Y. Machine for putting tops and bottoms on cans.	271,860	Feb. 6	333	92	23	499
Jones, Jacob G., Baltimore, Md., assignor of one-half to H. K. Thurber, New York, N. Y. Can-soldering machine.	283,713	Aug. 21	1500	423	24	785
Jones, James. (See Pearce and Jones.)						
Jones, John, Oregon City, Oreg. Miner's combination-tool.	270,315	Jan. 9	576	169	23	123
Jones, John, Oregon City, Oreg. Miner's candlestick.	270,316	Jan. 9	577	170	23	123
Jones, John B., Brooklyn, N. Y., assignor, by mesne assignments, to Kalamein Alloy Com- pany, (limited), Pittsburg, Pa. Alloy for coating metals. (Reissue).	10,415	Dec. 4	521		25	977
Jones, John W., et al. (See New, Albert L., assignor.)						
Jones, John W., Centropolis, Kans. Cultivator-shovel.	273,550	Mar. 6	399	107	23	902
Jones, John W., Greenfield, Ind. Combined seed-planter and fertilizer-distributor.	275,919	Apr. 17	1366	376	23	1476
Jones, Joseph D., Brooklyn, N. Y. Extracting oleaginous matter from animal and vegeta- ble substances.	287,382	Oct. 23	2025	550	25	386
Jones, Joseph D., Brooklyn, assignor to W. T. Lawton, New York, N. Y. Extracting ole- aginous matter from animal and vegetable substances.	271,859	Feb. 6	332	91	23	499
Jones, Joseph T., and J. H. Wild, Leeds, county of York, England. Apparatus for bor- ing rocks under water.	285,628	Sept. 25	1793	510 511	24	1238
Jones, L. J., et al. (See Atkinson, Henry C., assignor.)						
Jones, Lewellyn D., assignor of one-half to H. A. Jones, Olney, Md. Lifting-jack.	276,140	Apr. 17	1635	450	23	1522
Jones, Lewellyn E., Syracuse, N. Y. Hame.	273,096	Feb. 27	1920	537	23	797
Jones, Marcus R., assignor to T. J. Welby, Baltimore, Md. Letter-box.	271,861	Feb. 6	335	92	23	499
Jones, Mathew T. (See Logne, Jones, and Morrill.)						
Jones, Melville D., Somerville, Mass. Sign.	283,115	Aug. 14	767	216	24	644
Jones, N. A. T., Plymouth, Mass. Apparatus for filtering and purifying water in steam- boilers.	286,705	Oct. 16	1168	314	25	227
Jones, Nicholas A., Leavenworth, Kans. Automatic weighing-scale.	270,078	Jan. 2	292	87	23	59
Jones, Noel C., Auburn, N. Y. Ice-creeper.	278,337	May 29	2275	622	23	2045
Jones, Norman K., Youngstown, Ohio. Cutter-head for carving scrolls.	275,391	Apr. 10	696	185	23	1354
Jones, Oscar T., deceased, P. Fox, administrator, assignor to T. Jones, New Orleans, La. Horse-detacher.	281,860	July 24	1924	526	24	354
Jones, Owen H., Hartford, Conn. Car-ventilator.	277,903	May 22	1689	464	23	1938
Jones, Priscilla A., Madison, Wis. Sewing-machine attachment.	275,048	Apr. 3	217	59	23	1263
Jones, Richard B., assignor of two-thirds to R. Richards and G. F. Wetherell, Chicago, Ill. Planing-machine.	278,338	May 29	2276	622	23	2045
Jones, Richard B., and G. F. Wetherell, assignors of one-third to R. Richards, Chicago, Ill. Resawing-machine.	272,445	Feb. 20	1081	305	23	644

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Jones, Richard F., assignor of three-fourths to Famous Shoe and Clothing Company and J. Kerr, St. Louis, Mo. Combined cash and bundle conveyer.....	274,000	Mar. 13	970	266	23	1008
Jones, Robert K., Liverpool, county of Lancaster, England. Ratchet-drill.....	285,629	Sept. 25	1796	511	24	1238
Jones, Robert M., Santa Fé, N. Mex. Ter. Solar attachment for transit instruments.....	270,679	Jan. 16	1057	302	23	222
Jones, Robert V., Cleveland, Ohio. Match-holder.....	271,580	Jan. 30	2178	627	23	432
Jones, Samuel A., Chicago, Ill. Grain-binder.....	280,379	July 3	47	13	24	11
Jones, Samuel N. (See Shaffer, Charles H., assignor.)						
Jones, Squire R., Lacon, Ill. Car-coupling.....	282,732	Aug. 7	316	90	24	555
Jones, Stephen H., Lowell, Mass. Let-off mechanism for looms.....	289,420	Dec. 4	57	16	25	896
Jones, T. B. (See Riffin, William M., assignor.)						
Jones, Theodore. (See Jones, Oscar T., assignor.)						
Jones, Thomas B., Madisonville, Ky. Running-gear for vehicles.....	282,733	Aug. 7	317	90, 91	24	555
Jones, Thomas F., <i>et al.</i> (See Robbins, Fabius, assignor.)						
Jones, Walter, New York, N. Y. Saw-frame.....	284,432	Sept. 4	334	93	24	960
Jones, Walter, Niagara Falls, N. Y. Machine for preparing wood for pulping in the manufacture of paper.....	284,433	Sept. 4	334	93	24	960
Jones, Washington, Philadelphia, Pa. Variable cam.....	284,860	Sept. 11	861	242	24	1057
Jones, Whitfield E., Brooklyn, N. Y. Sheet-metal machine.....	283,575	Nov. 13	989	272	25	689
Jones, William, San Francisco, Cal. Hydraulic Portland cement.....	287,941	Nov. 6	191		25	541
Jones, William C., Philadelphia, Pa., assignor to W. M. Clayton, Denver, Colo. Kerfing-gage for saws.....	286,018	Oct. 2	292	82	25	55
Jones, William F., Baltimore, Md. Sectional inking-roller.....	276,825	May 1	377	100	23	1692
Jones, William H. D., Brixton, county of Surrey, England. Knife-cleaning machine.....	281,885	July 24	1953	534	24	360
Jones, William L., Holly Springs, Miss. Cotton-bale tie.....	285,469	Sept. 25	1625	456	24	1205
Jones, William R., Braddock, Pa. Manufacture of Bessemer metal.....	287,687	Oct. 30	2429		25	472
Jones, Willis, Brooklyn, N. Y. Carriage-axle.....	286,139	Oct. 2	440	120	25	82
Jones, Wright, Manchester, county of Lancaster, England. Balanced slide-valve.....	270,809	Jan. 16	1216	351	23	253
Jonis, John B., Olympia, Wash. Ter. Toggle for boom-chains.....	286,544	Oct. 9	954	257	25	184
Jonson, Josiah, Toledo, Ohio. Anti-friction bearing for wringing-machines.....	286,618	Oct. 16	1057	284	25	208
Jonson, Julius, assignor to Jonson Power Embroidery Machine Company, New York, N. Y. Embroidering-machine.....	277,289	May 8	967	259 260 261	23	1799
Jonson Power Embroidery Machine Company. (See Jonson, Julius, assignor.)						
Jonte, Pierre F., Cincinnati, Ohio. Mechanical movement.....	281,078	July 10	911	254	24	168
Jope, William P. T., and W. M. Johnston, Pittsburg, Pa. Machine for punching shovel-straps.....	276,249	Apr. 24	1766	492	23	1553
Jopling, Jesse, Longwood, Mo. Submarine boat.....	273,851	Mar. 13	792	215	23	978
Jopson, George W., Meriden, Conn. Key-ring.....	276,826	May 1	378	101	23	1692
Jordan, Ambrose L., assignor of one-half to R. C. Jordan, Ottawa, Ill. Hay and grain un-loader.....	271,862	Feb. 6	336	92	23	500
Jordan, Edmund, Brooklyn, assignor to E. W. Bliss, New Utrecht, N. Y. Punching-press.....	290,433	Dec. 18	1335	370	25	1137
Jordan, Michael, Scranton, Pa. Car wheel and axle.....	269,942	Jan. 2	146	42	23	30
Jordan, Michael W., Bellaire, Ohio. Combined table and carriage for potters.....	274,001	Mar. 13	972	267	23	1008
Jordan, Richard C. (See Jordan, Ambrose L., assignor.)						
Jordan, Robert G., <i>et al.</i> (See Pederson, Ole, assignor.) (Reissue.)						
Jordan, Scott D., Cape Elizabeth, Me. Extension clothes-pole.....	275,770	Apr. 10	1180	324	23	1436
Jordan, William F., Brooklyn, N. Y. Wrought-iron.....	270,901	Jan. 23	1331		23	279
Jordon, Charles G., Catlin, Colo. Canteen.....	273,097	Feb. 27	1921	538	23	797
Jorgensen, Axel, Des Moines, Iowa. Machine for barbing fence-wire.....	280,629	July 3	348	97	24	61
Jory, William E., San Francisco, Cal. Wave-power.....	281,370	July 17	1289	357	24	240
Josef, Edward E., Buffalo, N. Y. Wheel.....	277,904	May 22	1700	464	23	1938
Josel, Francis E., Freeport, Ill. Fire-escape ladder.....	285,273	Sept. 18	1365	385	24	1154
Joseph, Hiram W. (See Henninger, Julius, assignor.)						
Josephs, Nathan, <i>et al.</i> (See Anderson, Charles G., assignor.)						
Joslin, Charles S., Attleborough, Mass. Holder for acid-carboys.....	273,098	Feb. 27	1922	538	23	797
Joss, George N., New Philadelphia, Ohio. Screen-frame.....	277,135	May 8	796	209	23	1768
Jotten, John, Chicago, Ill. Skittle-square or game-board.....	284,306	Sept. 4	185	52	24	935
Jowett, Thomas L., assignor of one-half to J. Anderson, Boston, Mass. Adjustable desk attachment for drawers.....	282,087	July 31	2209	607	24	408
Jowitt, Josiah, Summit, N. J. Apparatus for treating or saturating paper, felt, &c.....	285,490	Sept. 25	1625	456 457	24	1205
Joy, Edwin W., Iowa City, Iowa, assignor, by mesne assignments, to Pattee Plow Company, Monmouth, Ill. Cultivator. (Reissue.)	10,297	Mar. 20	1565	498	23	1119
Joy, Thaddeus C., Titusville, Pa. Grate.....	279,250	June 12	791	218 219	23	2268
Joyce, Jacob O., Dayton, Ohio. Lifting-jack.....	271,863	Feb. 6	337	93	23	500
Joyce, Jacob O., Dayton, Ohio. Lever-jack.....	271,864	Feb. 6	338	93	23	500
Joyce, Jacob O., Dayton, Ohio. Lifting-jack.....	276,827	May 1	378	101	23	1692
Joyce, John T., Plainville, Mass. Ornamental chain.....	290,643	Dec. 18	1610	443	25	1184
Joyce, Joseph L., New Haven, Conn. Shoe.....	282,901	Aug. 7	509	143	24	590
Joyce, Joseph L., New Haven, Conn. Box-toe for boots and shoes.....	288,944	Nov. 20	1446	398	25	776
Joyce, Thomas, Buckland, Mass. Heel-stiffener for boots or shoes.....	277,571	May 15	1309	351	23	1862
Joyce, Thomas H., Carbondale, Pa. Breeching-loop and holdback-ring.....	285,414	Sept. 25	1539	434	24	1190
Jeyner, Fletcher, Glens Falls, N. Y. Center-board for sailing-vessels.....	284,130	Aug. 28	2037	566	24	890
Judd, Charles B. (See Gates, George W., assignor.)						
Judd & Co., H. L. (See Campbell, James W., assignor.)						
Judd, Cyrenius W. (See Judd, Orrin H. and C. W.)						
Judd, Garritt P., assignor to H. Phillips, San Francisco, Cal. Gas-machine.....	273,852	Mar. 13	794	215	23	978
Judd, Morton, Wallingford, Conn. Sash-fastener.....	281,768	July 24	1807	494	24	333
Judd, Oliver S., <i>et al.</i> (See Frost, Howard B., assignor.)						
Judd, Orrin H., and C. T. Rawalt, Fairfield, Nebr. Corn and cane harvester.....	276,422	Apr. 24	1995	552 553	23	1592
Judd, Orrin H., Fairfield, Nebr., and C. W. Judd, Meadville, Pa. Weed and grass turning attachment for plows.....	283,116	Aug. 14	768	216	24	644
Judkins, Henry E. (See Shaw and Judkins.)						
Judson, Lyman P., deceased, assignor, by mesne assignments, to Washburn & Moen Manufacturing Company, Worcester, Mass. Fence. (Reissue.)	10,313	Apr. 10	1221	334	23	1442
Judson, William B., Kansas City, Mo. Box-fastener.....	274,497	Mar. 27	1637	455	23	1138
Jumbo Patent Glove Company. (See Schoonmaker, Elou, assignor.)						
Juncker, Charles, Paris, France. Ornamentation of walls, paper, textile fabrics, glass-ware, &c.....	277,572	May 15	1310		23	1862
June, John, and L. Falk, Manson, Iowa. Feed-cooker.....	284,861	Sept. 11	862	242	24	1057
June Manufacturing Company. (See Hughes, Joseph D., assignor.)						
Junkin, Lawrence M., Leet, Pa. Seal-lock.....	275,496	Apr. 10	828	225	23	1376



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Jürgensen, Christopher P., Copenhagen, Denmark. Electric-arc lamp .....	270,954	Jan. 23	1400	404	23	290
Jürt, Joseph, Cullman, Ala. Decorticating-machine for grain .....	274,002	Mar. 13	972	267	23	1008
Justi, Henry D. (See Schmitz, Theodore H., assignor.)						
Justin, Myron L., et al. (See Dow and Chandler, assignors.)						
Kabus, Friedrich and R., New York, N. Y. Optometer .....	271,472	Jan. 30	2052	591	23	410
Kabus, Robert. (See Kabus, Friedrich and R.)						
Kacer, Martin V., and W. J. Kriz, St. Louis, Mo. Fire-arm .....	273,288	Mar. 6	53	16	23	844
Kacer, Martin V., and W. J. Kriz, St. Louis, Mo. Magazine fire-arm .....	282,328	July 31	2527	693	24	460
Kadish, Leopold J. (See Pusch, Johann, assignor.)						
Kaepfel, Charles, New York, N. Y. Dumping-wagon .....	272,555	Feb. 20	1920	341	23	668
Kaepfel, Charles, New York, N. Y. Dumping-wagon .....	283,252	Oct. 30	2235	607	25	435
Kaestner, August, New York, N. Y. Lamp .....	288,340	Nov. 13	689	190	25	635
Kaffenberger, Gustav, assignor to Black & Clawson Company, Hamilton, Ohio. Screening-machine .....	276,506	May 1	67	19	23	1639
Kahl, Dorsey P., Lineville, Pa. Car-coupling .....	290,060	Dec. 11	853	242	25	1044
Kahler, Conrad, Chicago, Ill. Printing-press folder .....	276,972	May 1	571	{ 149 150 }	23	1724
Kahler, Frank C. C., Chicago, Ill. Necktie-fastener .....	287,442	Oct. 30	2102	571	25	408
Kahlmus, John, et al. (See Keller and Myers, assignors.)						
Kahn, Joseph, Detroit, Mich. Safety-pocket for garments .....	283,609	Aug. 21	1371	383	24	760
Kai, Quan, San Francisco, Cal. Seam for uniting pieces of leather .....	283,252	Aug. 14	936	261	24	674
Kail, John L., Boone, Iowa. Bran-compressor .....	287,133	Oct. 23	1711	{ 468 469 }	25	331
Kaiser, Jacob, Brookline, Mass. Steam-engine .....	285,904	Oct. 2	161	45, 46	25	32
Kaiser, Nicolaus, Grellingen, Switzerland. Machinery for assorting wood pulp and similar material .....	276,250	Apr. 24	1768	492	23	1553
Kaiser, William, Wilkes-Barré, Pa. Hydrant .....	278,435	May 29	2395	653	23	2067
Kaiser, William, Wilkes-Barré, Pa. Hydrant-valve .....	284,021	Aug. 28	1902	533	24	867
Kalamain Alloy Company. (See Jones, John B., assignor.) (Reissue.)						
Kaldenberg, Frederick J., New York, N. Y. Lead or crayon holder .....	282,530	Aug. 7	67	20	24	512
Kaldenberg, Frederick J., New York, N. Y. Manufacture of articles from waste amber .....	290,888	Dec. 25	1930		25	1248
Kalfus, Sutherland, Louisville, Ky. Combined cooler and filter .....	274,339	Mar. 20	1413	387	23	1093
Kallista, Joseph, assignor of one-half to W. C. Hanna, Peoria, Ill. Horse-collar pad .....	283,610	Aug. 21	1372	383	24	760
Kals, Emil J. C., Yolo, Cal. Washing-machine .....	275,049	Apr. 3	218	59	23	1263
Kaltenbacher, Dominick, Shelbyville, Ky. Trace-eye guard .....	281,079	July 10	912	255	24	168
Kaltenbacher, Dominick, Shelbyville, Ky. Blinder for bridles .....	281,080	July 10	913	255	24	168
Kaltwasser, Frederick, Belleville, Ill. Stove-pipe fitting and fastening .....	278,798	June 5	166	49	23	2151
Kampfe, Frederick and O., Brooklyn, N. Y. Die and stamping press .....	272,056	Feb. 13	588	159	23	554
Kampfe, Otto. (See Kampfe, Frederick and O.)						
Kampfe, Richard, Brooklyn, N. Y. Electro-magnetic car-brake .....	290,689	Dec. 25	1673	461	25	1202
Kanaley, David F., Pittsburg, Pa. Roll for rolling steel springs .....	272,556	Feb. 20	1221	341	23	668
Kandeler, C. F., Theodor, Chicago, Ill. Burning brick .....	283,402	Aug. 21	1130	319	24	717
Kane, Charles I., et al. (See Tillou and Clapp, assignors.)						
Kane, Daniel P. (See Goodman, Henry, assignor.)						
Kane, Dennis J. and J. E., New Bedford, Mass. Machine for molding book-backs .....	280,380	July 3	51	14	24	11
Kane, Frank H., Riverside, assignor of one-half to W. Kruse, Sedamsville, Ohio. Steam-boiler furnace .....	273,099	Feb. 27	1923	538	23	797
Kane, James E. (See Kane, Dennis J. and J. E.)						
Kane, Thomas. (See Durant, Edward G., assignor.)						
Kane, Thomas. (See Durant and Kane.)						
Kanne, Frederick F., Waterville, Minn. Harvester-reel. (Reissue) .....	10,266	Jan. 2	434	{ 126 127 }	23	90
Kanne, Frederick F., Waterville, Minn. Harvester-reel .....	272,057	Feb. 13	589	159	23	554
Kanouse, John G. (See Miller, Richard, assignor.)						
Kapp, Cornelius H., New York, N. Y. Button .....	275,218	Apr. 3	433	118	23	1300
Karchner, Edward, et al. (See Harris, Charles A., assignor.)						
Karleskind, Frank J., St. Louis, Mo. Stove-pipe thimble and fine-stopper .....	276,597	May 1	69	19	23	1639
Karns, James E., Apollo, Pa. Gas-burner for heating and metallurgical purposes .....	288,445	Nov. 13	830	225	25	660
Karns, William E., Parker's Landing, Pa. Packing-ring for pumps .....	278,557	May 29	2339	692	23	2092
Karns, William E., Parker's Landing, Pa. Apparatus for cleaning oil-wells .....	282,531	Aug. 7	68	20	24	512
Karns, William E., Parker's Landing, Pa. Apparatus for regulating the flow and pressure of gas in gas-wells .....	288,446	Nov. 13	831	225	25	660
Karr, Jacob, Washington, D. C. Quarter-second timing-clock .....	271,078	Jan. 23	1549	{ 446 447 }	23	315
Karr, Jacob, Washington, D. C. Quarter-second time mechanism .....	273,100	Feb. 27	1924	{ 538 539 }	23	797
Karsbuer, William W., Washington, D. C. Galvanic battery .....	280,933	July 10	742	207	24	136
Karstens, Carsten N., Nebraska City, Nebr. Extension-table .....	286,827	Oct. 16	1318	359	25	254
Kaschagen, Leo, and H. Wietheger, Chicago, Ill. Device for cutting yeast .....	282,088	July 31	2209	607	24	408
Kasey, Thomas A., Salem, Va. Soap .....	283,403	Aug. 21	1131		24	717
Kasschau, Henry C. A., New York, N. Y. Fishing-reel .....	285,630	Sept. 25	1797	512	24	1238
Kassen, Henry and J., Cincinnati, Ohio. Coffee-boiler .....	279,649	June 19	1294	359	23	2358
Kassen, John. (See Kassen, Henry and J.)						
Kasson, Amasa C., assignor to Chicago Stamping Company, Chicago, Ill. Bake-pan and steamer .....	285,905	Oct. 2	162	46	25	32
Katz, Leopold A. (See Marcus, Morris H., assignor.)						
Katzenberg, Jacob, New York, N. Y. Suspender-end .....	290,061	Dec. 11	855	242	25	1044
Katzenmayer, Ernest, Chillicothe, Ohio, assignor to Mallinckrodt Brake Company, East St. Louis, Ill. Car-brake .....	287,293	Oct. 23	1919	524	25	367
Katzenmayer, Ernest, Chillicothe, Ohio, assignor to Mallinckrodt Brake Company, East St. Louis, Ill. Car-brake .....	287,294	Oct. 23	1920	525	25	367
Katzenmayer, Ernest, Chillicothe, Ohio, assignor to Mallinckrodt Brake Company, East St. Louis, Ill. Car-brake .....	287,295	Oct. 23	1922	525	25	368
Kanfler, Theodore L., and J. Serson, assignors of one-third to C. H. Dennie, Boston, Mass. Galvanic battery .....	272,058	Feb. 13	590	159	23	554
Kaufler, Theodore L., and J. Serson; said Kaufler assignor of part to W. B. S. Gay, Boston, Mass. Galvanic battery .....	279,872	June 19	1552	444	23	2403
Kauffman, John. (See Breyer, Joseph, assignor.)						
Kauffman, John. (See Roth, Frank J., assignor.)						
Kauffmann, John. (See Metz, Benjamin F., assignor.)						
Kaufholz, John N., assignor to himself and S. M. Carpenter, Cleveland, Ohio. Machine for centering shafts, axles, &c .....	272,704	Feb. 20	1412	396	23	702
Kaufmann, Isaac, et al. (See Zander, Franz, assignor.)						
Kaufmann, Joseph, New York, N. Y. Faucet .....	279,952	June 26	1656	464	23	2427

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Kaufmann, Sigmund, <i>et al.</i> (See Zander, Franz, assignor.)						
Kaufmann & Strauss. (See Hagelberg, Wolff, assignor.)						
Kautz, Joseph, New York, N. Y. Barrel	273,853	Mar. 13	795	216	23	979
Kay, F. G. (See Reese, Abram, assignor.)						
Kay, Joshua A., Melbourne, Victoria. Cultivating-machine	273,101	Feb. 27	1996	539 540	23	798
Kay, Joshua A., assignor of one-half to D. Bath, Melbourne, Victoria. Endless hand-knife.	286,706	Oct. 16	1169	314	25	227
Kay, William V., Waukegan, assignor to E. M. Crandal, Chicago, Ill. Barbed fence-wire.	286,987	Oct. 16	1522	419	25	238
Kaye, John, assignor of one-half to Wolfenden, Shore & Co., Cardington, Pa. Spout for oil-cans	270,810	Jan. 16	1219	351	23	253
Kaylor, John, Decatur, Ill. Check-row attachment for corn-planters	274,123	Mar. 20	1134	312	23	1043
Kaylor, John, and J. Fisher, Decatur, Ill. Check-row attachment for corn-planters	282,532	Aug. 7	68	20	24	512
Keach, Abram. (See Towan, James H., assignor.)						
Kealy, Stephen A. (See Phillips and Kealy.)						
Kean, Henry, Kinnickinnick, Wis. Churn	276,592	May 1	70	19	23	1640
Kearney, Frank, assignor of one-tenth to L. M. Hosea, Cincinnati, Ohio. Manufacture of shoes	226,204	Oct. 9	519	143	25	106
Kearney, William, Belleville, N. J. Furnace-grate	285,040	Sept. 18	1094	305	24	1106
Kearns, Isaac F., Chicago, Ill. Flat-iron attachment for oil-stoves	272,059	Feb. 13	592	160	23	554
Kearns, Isaac F., Chicago, Ill. Oil-stove	284,639	Sept. 11	585	164 165	24	1009
Kearns, John C., Maitland, Pa. Chain-pump	283,894	Aug. 28	1722	486	24	835
Kearville, John, Jr., Centerville, Iowa. Harness-loop	289,269	Nov. 27	1836	507	25	854
Keating, Joshua, <i>et al.</i> (See Collings, William, assignor.)						
Keating, Michael, Boston, Mass. Folding crib	273,102	Feb. 27	1928	540	23	798
Keck, James, Portland, Oregon. Nasal inhaler and irrigator	285,753	Sept. 25	1956	554	24	1265
Keckeler, T. T., <i>et al.</i> (See Bowen, William J., assignor.)						
Keckler, Godfrey, <i>et al.</i> (See Keller and Myers, assignors.)						
Keck, Daniel A., assignor of one-half to H. Keck, Cannonsburg, Mich. Fire-escape	284,434	Sept. 4	335	93	24	960
Keck, Hannah. (See Keck, Daniel A., assignor.)						
Keefe, John, Oswego, N. Y. Steam-radiator tube	273,740	Mar. 13	645	172	25	953
Keefe, John C., assignor of one-half to J. W. Bennett, Lowell, Mass. Barrel-head-strengthening device	284,022	Aug. 28	1903	533	24	867
Keefer, Calvin M., New Castle, Pa. Railway-rail joint	287,296	Oct. 23	1924	526	25	368
Keefer, Israel, assignor of two-thirds to O. D. Lewis, Pittsburg, Pa. Rudder for vessels.	282,643	Aug. 7	203	59	24	535
Keegan, Vincent E., Boston, Mass. Dynamo-electric machine	275,392	Apr. 10	697	186	23	1354
Keelo, Peyton S., Summersville, Mo. Agricultural implement	282,644	Aug. 7	204	59	24	535
Keeler, George W., Telford, Pa. Mowing-machine	284,435	Sept. 4	376	93	24	960
Keelor, J. Reinhart Z. (See Quinque, August, assignor.)						
Keely, Isaac I., Anderson, Ind. Car-coupling	276,141	Apr. 17	1636	451	23	1523
Keely, Thomas, Memphis, Tenn. Refrigerator	278,148	May 22	1997	549	23	1989
Keely, Thomas, Memphis, Tenn. Privy-sink	278,558	May 29	2539	693	23	2092
Keen, Charles C. and F. G., North McGregor, Iowa. Rub-iron for vehicles	273,149	May 22	1999	549	23	1989
Keen, Frank G. (See Keen, Charles C. and F. G.)						
Keene, Jacob, Middletown, N. Y. Wire-puller	288,241	Nov. 13	561	156	25	614
Keenan, William, assignor to B. F. Piel, Brooklyn, N. Y. Felting-machine	279,393	June 12	989	275	23	2300
Keenan, William T., <i>et al.</i> (See Shiver, Elisha, assignor.)						
Keene, George A., Lynn, Mass. Feathering-paddle	274,945	Apr. 3	80	22	23	1239
Keeney, Calvin N., Le Roy, N. Y. Bean-sorting machine	279,953	June 26	1657	465	23	2427
Keenholts, Addison. (See Keenholts, George and A.)						
Keenholts, George and A., Buffalo, N. Y. Spring bed-bottom	270,811	Jan. 16	1219	351	23	253
Keep, James M., assignor to J. N. Keep, Montclair, N. J. Bill or letter file	279,170	June 12	706	192	23	2253
Keep, Joanna N. (See Keep, James M., assignor.)						
Keffer, Peter, assignor of one-half to E. M. Reazor, Reading, Pa. Shutter-fastener	286,828	Oct. 16	1319	360	25	254
Keftuss, John D., <i>et al.</i> (See Guncel, Winfield O., assignor.)						
Kegreisz, Emile, Wood Haven, assignor to Lalance & Grosjean Manufacturing Company, New York, N. Y. Manufacture of enameled iron-ware	279,094	June 5	595	162	23	2225
Kehler, Amos, assignor of one-half to G. B. Lesch, Warsaw, Ind. Machine for bending plow-handles	288,576	Nov. 13	991	273	25	689
Keibel, Carl, Folsong, near Tauer, Germany. Candle-holder	273,103	Feb. 27	1928	540	23	798
Keil, Adam, Monongahela City, Pa. Car-wheel	290,434	Dec. 18	1338	370	25	1137
Keil, Adam, Monongahela City, Pa. Car wheel and axle	290,435	Dec. 18	1339	371	25	1138
Keilt, Patrick, Brooklyn, N. Y. Water-service plug	288,642	Nov. 20	1073	295	25	709
Keim, Adolph, Munich, Bavaria, Germany. Mineral painting	287,942	Nov. 6	192	56	25	541
Keiser, Bernhard, Ferndale, Pa. Turbine water-wheel	272,705	Feb. 20	1413	396	23	702
Keith Electric Company. (See Keith, Nathaniel S., assignor.)						
Keith, George, Jr., Freedom, Ill. Grain weigher and tally	271,079	Jan. 23	1552	447	23	315
Keith, Henry M., Erving, Mass. Car-coupling	284,436	Sept. 4	337	94	24	960
Keith, Horace M., Commerce, assignor of one-half to J. P. Harger, Pontiac, Mich. Combined corn-planter and marker	283,253	Aug. 14	937	261 262 216 217	24	674
Keith, Jeremiah, Florence, Mass. Sewing-machine	273,854	Mar. 13	796	217	23	979
Keith, Jesse M., Maiden Rock, Wis. Spring bed-bottom	275,668	Apr. 10	1049	284	23	1413
Keith, Jesse M., Maiden Rock, and S. R. Bolton, Trim Belle, Wis.; said Bolton assignor to said Keith. Weather-board gage	283,404	Aug. 21	1132	320	24	717
Keith, Nathaniel S., New York, N. Y. Electric-arc lamp	281,693	July 24	1710	465	24	316
Keith, Nathaniel S., assignor to Keith Electric Company, New York, N. Y. Electric-arc lamp	272,262	Feb. 13	840	234 235	23	598
Keith, Nathaniel S., New York, N. Y., assignor to American Electric Storage Company, Newark, N. J. Secondary battery	273,855	Mar. 13	802	217	23	979
Keith, Robert L., Brazil, Ind. Carriage-top	283,895	Aug. 28	1723	486	24	835
Keith, Thomas K. (See Whitney and Keith.)						
Keith, Thomas K., assignor to himself and R. Carleton, Haverhill, Mass. Mechanism for sewing on beads	271,473	Jan. 30	2053	591	23	410
Keith, Thomas K., assignor to himself, L. Whitney, and R. Carleton, Haverhill, Mass. Toy hoop	275,771	Apr. 10	1181	324	23	1436
Keith, Thomas K., and R. Carleton, Haverhill, Mass. Fire-escape	288,447	Nov. 13	833	226	25	660
Keizer, Lewis R. (See Painter, Murrill, and Keizer.)						
Kelcher, John O., Gold Dirt, Colo. Feed-water heater	288,064	Nov. 6	342	95	25	565
Kellam, Daniel C., Detroit, Mich. Steam damper-regulator	284,023	Aug. 28	1904	533	24	868
Kellar, William C., and R. R. Ditzel, Cincinnati, Ohio. Harness-buckle	270,680	Jan. 16	1059	302	23	222
Keller, Adam, New York, N. Y., assignor of one-half to J. C. Downing, Newark, N. J. Bracelet	281,371	July 17	1290	357	24	241
Keller, Bernard M. (See Forrester, Isaac N., assignor.)						
Keller, Frank. (See Keller, John A., assignor.)						
Keller, Henry, Sauk Centre, Minn. Sled	281,372	July 17	1291	357	24	241



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Keller, Henry, assignor of one-half to G. K. Page, Corpus Christi, Tex. Car-coupling.....	273,104	Feb. 27	1930	541	23	799
Keller, John. (See McKenzie and Keller.)						
Keller, John, St. Louis, Mo. Feed-water heater.....	282,902	Aug. 7	510	143	24	590
Keller, John A., assignor one-third to F. Keller, Hamilton, Ohio. Caster.....	285,491	Sept. 25	1628	457	24	1206
Keller, John F., Martinsburg, W. Va. Flexible drill-hoe.....	269,943	Jan. 2	147	43	23	30
Keller, John F., Martinsburg, W. Va. Boot and adjustable point for seeding-machines.....	269,944	Jan. 2	147	43	23	30
Keller, John G., Monticello, Ill. Chimney-protector.....	276,423	Apr. 24	1998	553	23	1592
Keller, Louis, New York, N. Y. Cartridge-loading machine.....	272,060	Feb. 13	593	160	23	555
Keller, Louis, New York, N. Y. Decoy.....	274,124	Mar. 20	1136	312	23	1044
Keller, Louis, New York, N. Y. Jointed gun-rod.....	275,050	Apr. 3	218	59	23	1263
Keller, Martin S. (See Keller and Myers.)						
Keller, Peter, New York, N. Y. Gas-burner.....	280,482	July 3	186	49	24	34
Keller, Peter, assignor to P. H. Hargrave, New York, N. Y. Gas-regulator.....	270,079	Jan. 2	293	87	23	60
Keller, Thomas H. and M. S., and C. W. Myers, assignors of part to M. V. B. Steinmetz, Lincoln, G. Keebler, Philadelphia, Pa., J. W. Ruger, and J. W. Ruger & Co., Buffalo, N. Y., C. Müller and J. Kahlmus, Philadelphia, Pa. Bretzel-machine.....	277,573	May 15	1311	{ 351 352 }	{ 23 23 }	1863
Keller, William, Hoboken, N. J., assignor to himself, J. Lefevre, New York, and F. P. Mundschenk, Brooklyn, N. Y. Fur garment.....	281,866	July 24	1956	534	24	360
Kelley, Austin, Brooklyn, N. Y. Corset-stay.....	283,611	Aug. 21	1372	384	24	760
Kelley, Austin, assignor to J. Stnart, Brooklyn, N. Y. Bustle.....	287,029	Oct. 23	1583	456	25	305
Kelley, Charles B. (See Mahan, Frank M., assignor.)						
Kelley, David J., assignor to M. L. Kelley, Boston, Mass. Button-stay.....	277,574	May 15	1314	353	23	1863
Kelley, Edward W., Lowell, Mass. Fire-escape.....	270,902	Jan. 23	1331	384	23	279
Kelley, Edward W., Lowell, Mass. Flier for roving-machines.....	282,329	July 31	2529	693	24	461
Kelley, Frederick H. (See Waterman and Kelley.)						
Kelley, James H., New York, N. Y. Roof-coating.....	289,003	Nov. 27	1519	.....	25	796
Kelley, John, assignor of two-thirds to H. H. Hill and S. T. Walker, Moline, Ill. Chain-conveyer.....	273,741	Mar. 13	646	172	23	953
Kelley, John W., Manchester, Vt. Thill-coupling.....	278,339	May 29	2278	622	23	2046
Kelley, Margaret L. (See Kelley, David J., assignor.)						
Kelley, Patrick J., assignor to Whitman Agricultural Company, St. Louis, Mo. Continuous baling-press.....	282,089	July 31	2210	608	24	408
Kelley, Thomas W. (See Butler and Kelley.)						
Kelley, William J. (See Taylor, Francis C., assignor.)						
Kellogg, Charles, Buffalo, N. Y. Machine for rolling tubes, columns, &c.....	278,340	May 29	2279	623	23	2046
Kellogg, Chester, <i>et al.</i> (See Wolfe, Horace S., assignor.)						
Kellogg, Clement A., Columbus Grove, Ohio. Sulky-plow.....	288,341	Nov. 13	690	190	25	635
Kellogg, Eugene P., New York, N. Y. Sleeping-car.....	279,954	June 26	1658	{ 465 466 }	{ 23 23 }	2427
Kellogg, Frank, Brooklyn, N. Y. Wagon-jack.....	274,498	Mar. 27	1638	455	23	1138
Kellogg, Frank J., Battle Creek, Mich. Rule or measure.....	290,889	Dec. 25	1930	533	25	1248
Kellogg, Henry, New Haven, Conn. Bicycle.....	283,612	Aug. 21	1374	384	24	761
Kellogg, Henry W., Ripon, Wis. Raising cream from milk.....	269,864	Jan. 2	51	16	23	13
Kellogg, Joseph A., Nashville, Tenn. Mail-bag catcher.....	286,932	Oct. 16	1448	398	25	275
Kellogg, L. S. (See Crane, Thomas, assignor.)						
Kellogg Newspaper Company, A. N. (See Pratt, Edwin E., assignor.)						
Kellogg, Warren T., Cohoes, N. Y. Gallows-frame for portable driving mechanisms.....	279,650	June 19	1294	359	23	2358
Kellogg, Warren T., Cohoes, N. Y. Device for converting motion.....	279,651	June 19	1295	360	23	2358
Kellogg, William E., Independence, Iowa. Timber-truck.....	285,818	Oct. 2	44	14	25	10
Kells, Edward, Cleveland, Ohio. Cooling lard and like materials.....	284,212	Sept. 4	72	20	24	917
Kells, Edward, assignor of one-half to D. A. Dangler, Cleveland, Ohio. Method of and apparatus for freezing paraffine, &c.....	271,080	Jan. 23	1554	447	23	315
Kells, Edward, and A. J. Adams, assignors of one-third to D. A. Dangler, Cleveland, Ohio. Extracting and mixing linseed-oil.....	280,483	July 3	186	.....	24	34
Kelly, Albert C., and G. W. Wimmer, San Francisco, Cal. Lemon-squeezer.....	276,424	Apr. 24	1998	553	23	1592
Kelly, Bartholomew J., Troy, N. Y. Straight-way valve.....	281,081	July 10	913	255	24	168
Kelly, Daniel, assignor of one-half to W. B. Kelly, Muskegon, Mich. Table.....	274,614	Mar. 27	1782	495	23	1163
Kelly, Dennis, assignor of one-half to J. W. Brewster, Cincinnati, Ohio. Coat and cloak hook.....	271,640	Feb. 6	70	19	23	452
Kelly, Edmund F. (See Tucker and Kelly.)						
Kelly, Edward J., Monongahela City, Pa. Car-wheel.....	288,817	Nov. 20	1294	354	25	747
Kelly, Edward M., Parker's Landing, Pa. Show-box for boots and shoes.....	271,081	Jan. 23	1555	448	23	316
Kelly, Francis W., Minneapolis, Minn. Valve for water-cocks.....	279,569	June 19	1290	332	23	2341
Kelly, Frank M., Watertown, assignor of one-half to C. W. Bassett, Newton, Mass. Curtain-fixture.....	280,833	July 10	617	173	24	115
Kelly, George, Chicago, Ill. Non-conducting covering.....	273,687	Mar. 6	576	153	23	932
Kelly, George, Chicago, Ill. Lining for non-conducting coverings.....	273,688	Mar. 6	577	153	23	933
Kelly, George, Chicago, Ill. Fire-proof material for filling safes, doors, &c.....	283,789	Aug. 28	1604	.....	24	815
Kelly, George, Chicago, Ill. Running-gear for vehicles.....	284,640	Sept. 11	586	165	24	1010
Kelly, George, assignor to Kelly Scroll Section Manufacturing Company, Chicago, Ill. Covering for steam-boilers, &c.....	273,689	Mar. 6	578	153	23	933
Kelly, George, assignor of one-half to S. Clark, Chicago, Ill. Fire-escape.....	276,973	May 1	573	150	23	1724
Kelly, George, Chicago, Ill., assignor to Kelly Scroll Section Manufacturing Company. Non-conducting covering.....	278,559	May 29	2540	693	23	2092
Kelly, Henry and J., Goshen, Ind. Well-drilling machine.....	285,274	Sept. 18	1366	385	24	1155
Kelly, Henry and J., Goshen, Ind. Wood-turning lathe.....	267,688	Oct. 30	2431	654	25	472
Kelly, Henry and J., Goshen, Ind. Pump.....	289,270	Nov. 27	1836	507	25	854
Kelly, J. Miller, Rochester, N. Y. Railway time-indicator.....	281,516	July 17	1473	404	24	272
Kelly, J. Miller, Rochester, N. Y. Locomotive head-light.....	283,254	Aug. 14	941	262	24	675
Kelly, J. Miller, Rochester, N. Y. Signal for locomotive head-lights.....	288,242	Nov. 13	561	156	25	614
Kelly, James, <i>et al.</i> (See Kelly, John, assignor.)						
Kelly, John. (See Beckett, Albert A., assignor.)						
Kelly, John, Luling, La. Vacuum-pan.....	278,150	May 22	1999	550	23	1990
Kelly, John, Peoria, Ill. Lubricator.....	281,699	July 24	1714	466	24	317
Kelly, John, Baltimore, Md. Propulsion of ships, &c.....	286,205	Oct. 9	520	143	25	106
Kelly, John, assignor of two-thirds to T. and J. Kelly, Chicago, Ill. Water-closet.....	270,080	Jan. 2	293	87	23	60
Kelly, John, assignor of two-thirds to T. and J. Kelly, Chicago, Ill. Stop and waste cock.....	283,613	Aug. 21	1376	{ 384 385 }	{ 24 24 }	761
Kelly, John C., St. Louis, Mo. Gas-burner.....	271,641	Feb. 6	70	19	23	452
Kelly, John J., Newark, N. J. Harness or hame link.....	277,290	May 8	974	261	23	1800
Kelly, John T., assignor to himself and G. M. Jones, Brooklyn, N. Y. Air and steam trap.....	286,446	Oct. 9	836	226	25	162
Kelly, Joseph. (See Kelly, Henry and J.)						
Kelly, Michael, New York, assignor of one-half to W. F. Lett, Brooklyn, N. Y. Barbed-wire fence.....	283,614	Aug. 21	1377	385	24	761

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Kelly, Oliver S., <i>et al.</i> (See Green, George F., assignor.)						
Kelly, Patrick, Poughkeepsie, N. Y. Derrick	271,474	Jan. 30	2055	592	23	410
Kelly, Robert M., West Liberty, assignor of two-thirds to I. Brown, Zanesville, and E. C. Williams, Bellefontaine, Ohio. End-gate for wagons	280,187	June 26	1923	541	23	2475
Kelly Scroll Section Manufacturing Company. (See Kelly, George, assignor.)						
Kelly, Simon E., assignor of one-half to J. Pelletier, New Orleans, La. Folding kite	274,340	Mar. 20	1415	388	23	1093
Kelly, Thomas, <i>et al.</i> (See Kelly, John, assignor.)						
Kelly, William. (See Heffner and Kelly.)						
Kelly, William, Scottdale, Pa. Cinder-car	274,786	Mar. 27	1982	551	23	1199
Kelly, William, Sarinac, assignor to J. L. Pitts, Grand Rapids, Mich. Saw-swage	279,251	June 12	792	219	23	2269
Kelly, William B. (See Kelly, Daniel, assignor.)						
Kelly, William E., Rockville, Pa. Gymnastic chair	284,024	Aug. 28	1905	534	24	868
Kelly, William H., <i>et al.</i> (See Ryan, Patrick, assignor.)						
Kelly, William H., New York, N. Y. Lawn-pool apparatus	278,341	May 20	2280	623	23	2046
Kelsall, William G. (See Mountford and Kelsall.)						
Kelsey, Edward J., <i>et al.</i> (See Pfandler, John M., assignor.) (Reissue.)						
Kelsey, Frederick E., Cleveland, Ohio. Cigar-bunching machine	281,517	July 17	1474	405	24	272
Kelsey, Loren G., Marilla, N. Y. Potato-digger	275,669	Apr. 10	1049	285	23	1414
Kelsey, Rollin E., Corunna, Mich. Necktie-fastener	278,342	May 29	2281	623	23	2047
Kelsey, Rollin E., and C. H. Shuttleworth, Corunna, Mich. Separable button	270,593	Jan. 16	948	274	23	203
Kelso, John S., Jr. (See Benson, George T., assignor.)						
Kelso, John S., Jr., Stamford, Conn. Incandescing electric lamp	273,366	Mar. 6	170	46	23	863
Kelton, John C., San Francisco, Cal. Gun-sight	280,484	July 3	187	49	24	35
Kemery, George W., Angola, Ind. Cloth reeling and measuring machine	273,690	Mar. 6	578	154	23	933
Kemmerling, Charles, Scranton, Pa. Revolving stove-grate	283,790	Aug. 28	1604	453	24	815
Kemp, Francis E., and E. A. Mock, Jessup, Ga. Cotton-chopper	276,599	May 1	71	19	23	1640
Kemper, George W., and J. B. Cartwright, Goodlettsville, Tenn. Grain-cradle	271,335	Jan. 30	1667	541	23	376
Kempner, Simon, Buffalo, N. Y. Stock indicator for manufacturers	271,865	Feb. 6	339	93, 94	23	500
Kempshall, Eleazer, New Britain, Conn. Button-fastener	282,903	Aug. 7	510	143	24	591
Kempshall, Eleazer, New Britain, Conn. Sash-fastener	283,896	Aug. 28	1724	486	24	835
Kempshall Manufacturing Company. (See Sparks, William E., assignor.)						
Kempson, Frank K., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Traveling crane	279,765	June 19	1420	397	23	2380
Kempster, Daniel E., Boston, Mass. Spring shade-roller	286,308	Oct. 9	669	179	25	131
Kempster, Daniel E., assignor to G. W. Smith, Boston, and B. F. Smith, Somerville, Mass. Hand drilling-machine	289,110	Nov. 27	1650	458	25	819
Kendall, Edward, Cambridgeport, Mass. Apparatus for heating air or condensing steam	272,886	Feb. 27	1670	467	23	754
Kendall, Edward D., Brooklyn, N. Y. Process of and apparatus for preparing petroleum jelly	284,437	Sept. 4	338	94	24	960
Kendall, Edward D., Jersey City, N. J., assignor to American Coal Tar Color Company of New York. Writing-ink	273,240	Feb. 27	2096		23	828
Kendall, Francis B., assignor of one-fourth to J. B. Clark, Monmouth, Ill. Corn-planter check-rower	279,766	June 19	1422	397	23	2381
Kendall, Frank H., and F. W. Ladd, Windsor, Vt. Wick-tube for oil-burners	283,255	Aug. 14	942	263	24	675
Kendall, Franklin B., Tumwater, Wash. Ter. Privy	290,776	Dec. 25	1791	494	25	1224
Kendall, George W., and C. Kruse, New York, N. Y. Check registering and printing apparatus	236,019	Oct. 2	293	82	25	55
Kendall, George W., and C. Kruse, New York, N. Y.; said Kendall assignor to said Kruse. Printing-machine	287,383	Oct. 23	2026	551	25	386
Kendall, John L., Brooklyn, assignor of one-half to Heimann & Wall, New York, N. Y. Head-covering	275,670	Apr. 10	1051	286	23	1414
Kendall, Oscar W., Olmsted, Ohio. Process of and device for stowing and curing grain, hay, &c	288,243	Nov. 13	563	156	25	614
Kendall, William, Logansport, Ind. Portable bath	283,117	Aug. 14	769	216	24	644
Kendrick, Alonzo, and E. L. Jerauld, Harwich, Mass. Apparatus for extracting oil from cods' livers	275,828	Apr. 17	1258	346	23	1456
Kenfield, William, and H. M. Stilwell, assignors to I. Stilwell, Rochester, N. Y. Bicycle-lock	276,600	May 1	71	20	23	1640
Kengel, Joseph, Detroit, Mich. Side spring vehicle	273,299	Mar. 6	54	16	23	844
Kengel, Joseph, Detroit, Mich. Vehicle-spring	278,911	June 5	436	119	23	2197
Kenison, Orrin W., Lawrence, Mass. Cloth-holding roller for looms	277,742	May 15	1501	407	23	1896
Kenna, Charles P. (See Kenna, Joseph W., assignor.)						
Kenna, Joseph W., assignor to C. P. Kenna, Chicago, Ill. Nursery-chair	283,405	Aug. 21	1133	320	24	717
Kennan, Sidney T., assignor to Webster Manufacturing Company, Menasha, Wis. Sand-ing or polishing machine for carriage-spokes	286,707	Oct. 16	1170	315	25	227
Kennedy, Albert H., Rockport, Ind. Geometrical block	270,225	Jan. 9	475	139	23	103
Kennedy, Albert H., Rockport, Ind. Belt-gearing	287,297	Oct. 23	1924	526	25	368
Kennedy, Albert J., Athens, Pa. Carpet-stretcher	286,708	Oct. 16	1173	315	25	228
Kennedy, Charles, Philadelphia, Pa. Belt-tie	283,491	Aug. 21	1241	348	24	736
Kennedy, David P. (See Farley, Michael, assignor.)						
Kennedy, De Laney, New York, N. Y. Bicycle	287,943	Nov. 6	194	56, 57	25	541
Kennedy, Emmett L. (See Smelser and Kennedy.)						
Kennedy, Frank, Grand Blanc, Mich. Automatic tilting gate	271,336	Jan. 30	1868	542	23	377
Kennedy, George F., Houston, Tex. Plow	279,252	June 12	793	219	23	2269
Kennedy, James, Kingston, Jamaica. Machine for obtaining fiber and for other purposes	275,920	Apr. 17	1368	377	23	1476
Kennedy, James, Strabane, county of Tyrone, Ireland. Fire-escape	288,448	Nov. 13	834	226	25	660
Kennedy, James H., Iona Station, and T. P. Hall, Toronto, Ontario, Canada. Switch-operator	288,577	Nov. 13	992	273	25	689
Kennedy, John, Montreal, Quebec, Canada. Elevator dredging-machine	279,570	June 19	1201	332	23	2342
Kennedy, John J., West Hoboken, N. J. Glove	270,955	June 26	1661	467	23	2428
Kennedy, Jophanus H., New Vineyard, Me. Bolt-cutter	274,499	Mar. 27	1639	456	23	1138
Kennedy, Joseph B., assignor of one-half to J. M. Almon, Princeton, Ind. Fire-escape	275,772	Apr. 10	1182	324	23	1436
Kennedy, Kenneth, Kenyon, Ontario, Canada. Dumping-wagon	289,660	Dec. 4	358	101	25	950
Kennedy, Lewis B., Keokuk, Iowa. Brick-machine	280,316	June 26	2091	588	23	2505
Kennedy, Michael, Troy, N. Y. Automatic car-coupling	285,906	Oct. 2	163	47	25	32
Kennedy, Samuel A., assignor of four-fifths to C. T. and H. M. Evans, Xenia, Ill. Weatherboarding gage and clamp	285,137	Sept. 18	1213	341	24	1125
Kennedy, Thomas H., assignor of three-fourths to J. A. Ankrom and W. C. Barton, New Plymouth, Ohio. Saw-mill dog	277,841	May 15	1621	442	23	1918
Kennelly, Patrick, Bridgeport, Conn. Protractor	285,907	Oct. 2	165	47	25	32
Kenner, Charles, St. Mary's, Mo. Double-shovel plow	270,812	Jan. 16	1220	352	23	254



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Kennett, John R., Geddes, N. Y. Tool-holder for grinding tools.....	271,249	Jan. 30	1751	506	23	357
Kenney, Daniel T. (See Bauer and Kenney.)						
Keonish, William, New York, N. Y. Atomizer.....	282,090	July 31	2212	608	24	408
Keonish, William, New York, assignor to C. B. Dickinson, Brooklyn, N. Y. Tube-valve.....	274,447	Mar. 20	1553	426	23	1117
Kent, Alexander W., assignor to A. Robinson, Bloomingdale, N. J. Separating foreign substances from india-rubber waste.....	281,769	July 24	1808	494	24	334
Kent, Artemas A., Denver, Colo. Ore-concentrator.....	280,934	July 10	743	207	24	137
Kent, Nelson N. (See Morgan and French, assignors.)						
Kent, William, Allegheny, Pa., assignor of one-half to J. Scott, Jersey City, N. J. Blast-furnace.....	273,742	Mar. 13	647	172	23	953
Kenton, James, Urbana, Ohio. Harrow.....	273,105	Feb. 27	1931	541	23	799
Kenyon, Charles H., South Glen's Falls, N. Y. Band-shaper for shirts.....	290,062	Dec. 11	855	243	25	1044
Kenyon, George H., Homer, N. Y. Hop-pole.....	286,309	Oct. 9	670	179	25	132
Kenyon, James. (See Garland and Kenyon.)						
Kenyon, Orrin P., Wakefield, R. I. Paper-bag holder.....	272,263	Feb. 13	844	235	23	599
Kepler, Martin, Deedsville, Ind. Device for upsetting and restoring screw-threads.....	289,271	Nov. 27	1837	507	25	854
Kerby, George M., Bolivar, Tex. Draft-equalizer.....	272,706	Feb. 20	1414	396	23	702
Kern, Alfred. (See Caro and Kern.)						
Kern, Alfred, Basle, Switzerland, assignor to Badische Anilin and Soda Fabrik, Mannheim, Germany. Manufacture of dye-stuff or coloring-matter.....	290,891	Dec. 25	1932	.....	25	1249
Kern, Alfred, Basle, Switzerland, assignor to Badische Anilin and Soda Fabrik, Mannheim, Germany. Manufacture of purple dye-stuff.....	290,892	Dec. 25	1933	.....	25	1249
Kern, Alfred, Basle, Switzerland, assignor to Badische Anilin and Soda Fabrik, Mannheim, Germany. Manufacture of dye-stuff or coloring-matter.....	290,893	Dec. 25	1935	.....	25	1249
Kern, Xavier, Jr., and J. Hammer, West Brookfield, Ohio. Mining-machine.....	291,012	Dec. 25	2099	{ 578 579 }	{ 25 25 }	{ 1275 1275 }
Kerner, Marion H., New York, N. Y. Stylographic fountain-pen.....	280,630	July 3	349	97	24	62
Kerner, Marion H., New York, N. Y., and C. L. Downes, Jersey City, N. J., said Downes assignor to said Kerner. Stylographic fountain-pen.....	276,425	Apr. 24	1999	554	23	1592
Kerns, Charles H., Port Byron, N. Y. Whiffletree-plate.....	283,615	Aug. 21	1378	385	24	762
Kerr, James, and J. Haworth, Church, county of Lancaster, England. Machine for printing fabrics.....	276,426	Apr. 24	2000	554	23	1592
Kerr, Joseph, et al. (See Jones, Richard F., assignor.)						
Kerr, Thomas B. (See Barr, Charles H., assignor.)						
Kerr, Thomas B. (See Finney, Joseph R., assignor.)						
Kerr, Thomas B. (See Ford, John C., assignor.)						
Kerr, Thomas B. (See Oliver, James B., assignor.)						
Kerr, Thomas B. (See Stubbe, John, assignor.)						
Kershaw, Arnold W., Lancaster, county of Lancaster, England. Apparatus for ventilating buildings and chimney-stacks.....	281,082	July 10	914	255	24	169
Kershner, Rebecca, Ansonia, Ohio. Spring-pillow.....	283,616	Aug. 21	1379	385	24	762
Kersten, Henry C. (See Schüssler and Kersten.)						
Kesseberg, Peter H., Hamburg, Germany. Spring bed-bottom.....	275,497	Apr. 10	830	925	23	1376
Kessler, Henry, San Francisco, Cal. Steam-actuated valve.....	290,063	Dec. 11	856	243	25	1044
Kessler, Johann K., assignor of one-half to F. Siller, Milwaukee, Wis. Production of glycerine from the mother-liquor of soap-factories.....	277,575	May 15	1315	.....	23	1863
Kessler, Louis, Ludington, Mich. Fishing apparatus.....	281,083	July 10	915	256	21	169
Kessler, Paul O., Darien, Ga. Cartridge-shell.....	283,118	Aug. 14	770	217	24	644
Kessler, Paul O., Darien, Ga. Powder-flask.....	288,066	Nov. 6	343	96	25	566
Kester, John, Clay City, Ind. Cultivating plow.....	272,962	Feb. 27	1752	489	23	767
Ketcham, Charles A., Cold Spring, Ind. Animal-trap.....	285,754	Sept. 25	1937	554	24	1265
Ketcham, John G., Coldwater, Mich. Paving composition.....	277,743	May 15	1502	.....	23	1896
Ketcham, John G., Coldwater, Mich. Paving composition. (Reissue).....	10,414	Nov. 27	1974	.....	25	880
Ketchledge, James T., and R. J. Pepper, Sidney, Ohio; said Ketchledge assignor to said Pepper. Level.....	277,842	May 15	1622	442	23	1918
Ketchum, Everett H., Riceville, Pa. Saw-setting device.....	287,835	Nov. 6	55	16, 17	25	517
Ketchum, Joseph, Jr. (See Dunlap and Ketchum.)						
Kettell, James F., Worcester, Mass. Electric clock-setting mechanism.....	290,894	Dec. 25	1936	{ 533 534 }	{ 25 25 }	{ 1249 1249 }
Kettinger, Edward, Jefferson City, Mo. Harness-pad.....	277,291	May 8	974	262	23	1800
Kenfel & Esser. (See Weidenmann, Jacob, assignor.)						
Key, Erasmus H., Mayfield, Ky. Bee-hive.....	273,691	Mar. 6	580	154	23	933
Key Inclined Plane Fire Escape Company. (See Key, Minter P., assignor.)						
Key, Minter P., Memphis, Tenn., assignor to Key Inclined Plane Fire Escape Company, Washington, D. C. Fire-escape.....	270,955	Jan. 23	1402	404	23	290
Keys, Erasmus L., assignor to Muncie Washing Machine Company, Muncie, Ind. Washing-machine.....	274,946	Apr. 3	81	22	23	1239
Keys, Thomas, Chicago, Ill. Coffee-pot.....	281,373	July 17	1292	358	24	241
Keys, William A. (See Lockwood and Keys.)						
Keys, William A., and J. Lockwood, New York, N. Y. Necktie-holder.....	277,905	May 22	1701	414	23	1939
Keyser, John H., New York, N. Y. Gas heating and cooking stove.....	276,049	Apr. 17	1520	418	23	1502
Kibble, Herbert W., Utica, N. Y. Calendar.....	285,138	Sept. 18	1214	341	24	1126
Kibbe, Isaac P. (See Rutherford, Robert W., assignor.)						
Kibbe, William A., Leavenworth, Kans. Striping device for painters.....	279,767	June 19	1422	398	23	2381
Kichline, William E., assignor of one-half to A. Stont, Bethlehem, Pa. Machine for curving railway-rails.....	279,394	June 12	990	275	23	2300
Kidd, James E., Stockton, assignor of one-half to J. Duffy, San Francisco, Cal. Sample-exhibitor for wall-papers.....	285,755	Sept. 25	1958	554	24	1265
Kidd, Michael F., Baltimore, Md. Automatic door for elevator-hatchways.....	281,632	July 17	1616	442	24	294
Kidder, Charles E., Anroa, Ill. Whisk-broom holder.....	272,446	Feb. 20	1082	305	23	644
Kidder, Jephther P., Philmont, assignor of one-half to G. W. Mosely, Hudson, N. Y. Knitting-machine.....	274,947	Apr. 3	82	23	23	1239
Kidder, Wellington P., Malden, Mass. Combination of drawing-tablet and instrument-case.....	284,131	Aug. 28	2038	566	24	891
Kiefer, Charles C., Urbana, Ohio. Street-lamp.....	275,219	Apr. 3	433	119	23	1300
Kieffer, Martin W., Helfenstein, Pa. Harvester cutter-bar.....	288,342	Nov. 13	692	191	25	636
Kieffer, John C. (See Harry and Kieffer.)						
Kickenapp, Friedrich. (See Peavey and Kickenapp.)						
Kickenapp, Frederick, Faribault, Minn. Supplemental pocket for pool and billiard tables.....	281,518	July 17	1477	405	24	272
Kiel, Adolphus E., Montrose, Iowa. Washing-machine.....	290,064	Dec. 11	857	243	25	1044
Kieley, Timothy J., New York, N. Y. Apparatus for returning and feeding water to boilers.....	273,367	Mar. 6	171	47	23	863
Kienardt, John A., assignor of two-thirds to F. Wogaman and W. F. Patterson, Dayton, Ohio. Bed-spring.....	277,136	May 8	797	299	23	1768
Kientoff, August W., Dallas, Oreg. Chronometer-escapement.....	283,349	Aug. 14	1059	297	24	698
Kientoff, William F., Englewood, Ill. Tucking attachment for sewing-machines.....	290,065	Dec. 11	857	244	25	1045

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Kienzle, John G., assignor to G. F. Hensel, Philadelphia, Pa. Corset fabric.....	281,519	July 17	1477	405	24	273
Kierstein, Hermann. (See Gunther, George A., assignor.)						
Kiggins and Tooker Company. (See Hemphill, Edward A., assignor.)						
Kibbeman, Theodor, New Orleans, La. Brush for cotton-gins.....	273,692	Mar. 6	581	154	23	933
Kilborn, Alden D., Tucson, Ariz. Ter. Safety-valve.....	274,787	Mar. 27	1984	552	23	1199
Kilborn, Alden D., and W. F. Smith, Tucson, Ariz. Ter. Car-brake.....	270,440	Jan. 9	747	219	23	155
Kilbourn, Edward, Jamestown, Wis. Treadle.....	275,829	Apr. 17	1260	346	23	1456
Kilburn, Benjamin W., Littleton, N. H., assignor to Scovill Manufacturing Company, Waterbury, Conn. Photographic camera.....	286,447	Oct. 9	837	227	25	163
Kilburn, Cheney. (See Kimball and Kilburn.)						
Kilcullen, Patrick P., St. Louis, Mo. Device for turning fly-wheels of engines, &c.....	279,652	June 19	1296	360	23	2358
Killgore, Charles, assignor to I. W. Killgore, Utica, N. Y. Machine for compressing dry and plastic materials.....	276,828	May 1	379	101	23	1692
Killgore, Ida W. (See Killgore, Charles, assignor.)						
Killingworth, Wesley T., Augusta, Ga. Agne remedy.....	282,091	July 31	2212		24	408
Killion, Michael J. (See Milligan and Killion.)						
Killion, William. (See Milligan and Killion, assignors.)						
Killip, John, Allegheny, assignor to Bair & Gazzam, Pittsburg, Pa. Coupling for shafting.....	280,188	June 26	1924	541	23	2475
Kilmer, Irving A., Schenectady, N. Y. Bale-tie.....	282,991	Aug. 14	608	172	24	616
Kilner, George T., Providence, R. I. Combined clasp and button.....	276,427	Apr. 24	2002	555	23	1593
Kilroy, John O., Albany, N. Y. Tobacco-pipe.....	286,020	Oct. 2	296	82	25	55
Kilshaw, John, St. Paul, Minn. Heating-stove.....	273,106	Feb. 27	1932	541	23	799
Kilts, Christopher C., Hannibal, Mo. Car-door.....	273,290	Mar. 6	55	16	23	844
Kimball, Alonzo S., Worcester, Mass. Dynamo-electric machine.....	288,818	Nov. 20	1295	354 355	25	747
Kimball, Benjamin B. (See Lindsey, William M., assignor.)						
Kimball, Benjamin P., Elmore, Ohio. Fastening for overshoes.....	272,887	Feb. 27	1672	467	23	755
Kimball, Charles E., Leadville, Colo. Cut-off-valve gear.....	279,253	June 12	794	230	23	2269
Kimball, Charles M., assignor to himself and J. M. Wheeler, Toledo, Ohio. Top.....	272,707	Feb. 20	1414	397	23	702
Kimball, Frank H., assignor of one-half to A. M. Johnston, Rockford, Ill. Starch-separator.....	275,340	Apr. 3	602	162	23	1328
Kimball, George A., and L. H. Davis City, Pa. Deep-well pump.....	271,082	Jan. 23	1556	448	23	316
Kimball, George P., San Francisco, Cal. Two-wheeled vehicle.....	272,557	Feb. 20	1221	341	23	668
Kimball, Handley B., and C. S. Barrett, assignors of one-third to J. Morey, Charlotte, Mich. Fire-escape.....	283,617	Aug. 21	1380	386	24	762
Kimball, Henry H. (See Perry and Kimball.)						
Kimball, Henry H., and C. E. Perry, Bloomington, Ill. Wrist-pin lubricator.....	273,856	Mar. 13	804	217	23	980
Kimball, Hiram, Cleveland, Ohio. Die for the manufacture of turn-buckles.....	285,275	Sept. 18	1368	386	24	1155
Kimball, Hiram, Cleveland, Ohio. Die for the manufacture of turn-buckles.....	285,275	Sept. 18	1370	386	24	1155
Kimball, Hiram A., Philadelphia, Pa. Machine for coupling butt-joints of splints.....	276,142	Apr. 17	1637	451	23	1523
Kimball, Hiram A., Philadelphia, Pa. Tool for dressing stone.....	279,488	June 12	1098	303	23	2317
Kimball, Hiram A., and C. Kilburn, Philadelphia, Pa.; said Kimball assignor to said Kilburn. Tilting and revolving chair.....	270,081	Jan. 2	295	88	23	60
Kimball, Lauron H. (See Kimball, George A. and L. H.)						
Kimball, Peter, Cleveland, Ohio. Producing fruit on barren fruit-trees and changing their bearing-years.....	270,226	Jan. 9	476	140	23	103
Kimball, Samuel H. (See Somes and Kimball.)						
Kimball, Samuel P., Woodstock, Ohio. Combined roller and harrow.....	297,836	Nov. 6	56	17	25	517
Kimball, Stephen H., Everett, Mass. Velocipede.....	278,972	June 5	437	119	23	2198
Kimball, Thomas, Chicago, Ill. Shirt.....	277,744	May 15	1503	407	23	1896
Kimball, William B., assignor to E. Howe & Co., Peterborough, N. H. Truss.....	288,945	Nov. 20	1447	399	25	776
Kimball, William H., Boston, Mass. Self-extinguishing lamp.....	289,843	Dec. 11	594	165	25	998
Kimbark, Seneca D. (See Curtis, George S., assignor.)						
Kimble, Andrew, Moundsville, W. Va. Wagon-axle.....	274,341	Mar. 20	1416	388	23	1093
Kimble, James E., Vicksburg, Mich. Grain weigher and measure.....	290,006	Dec. 11	859	244	25	1045
Kimmel, William, Milton, Ind. Gang-plow.....	279,768	June 19	1423	398	23	2381
Kimpen, Cornelius, assignor to himself and Northwestern Fertilizing Company, Chicago, Ill. Crushing and grinding machine.....	281,887	July 24	1956	534 536	24	360
Kimpen, Cornelius, assignor to himself and Northwestern Fertilizing Company, Chicago, Ill. Deseccating-machine.....	281,888	July 24	1960	536	24	360
Kindermann, August, Cleveland, Ohio. Vapor-burner.....	288,313	Nov. 13	693	191	25	636
Kindle, John. (See Gump, Alexander, assignor.)						
King, Alfred. (See Abel, William G., assignor.)						
King, Alfred, et al. (See Locke, Stephen F., assignor.)						
King, Alfred T., Nottingham, England. Bottle-stopper.....	284,561	Sept. 4	486	137	24	987
King, Amos B., Lake View, Ill. Car-door.....	271,337	Jan. 30	1869	542	23	377
King, Charles A., Meriden, Conn. Machine for turning gun-barrels.....	287,548	Oct. 30	2236	607	25	435
King, Charles C., Shelby, Ohio. Vehicle-spring.....	282,904	Aug. 7	512	143	24	591
King, Edwin A. (See Randel and Sims, assignors.)						
King, Francis M., Wilmington, N. C. Combined fertilizer-distributor and seeder.....	284,562	Sept. 4	487	137	24	987
King, Frank. (See Beeman, Taylor, and King.)						
King, George W., New York, N. Y. Harvester-knife grinder.....	285,492	Sept. 25	1629	457	24	1206
King, George W., assignor to W. W. King and C. E. Coburn, Chicago, Ill. Harvester-knife grinder.....	270,548	Jan. 9	887	257	23	183
King, Gideon, Eminence, Ky. Swinging gate.....	272,061	Feb. 13	595	161	23	555
King, Henry T., Falkland, N. C. Manure-drill.....	281,191	July 10	1055	291	24	193
King, Herbert, Des Moines, Iowa. Tile-laying plow.....	288,344	Nov. 13	695	191	25	636
King, Hezekiah O., Greenville, S. C., assignor to G. T. Raoul, New Orleans, La. Ice-cream freezer.....	273,107	Feb. 27	1932	541	23	799
King, Hiram T., Rochester, N. Y. Sash-fastener.....	276,050	Apr. 17	1522	418	23	1503
King, Hiram T., Rochester, N. Y. Sash-fastener.....	280,935	July 10	746	208	24	137
King, Israel C., et al. (See Corbin, Elijah H., assignor.)						
King, Jabez W., and S. W. Goodwin, Toledo, Ohio. Portfolio.....	287,030	Oct. 23	1584	436	25	306
King, Jacob, Indianapolis, Ind. Gearing for grain-drills.....	270,317	Jan. 9	578	170	23	123
King, James A., and J. Little, Dublin, Ireland. Furnace for the manufacture of glass.....	279,254	June 12	795	250	23	2269
King, Jeremiah J., New York, N. Y. Mat-lock.....	274,788	Mar. 27	1985	552	23	1200
King, Jesse H., Shane's Crossing, Ohio. Extension-table.....	277,576	May 15	1316	353	23	1863
King, John W., Lambertville, N. J. Safety-elevator.....	287,549	Oct. 30	2238	608	25	436
King, Josias R., assignor of one-half to R. W. Johnson and N. Myrick, St. Paul, Minn. Combined paper-weight, calendar, and pen-rack.....	288,065	Nov. 6	343	96	25	566
King, Morris, Gloversville, N. Y. Glove.....	272,384	Feb. 13	1062	280	23	625
King, Oliver C. (See Flynn, William V., assignor.)						
King, Peter, Springfield, Ohio. Pulley-block.....	286,021	Oct. 2	297	83	25	55



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King, Robert L., Flint, Mich. Packing-ring for piston-rods.....	285,139	Sept. 18	1215	341	24	1120
King, Robert T., Columbus, Ohio. Brake-shoe.....	275,830	Apr. 17	1260	346	23	1457
King, Robert T., Columbus, Ohio. Machine for making split keys.....	277,577	May 15	1317	353	23	1864
King, Samuel M., Lancaster, Pa. Rotary shingle-planing mill.....	281,520	July 17	1478	406	24	273
King, Sidney D., Pittston, Pa. Dumping-car.....	278,343	May 29	2282	624	23	2047
King, Sidney D., assignor of five-eighths to G. B. Thompson, Pittston, and C. D. Simpson, Scranton, Pa. Side bearing for railway-cars.....	273,693	Mar. 6	582	155	23	933
King, Thomas, Providence, R. I. Bracelet.....	285,041	Sept. 18	1096	306	24	1106
King, Thomas D., Montreal, Quebec, Canada. Balances.....	274,202	Mar. 20	1225	337	23	1060
King, Wendell R. (See Bogle, Walter S., assignor.)						
King, William A., Cleveland, Ohio. Fire-escape.....	285,756	Sept. 25	1959	554	24	1265
King, William T., Cambridgeport, Mass. Automatically releasing safety-valve weights.....	288,710	Nov. 20	1161	319	25	724
King, William W., et al. (See King, George W., assignor.)						
Kingman, Henry, et al. (See Odell, Levi J., assignor.)						
Kingsford, Thomas P., Oswego, N. Y. Manufacture of starch from wheat, corn, &c.....	280,044	June 26	1774	.....	23	2448
Kingsford, Thomas P., Oswego, N. Y. Manufacture of dextrine, glucose, maltose, and grape-sugar.....	280,045	June 26	1775	.....	23	2448
Kingsland, Jacob D. (See Wills and Kingsland.)						
Kingsland, Philip S., Chicago, Ill. Steam pumping-engine.....	272,264	Feb. 13	845	235	23	599
Kingsland, Samuel, Omaha, Nebr. Milk-pan.....	286,310	Oct. 9	671	179	25	132
Kingsley, George, Leavenworth, Kans. Steam-boiler.....	282,330	July 31	2531	693	24	461
Kingsley, Horace L., Racine, Wis. Road-cart.....	284,132	Aug. 28	2038	567	24	891
Kingsley, Willey J. P., Rome, N. Y. Steam-boiler.....	289,661	Dec. 4	359	101	25	950
Kingston, Edward S., Little Falls, N. Y. Last for boots and shoes.....	273,108	Feb. 27	1933	542	23	799
Kingston, Frank, Deptford, county of Kent, England. Stair-rod securer.....	271,083	Jan. 23	1558	448	23	316
Kingwill, John F., Chicago, Ill. Spring-scale.....	282,465	Aug. 7	205	59	24	535
Kingzett, Charles T., 17 Lansdowne Road, Tottenham, and M. Zingler, 19 Buckland Crescent, Belsize Park, county of Middlesex, England. Production of disinfectants.....	274,789	Mar. 27	1986	.....	23	1200
Kingzett, Charles T., 17 Lansdowne Road, Tottenham, and M. Zingler, 19 Buckland Crescent, Belsize Park, county of Middlesex, England. Disinfectant.....	281,521	July 17	1479	.....	24	273
Kinkaid, James H., assignor of one-half to P. Evans, Reno, Nev. Ore crusher and pulverizer.....	277,578	May 15	1319	354	23	1864
Kinn, Friedrich, New York, assignor, by mesne assignments, to E. Sanders, Brooklyn, N. Y. Fan.....	278,799	June 5	167	49	23	2151
Kinne, Erastus M., Auburn, N. Y. Buckle.....	270,227	Jan. 9	476	140	23	104
Kinnear, Peter, et al. (See Strong, Levi C., assignor.)						
Kinney, Cyrus, Windsor, Ontario, Canada, assignor to himself and J. M. Welch, Detroit, Mich. Knife-scourer.....	273,368	Mar. 6	172	47	23	863
Kinney, Israel, Windsor, Ontario, Canada. Pipe-cutter.....	271,250	Jan. 30	1752	507	23	357
Kinney, Marshal J., et al. (See Jensen, Mathias, assignor.)						
Kinney, Simon, Port Townsend, Wash. Ter. Saw-sawge.....	279,769	June 19	1425	398	23	2381
Kinnier, Adelia. (See Kinnier, George, Jr., assignor.)						
Kinnier, George, Jr., assignor to A. Kinnier, Baltimore, Md. Controlling-strap for harness.....	284,563	Sept. 4	488	137	24	987
Kinsley, William E. (See Sonier, Frank, assignor.)						
Kinsley, Edwin. (See Bushort, Dorrick J., assignor.)						
Kinsman, Frank E., New York, N. Y. Electric time-register for telephone and telegraph switches.....	276,184	Apr. 24	1688	466	23	1540
Kinsman, Frank E., New York, N. Y. Apparatus for protecting telephonic and telegraphic instruments.....	283,492	Aug. 21	1242	349	24	736
Kinsman, John H., Rye, N. Y. Telephonic apparatus.....	288,449	Nov. 13	835	226 227	25	661
Kinyon, D. Randolph, assignor of one-half to J. C. Kinyon, Raritan, N. J. Friction-clutch.....	281,700	July 24	1715	466	24	317
Kinyon, Job C. (See Kinyon, D. Randolph, assignor.)						
Kinzel, Lafayette, Cincinnati, Ohio. Ladder attachment.....	274,448	Mar. 20	1555	426	23	1117
Kinzel, Lafayette, Cincinnati, Ohio. Combined clamp-handle and wrench for hose.....	282,714	Aug. 21	1501	423	24	785
Kipling, Richard A., Roselle, N. J. Charm-compass frame.....	273,265	Feb. 13	846	235	23	599
Kipling, Ste. E. E. (See Lancon, Gédéon, assignor.)						
Kipp, August E., assignor to Holden Manufacturing Company, Dayton, Ohio. Blank book.....	276,601	May 1	72	20	23	1640
Kipp, H. A. (See Wells, Philip F., assignor.)						
Kipp, Mary H. (See Rix, Benjamin F., assignor.)						
Kirby, James J., Clinton, Iowa. Automatic friction feeding device for drilling and boring machines.....	290,242	Dec. 18	1077	301	25	1093
Kirby, John, Jr. (See Yoe and Kirby.)						
Kirby, John, Jr., Ludlow, Ky., assignor to Post & Co., Cincinnati, Ohio. Coupling-ring for lamps.....	271,866	Feb. 6	340	94	23	500
Kirby, John, Jr., Ludlow, Ky., assignor to Post & Co., Cincinnati, Ohio. Berth-lock for sleeping-cars.....	271,867	Feb. 6	341	94	23	500
Kirby, John, Jr., Ludlow, Ky., assignor to Post & Co., Cincinnati, Ohio. Lamp.....	274,003	Mar. 13	975	207	23	1009
Kirby, John, Jr., Ludlow, Ky., assignor to Post & Co., Cincinnati, Ohio. Signal for locomotive head-lights.....	276,428	Apr. 24	2002	555	23	1593
Kirby, John, Jr., Ludlow, Ky., assignor to Post & Co., Cincinnati, Ohio. Sleeping-car pump-joint.....	281,192	July 10	1056	291	24	194
Kirby, John, Jr., Ludlow, Ky., assignor to Post & Co., Cincinnati, Ohio. Lamp.....	281,633	July 17	1618	442	24	295
Kirby, John, Jr., Ludlow, Ky., assignor to Post & Co. Knob attachment.....	281,701	July 24	1716	466	24	317
Kirchen, William, Chicago, Ill. Horseshoe.....	272,963	Feb. 27	1753	490	23	767
Kirk, David, assignor of one-half to H. C. Kirk, Phelps, N. Y. Pole-ring for harness.....	274,615	Mar. 27	1783	495	23	1164
Kirk, Edward, Oswego, N. Y. Treatment of caustic soda.....	275,498	Apr. 10	831	.....	23	1377
Kirk, Eli, Clarksville, Ohio. Car-coupling.....	282,734	Aug. 7	318	91	24	556
Kirk, George H., Philadelphia, Pa. Candle.....	276,602	May 1	72	20	23	1640
Kirk, George W., Washington, D. C. Gold washer and amalgamator.....	270,813	Jan. 16	1222	352	23	254
Kirk, Hyland C. (See Kirk, David, assignor.)						
Kirk, Joseph L., Pittsburg, Pa. Ticket-case.....	272,708	Feb. 20	1415	397	23	762
Kirk, Peter, Workington, county of Cumberland, England. Rolling-mill.....	270,441	Jan. 9	748	219	23	155
Kirk, W. Ranson, assignor of one-half to W. J. Moore, Fort Scott, Kans. Steam-boiler.....	270,395	June 12	993	276	23	2300
Kirk, W. Ranson, assignor of one-half to W. J. Moore, Fort Scott, Kans. Steam-boiler.....	279,396	June 12	994	276	23	2301
Kirk, W. Ranson, assignor of one-half to W. J. Moore, Fort Scott, Kans. Apparatus for the construction of tunnels.....	290,989	Dec. 25	2070	570	25	1270
Kirk, William, Bridgeport, Conn. Lamp holder and bracket.....	273,857	Mar. 13	805	218	23	980
Kirkbride, Frederick L., Wyandotte, Kans., assignor of two-thirds to R. H. Drennon and W. C. Duvall, Kansas City, Mo. Grain-car door.....	279,255	June 12	796	230	23	2269
Kirkham, James, Milwaukee, Wis. Window-cleaner.....	275,921	Apr. 17	1370	377	23	1476
Kirkland, William P., San Francisco, Cal. Harrow attachment.....	284,307	Sept. 4	186	52	24	936
Kirkland, William P., assignor of six-tenths to D. Buck and A. B. Smith, San Francisco, Cal. Solar fruit-drier.....	281,084	July 10	916	256	24	169
Kirkland, William P., assignor to G. B. Davis, San Francisco, Cal. Slate-pencil sharpener.....	285,757	Sept. 25	1959	555	24	1265

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Kirkpatrick, David M. (See Jackson and Kirkpatrick.)						
Kirkpatrick, David M., Kansas City, Mo. Safety-truck for railway-cars.	272,267	Feb. 13	848	236	23	599
Kirkpatrick, Elijah, and S. Copron, Gilbert's Mills, Ohio. Ditching-spade.	272,266	Feb. 13	847	236	23	599
Kirkpatrick, Thomas J., Springfield, Ohio. Bicycle-saddle.	278,560	May 29	2541	693	23	2092
Kirkpatrick, Thomas J., Springfield, Ohio. Bicycle-saddle.	289,272	Nov. 27	1838	507	25	854
Kirksey, John R., Dysartville, N. C. Car-coupling.	290,243	Dec. 18	1077	301	25	1093
Kirkwood, David, Boston, Mass. Breach-loading fire-arm.	289,273	Nov. 27	1839	508	25	855
Kirkwood, Joseph S., McKeesport, Pa. Lifting-jack.	272,837	Feb. 20	1588	446	23	733
Kirkwood, Robert G., Ellicott City, Md. Wind-wheel.	278,561	May 29	2542	693	23	2093
Kirkwood, Thomas, Chicago, Ill. Grate for furnaces.	277,491	May 15	1214	325	23	1847
Kirkwood, Thomas B. (See Crawford and Kirkwood.)						
Kirlin, Linden, White Cloud, Kans. Combined lister and drill.	274,004	Mar. 13	976	268	23	1009
Kise, Samuel D. B., Kingwood, N. J. Cultivator.	274,616	Mar. 27	1783	496	23	1164
Kiss, Emerick, New York, N. Y. Elevator-hatchway guard.	282,905	Aug. 7	513	144	24	591
Kissam, Astor, Pimlico, county of Middlesex, England. Rotary motor.	282,001	July 24	2089	573	24	383
Kistner, Harry U., Bordentown, N. J. Combination-tool.	271,868	Feb. 6	342	94	23	501
Kitchen, William W., West Union, Iowa. Churn.	282,199	July 31	2367	651	24	432
Kitselman, Alva L., assignor of one-half to D. M. Kitselman, Ridgeville, Ind. Roller-skate.	279,489	June 12	1098	303	23	2317
Kitselman, Davis M. (See Kitselman, Alva L., assignor.)						
Kitson, George L. (See Philips and Kitson.)						
Kitson Machine Company. (See Kitson, Richard, assignor.)						
Kitson, Richard, assignor to Kitson Machine Company, Lowell, Mass. Cotton opener and lapper.	272,709	Feb. 20	1416	397	23	703
Kitson, Richard, assignor to Kitson Machine Company, Lowell, Mass. Cotton-opener.	269,004	Nov. 27	1510	420	25	796
Kitt, Nickolas, and J. Schmadel, Cincinnati, Ohio. Caster for trunks.	279,397	June 12	995	276	23	2301
Kittell, Ferdinand A., Pittsburg, Pa. Candelabrum.	282,458	July 31	2694	740	24	490
Kittleston, Ole O., Lee, Ill., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass., and I. L. Ellwood, De Kalb, Ill. Barbed-wire machine.	280,189	June 26	1925	{ 541 } { 542 }	23	2476
Kittoo, George D., Kensington, county of Middlesex, England. Instrument for counting and registering the number of revolutions of a rotating shaft.	279,095	June 5	596	162	23	2225
Kittredge, Charles, Indianapolis, Ind. Stapling machine.	282,533	Aug. 7	69	21	24	512
Kitson, Alfred B., Boston, Mass. Foot-power mechanism.	285,819	Oct. 2	44	14, 15	25	10
Kitson, Alfred B., Boston, Mass. Foot-power machine.	285,820	Oct. 2	45	15	25	10
Kitz, Ernest, assignor of one-half to J. W. Loeper, Indianapolis, Ind. Advertising device for cars.	288,578	Nov. 13	994	274	25	689
Kitz, Jacob, Neuschlenssig, near Leipzig, Germany. Machine for smoothing piano-keys.	272,140	Feb. 13	695	190	23	572
Kitzmiller, Archibald. (See Darling and Kitzmiller.)						
Kivett, John. (See Lockwood and Kivett.)						
Kivitts, Charles, Bellevue, Iowa. Carrying-can and jacket.	281,374	July 17	1292	358	24	241
Kizer, William R., Hammond, Ill. Umbrella-support.	278,973	June 5	438	119	23	2198
Klahr, William, Myerstown, Pa. Bicycle.	285,821	Oct. 2	46	15	25	10
Klaiber, Conrad, and A. Currier, Grand Rapids, Mich. Combined cigar clipper and perforator.	289,351	Nov. 27	1939	539	25	874
Klapperich, John S., San Francisco, Cal. Fifth-wheel for vehicles.	287,550	Oct. 20	2240	608	25	436
Klauber, Edward, Louisville, Ky. Box for photographic dry-plates.	290,587	Dec. 18	1539	423	25	1172
Kleckner, Isaac F. (See Devore, Levi M., assignor.)						
Kleckner, Isaac F., et al. (See Kochsmeier, Henry P., assignor.)						
Klêe, Federico, Guatemala, Central America. Coffee-drying apparatus.	271,869	Feb. 6	343	95	23	501
Klein, Henry, Cincinnati, Ohio. Can-soldering tool.	284,641	Sept. 11	586	165	24	1010
Klein, Josef, assignor of one-third to J. Fischl, New York, N. Y. Suspension-joint for chandeliers.	285,277	Sept. 18	1371	386	24	1155
Klein, Joseph, assignor of one-half to A. Wisniewski and S. Krzeminski, New York, N. Y. Scaffold and fire-escape.	284,308	Sept. 4	187	52, 53	24	936
Klein, Wilhelm. (See Hildenbrand, Klein, and Trumper.)						
Kleinert, Isaac B. (See Beard and Baldwin, assignors.)						
Kleinert, Isaac B., New York, N. Y. Dress-shield.	287,298	Oct. 23	1925	{ 526 } { 527 }	25	378
Kleinschmidt, Charles, Breckinridge, Colo., assignor to E. Kleinschmidt and C. Ambrasius, Cleveland, Ohio. Ore-concentrator.	270,956	Jan. 23	1405	404	23	2
Kleinschmidt, Emilie, et al. (See Kleinschmidt, Charles, assignor.)						
Klemt, Adolf, New York, N. Y. Light for bakers' ovens.	271,714	Feb. 6	152	42	23	406
Klenze, Carl F. (See Roehl, Carl, assignor.)						
Kley, Frederick, Fort Wayne, Ind. Box-fastener.	280,749	July 3	501	142	24	89
Klima, Martin, Tabor, assignor of one-half to J. Charnock, Racine, Wis. Feed-cutter.	279,096	June 5	597	162	23	2225
Klinck, E. Jay. (See Ross and Klinck.)						
Kline, John A., assignor of one-half to L. Buckwalter, Roger's Ford, Pa. Lock-hinge.	288,345	Nov. 13	696	191	25	636
Kline, Joseph, Philadelphia, Pa. Pipe-joint.	278,800	June 5	168	49	23	2151
Kline, Joseph C., Philadelphia, Pa. Ice-making machine.	274,500	Mar. 27	1639	456	23	1139
Kline, Joseph C., Philadelphia, Pa. Condenser for ice-machines.	288,450	Nov. 13	841	227	25	662
Kline, Lewis T., Alpena, Mich. Log-roller.	278,022	May 22	1845	503	23	1962
Kline, Perry, et al. (See Harvey, Peter I., assignor.)						
Kline, Perry, et al. (See Wheelock, John A., assignor.)						
Kline, William. (See Shonpe and Buskirk, assignors.)						
Kling, Isaac, Louisville, Ky. Car-coupling.	285,758	Sept. 25	1960	555	24	1265
Klinkerfues, Wilhelm, Göttingen, Germany. Hygroscope.	275,220	Apr. 3	434	119	23	1300
Klinkner, Charles A., San Francisco, Cal. Hand-stamp.	289,844	Dec. 11	505	165	25	998
Klinschmidt, William, Haddonfield, N. J. Clothes-rack.	270,442	Jan. 9	749	220	23	155
Klipstein, Fredrick C., Fond du Lac, Wis. Sled.	279,256	June 12	797	221	23	2270
Klixvill, Sophus A. L., Copenhagen, Denmark. Life-preserver.	271,870	Feb. 6	344	95	23	501
Kloberg, John C. (See Ortlöpp and Kloberg.)						
Kluge, Alexander, Chicago, Ill. Picture-hanger.	271,715	Feb. 6	153	42	23	467
Klugh, Lewis E., and J. Hudson, Detroit, Mich. Hitching device.	278,710	June 5	44	14	23	2132
Knab, Clovis, Houssigny, assignor to Société Anonyme Lorraine Industrielle, Nancy, France. Making sodium carbonate.	287,551	Oct. 30	2240	.....	23	436
Knapp, Carey W., Geneva, Ohio. Rake.	272,268	Feb. 13	848	236	23	600
Knapp, Charles H., assignor to himself and R. F. Wilson, Mansfield, Pa. Machine for preparing the soil for crops.	275,773	Apr. 10	1183	325	23	1436
Knapp, Frank A. (See Conklin, Theodore F., assignor.)						
Knapp, Frank J. (See Ames, Josiah, assignor.)						
Knapp, George S., Chicago, Ill. Camp-chair.	279,398	June 12	996	276	23	2301
Knapp, George S., Chicago, Ill. Folding table.	283,119	Aug. 14	771	217	24	644
Knapp, George W., Baltimore, Md. Attaching handles to sheet-metal vessels.	271,871	Feb. 6	344	95	23	501
Knapp, George W., Baltimore, Md. Lip for coffee-boilers.	281,522	July 17	1480	406	24	273
Knapp, George W., Corning, N. Y. Car-coupling.	280,361	July 3	51	14	24	11



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Knapp, J. Jerome, South Gardner, Mass. Elevator-guard .....	278,974	June 5	439	120	23	2198
Knapp, John A., assignor of one-half to N. W. Strobbridge, Cincinnati, Ohio. Advertising device .....	281,025	Aug. 28	1906	534	24	868
Knapp, John H., New York, N. Y. Pencil-case .....	271,872	Feb. 6	345	95	23	501
Knapp, John H., New York, N. Y. Pendant .....	286,545	Oct. 9	934	257	25	184
Knapp, Robert P., New York, N. Y. Umbrella or parasol .....	280,485	July 3	189	50	24	35
Knapp, Smith H., and A. E. Adams, Danbury, Conn. Electrical pilot-car for locomotives .....	280,046	June 26	1776	498	23	2448
Knapp, Smith H., and A. E. Adams, Danbury, Conn. Elevated wire-railway .....	282,200	July 31	2368	652	24	432
Knapp, Thomas K., Tiffin, Ohio. Bread and meat slicer .....	288,451	Nov. 13	842	227	25	662
Knapp, William H., New Haven, Conn. Garment-stand .....	288,452	Nov. 13	842	228	25	662
Knapp, William H., New Haven, Conn. Garment-stand .....	290,990	Dec. 25	2071	570	25	1270
Knauss, Frank T., Scranton, Pa. Knockdown table .....	273,109	Feb. 27	1934	542	23	799
Knauth & Co. (See Geisler, Robert, assignor.)						
Knecht, John C., Sigel, Ill. Balanced slide-valve .....	282,906	Aug. 7	514	144	24	591
Kneeland, Charles L., Margaretville, N. Y. Milk-cooler .....	288,711	Nov. 20	1162	319	25	724
Kneeland, Julia A., Salem, Mass. Lady's head-wear protector .....	274,694	Mar. 6	583	155	23	934
Kneeland, Thomas T., Tecumseh, Mich. Wheat-huller .....	277,906	May 22	1702	465	23	1939
Knell, Andrew M., Ellicott City, Md. Seed-drilling harrow .....	290,244	Dec. 18	1079	301	25	1093
Knell, James W., Boston, Mass. Apparatus for producing illusory dramatic effects .....	277,137	May 8	798	209	23	1769
Knell, James W., Boston, Mass. Apparatus for producing illusory dramatic effects .....	286,709	Oct. 16	1174	315	25	228
Knibbs, James, Troy, N. Y. Automatic harness-suspender .....	274,501	Mar. 27	1641	456	23	1139
Knickerbocker, Henry N. (See Bennit, William, assignor.)						
Knieper, Julius L., et al. (See Hill, Andrew L., assignor.)						
Knieper, Julius L., et al. (See Koehler, Charles A., assignor.)						
Kniess, Frederick C., Baltimore, Md. Gas-making apparatus .....	283,897	Aug. 28	1724	486 487	24	835
Knight, Clarence H. (See Mills and Knight.)						
Knight, Edward C., Philadelphia, Pa. Crushing attachment for centrifugal machines .....	272,710	Feb. 20	1417	397	23	703
Knight, Edward M., Liverpool, county of Lancaster, England. Knife-cleaning machine .....	285,278	Sept. 18	1372	387	24	1155
Knight, George A., Lamartine, Pa. Stable .....	285,759	Sept. 25	1961	555	24	1265
Knight, George F., Hicksville, Ohio. Saw-mill dog .....	272,838	Feb. 20	1589	446	23	734
Knight, George F., Carroll, Ohio. Washing-machine .....	281,523	July 17	1481	406	24	273
Knight, George H., et al. (See Harris and Evans, assignors.)						
Knight, George H. (See Parkhurst, Darius, assignor.)						
Knight, George H. (See Pilger and Knight.)						
Knight, George H. (See Renner and Knight.)						
Knight, George H. (See Thomas, William M., assignor.)						
Knight, George M., Adrian, Mich. Wheat and flour scale .....	277,292	May 8	975	262	23	1800
Knight, J. Lee, Topeka, Kans. Game-counter .....	274,005	Mar. 13	976	263	23	1009
Knight, John A., Auburn, Me. Vinegar-measure .....	288,946	Nov. 20	1448	399	25	776
Knight, John A., Marlborough, N. H., assignor to himself and R. H. Montgomery, West Plains, Mo. Rotary steam-engine .....	282,907	Aug. 7	514	144	24	592
Knight, John J., Widnes, county of Lancaster, assignor of one-half to T. Leech, Hough Green, Ditton, England. Preparation and production of mineral phosphates .....	276,143	Apr. 17	1638	446	23	1523
Knight, John K., New York, and W. H. Baker, Brooklyn, N. Y., said Knight assignor to said Baker. Electric interlocking railway signal and switch system .....	272,839	Feb. 20	1590	447	23	734
Knight, Joseph. (See Austin, Dinsmore, assignor.)						
Knight, Joseph. (See Yeaw, Isaac H., assignor.)						
Knight, Josiah. (See McDowell, Samuel J., assignor.)						
Knight, Margaret E., and H. M. Macfarland, Ashland, Mass. Skirt-protector .....	282,646	Aug. 7	206	60	24	536
Knight, Octavins, et al. (See Harris and Evans, assignors.)						
Knight, Samuel, et al. (See Harris and Evans, assignors.)						
Knight, Walter H. (See Bentley and Knight.)						
Knight, Walter H., and E. M. Bentley, Washington, D. C. Electric way .....	276,829	May 1	380	101 102	23	1693
Knight, William H. H., assignor to L. Abraham, Washington, D. C. Lead or crayon holder .....	270,681	Jan. 16	1059	303	23	223
Knight, William H. H., assignor of one-half to G. B. Abrams, Washington, D. C. Operating chair .....	276,830	May 1	383	102	23	1693
Knight, William H. H., assignor to L. Abraham, Washington, D. C. Lead or crayon holder .....	277,138	May 8	799	210	23	1769
Knight, William H. H., assignor to L. Abraham, Washington, D. C. Lead or crayon holder .....	277,139	May 8	800	210	23	1769
Knipe, Oliver C., Norristown, Pa. Signal for cars and vessels .....	271,581	Jan. 30	2179	627	23	432
Knobeloch, John P., Philadelphia, Pa. Attaching springs .....	273,695	Mar. 6	584	155	23	934
Knoder, Henry F. (See Flood and Knoder.)						
Knock, Charles, assignor to A. Lyons, New York, N. Y. Machine for making stitched trimmings and moldings .....	279,257	June 12	798	221 222	23	2270
Knoepflin, John B., assignor of two-thirds to S. Mayer and L. Beckhardt, New York, N. Y. Ornamenting paper-hangings .....	271,201	Jan. 23	1697	490	23	338
Knollin, Thomas H., Syracuse, N. Y. Pipe-organ .....	273,369	Mar. 6	173	47	23	864
Knous, John, Hartford, Conn., assignor to Pope Manufacturing Company, Boston, Mass. Brake for velocipedes .....	279,956	June 26	1662	467	23	2428
Knous, John, assignor to Pope Manufacturing Company, Hartford, Conn. Pedal for velocipedes .....	281,889	July 24	1961	537	24	361
Knowles, Charles S., et al. (See Barbour, E. Russell, assignor.)						
Knowles, Edward R., assignor of one-half to B. A. Brooks, Brooklyn, N. Y. Dynamo-electric machine .....	282,459	July 31	2695	740 741	24	490
Knowles, Edward R., assignor of one-half to B. A. Brooks, Brooklyn, N. Y. Incandescent electric lamp .....	282,460	July 31	2697	741	24	490
Knowles, Edward R., assignor of one-half to B. A. Brooks, Brooklyn, N. Y. Electric-arc lamp .....	282,461	July 31	2698	741	24	490
Knowles, Edward R., assignor of one-half to B. A. Brooks, Brooklyn, N. Y. Electric lamp .....	288,346	Nov. 13	697	192	25	636
Knowles, Edward R., Brooklyn, N. Y., and F. E. Idell, Hoboken, N. J. Armature for dynamo-electric machines .....	279,399	June 12	997	277	23	2301
Knowles, Edward R., Brooklyn, N. Y., and F. E. Idell, Hoboken, N. J. Incandescent electric lamp .....	282,534	Aug. 7	71	21	24	512
Knowles, Lewis G., New York, N. Y. Cartridge .....	283,898	Aug. 28	1725	487	24	835
Knowles, Lucius J., Worcester, Mass. Loom .....	272,062	Feb. 13	596	161	23	555
Knowles, Lucius J., Worcester, Mass. Loom .....	274,502	Mar. 27	1643	457	23	1139
Knowles, Lucius J., Worcester, Mass. Machine for forming key-seats in hubs of gears, &c. .....	275,393	Apr. 10	699	186	23	1354
Knowles, William, Bolton, county of Lancaster, England. Governor for steam-engines .....	279,097	June 5	599	163	23	2226
Knowles, William, Bolton, county of Lancaster, England. Governor for steam-engines .....	282,908	Aug. 7	515	144	24	592
Knowles, William A., et al. (See Hunt, Robert H. H., assignor.)						
Knowles, William E., et al. (See Benner, Joseph, assignor.)						
Knowlton, Albion, Boston, assignor to E. F. Belding, Fitchburg, Mass. Leather-skiving machine .....	272,888	Feb. 27	1672	467 468	23	755

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dis.	Vol.	Page.
Knowlton, Albion, Boston, assignor of two-thirds to W. B. and W. F. Brigham, Hudson, Mass. Nailing-machine	280,190	June 26	1928	542	23	2476
Knowlton, Charles H. (See Fuller and Knowlton.)						
Knowlton, Edward R. (See Bissell, Albert A., assignor.)						
Knowlton, Edward R., et al. (See Nadellioffer, John W., assignor.)						
Knowlton, George W., Porter's Mills, Wis. Hay loader and rake	269,865	Jan. 2	52	16	23	13
Knowlton, Henry, West Bay City, Mich. Salt-evaporator	269,945	Jan. 2	148	43	23	31
Knowlton, John D. (See Bucklin and Knowlton.)						
Knowlton, William A., Rockford, Ill. Cultivator	287,443	Oct. 30	2102	571	25	408
Knowlton, William A., Rockford, Ill. Horse hay-rake	290,777	Dec. 25	1792	495	25	1224
Knowlton, William H. H., Chicago, Ill., and P. Sage, Dubuque, Iowa. Boiler-feeder	281,702	July 24	1717	467	24	317
Knowlton, William W., assignor of six-eighths to L. K. Shaylor and S. R. Harris, Ashtabula, Ohio. Rake	281,524	July 17	1482	407	24	273
Knowlton, William W., assignor of three-fourths to S. R. Harris and L. K. Shaylor, Ashtabula, Ohio. Making metallic rakes and forks	281,634	July 17	1618	443	24	295
Knox, Charles N. (See Spencer and Dunn, assignors.)						
Knox, Frank A., Woodland, Cal. Automatic adjustable grate	279,770	June 19	1426	398	23	2381
Knox, Orville M., Oneida, N. Y. Drying-floor for hop-houses	281,273	July 17	1167	323		
Knudtson, John L. (See Gage, Chapman E., assignor.)						
Kober, Philip A. O. (See Worn and Kober.)						
Koch, Gustav, Munich, Bavaria, Germany. Air-ship	282,647	Aug. 7	207	60	24	536
Koch, Henry, assignor one-half to B. F. Schertz, Hilton, Ill. Wagon-tongue	274,342	Mar. 20	1417	388	23	1093
Koch, John, et al. (See Hamburjer, Ephraim, assignor.)						
Koch, Walter E. (See Huntington and Koch.)						
Koch, William. (See Freeman, Thomas F., assignor.)						
Koch, William, New York, N. Y. Quilting-machine	271,475	Jan. 30	2056	592	23	411
Kocher, John W., Bristow, Iowa. Stove	282,735	Aug. 7	319	91	24	556
Kochsmeier, Henry P., assignor to L. M. Devore and I. P. Kleckner, Freeport, Ill. Spring-hinge	282,993	Aug. 14	609	173	24	616
Kock, Henry. (See Eisenmann and Kock.)						
Kock, Wilhelm, assignor to J. L. Hall, Cincinnati, Ohio. Combined time and non-time lock	272,063	Feb. 13	596	161	23	555
Koechlin, Horace, Lörrach, and O. N. Witt, Mülhausen, Germany. Treatment of indophenols	275,774	Apr. 10	1184	162		
Koefoed, Albert H., New York, N. Y., and T. B. Stillman, Hoboken, N. J. Treating phosphates of iron and alumina	281,635	July 17	1619		24	295
Koegel, Alois, Milwaukee, Wis. Lamp-extinguisher	287,689	Oct. 30	2444	655	25	473
Koehler, Charles A., Decatur, Ill. Vapor-burner	270,191	Jan. 2	427	123	23	87
Koehler, Charles A., assignor to J. L. Knieper, Decatur, and J. Barriek, Blue Mound, Ill. Vapor-stove	281,735	July 17	1294	358	24	241
Koehler, Henry, Pomeroy, Ohio. Station-indicator	277,375	May 15	1503	408	23	1896
Koenig, John F., Schlusburg, Mo. Shoe-nail clincher	288,244	Nov. 13	565	157	25	615
Koenig, Maximilian J., Jersey Shore, Pa. Invalid-chair	276,429	Apr. 24	2003	553	23	1593
Koeuig, Maximilian J., Jersey Shore, Pa. Head-rest	290,644	Dec. 18	1610	443	25	1184
Koerber, Rudolph C., Austin, Tex. Process of and apparatus for cleaning, tinting, and polishing pecan and other nuts	287,690	Oct. 30	2435	655	25	473
Kohler, Edward, assignor of three-eighths to H. P. Eayrs and M. Grunewald, Oakland, Cal. Sewing-machine	270,614	Jan. 16	1222	353	23	254
Kohler, Elias, York, Pa. Stock-car	275,221	Apr. 3	435	119	23	1301
Kohler, Frederick E., assignor of one-half to I. Harter, Canton, Ohio. Post-hole-digger	281,193	July 10	1057	292	24	194
Kohler, Frederick E., assignor of one-half to I. Harter, Canton, Ohio. Transplanter and post-hole digger	281,194	July 10	1059	292	24	194
Kohlhaas, Reynold, Paterson, N. J. Ribbon-loom	289,916	Dec. 11	683	190	25	1013
Kohmescher, John H., Cincinnati, Ohio. Insulating-wrapper for grouped electrical conductors	286,829	Oct. 16	1320	360	25	254
Konhorst, Henry, Henderson, Ky. Brick-kiln	288,347	Nov. 13	699	192	25	637
Kohnle, Lawrence B., and W. B. Hamilton, assignors to J. Irvine, Lima, Ohio. Drop-lift step for mill machinery	276,603	May 1	73	20	23	1640
Kohnle, Lawrence B., and W. B. Hamilton, assignors to J. Irvine, Lima, Ohio. Cut-off for bolting-chest conveyers	283,715	Aug. 21	1502	424	24	785
Kohnle, Lawrence B., and W. B. Hamilton, assignors to J. Irvine, Lima, Ohio. Bolting-chest	283,899	Aug. 28	1726	487	24	836
Kohnle, Lawrence B., and W. B. Hamilton, assignors to J. Irvine, Lima, Ohio. Combined bracket and adjustable box-bearing for shafting	284,564	Sept. 4	489	138	24	987
Koht, Frank, Gladbrook, Iowa. Seeder	274,343	Mar. 20	1417	388	23	1093
Kolar, Louis J., Chicago, Ill. Valve	277,492	May 15	1215	326	23	1848
Körner, Richard, Dresden, Saxony, Germany. Window flower-stand	285,140	Sept. 18	1215	342	24	1126
Konetes, John H., assignor of one-half to H. W. Mead, Quincy, Ill. Brick-machine	271,873	Feb. 6	346	96	23	501
Koon, Henry R., Rome, N. Y. Dredger	278,975	June 5	440	120	23	2198
Koon, William M., Troy, N. Y. Fire-kindling composition	278,436	May 29	2397		23	2067
Koons, Gerow, St. Louis, Mo. Refrigerator	287,691	Oct. 30	2436	655	25	473
Koontz, Augustus O., South Bend, Ind. Windmill	272,064	Feb. 13	599	162	23	576
Kopp, Robert W. H., Washington, D. C. Automatic cut-off for gas	289,274	Nov. 27	1840	508	25	855
Korff, Henry, Jr. (See Haney, William H., assignor.)						
Korn, George W., New York, N. Y. Pocket-knife	273,558	Mar. 13	806	218	23	980
Korn, George W., New York, N. Y. Cork-turner	283,900	Aug. 28	1728	487	24	836
Korner, Theodore, Knox, Pa. Machine for pumping Artesian wells	287,444	Oct. 30	2103	572	25	408
Korte, Frank J., Zanesville, Ohio. Saw-mill set-works	286,022	Oct. 2	298	83	25	56
Körting, Ernst, Hanover, Brunswick, Germany. Jet-condenser	285,622	Oct. 2	47	15	25	10
Körting, Ernst, and G. Lieckfeld, Hanover, Prussia, Germany. Gas-motor	289,774	Dec. 4	497	138	25	972
Kosiol, Louis. (See Kosiol, Oswald J., assignor.)						
Kosiol, Oswald J., assignor to himself and L. Kosiol, Louisville, Ky. Stock for cutting-screw-threads	289,275	Nov. 27	1842	508	25	855
Koskul, Frederick, St. Louis, Mo. Fabric for veneers	288,453	Nov. 13	843	228	25	662
Koskul, Frederick, St. Louis, Mo. Brilliant veneer	288,712	Nov. 20	1163	319	25	724
Koskul, Frederick, St. Louis, Mo. Veneer	289,005	Nov. 27	1530	421	25	797
Koskul, Frederick, St. Louis, Mo. Manufacture of ornaments, letters, figures, or characters upon a foundation material	289,917	Dec. 11	684	191	25	1013
Koster, Charles. (See Dreyer, Johann H., assignor.)						
Kothe, William, Rockville, Conn. Shuttle-binder for looms	270,228	Jan. 9	477	140	23	104
Koyl, Charles H. (See Taaffe and Koyl.)						
Koyl, Charles H., Baltimore, Md., assignor to American Electrophore Company, Washington, D. C. Plate for secondary batteries	276,974	May 1	574	151	23	1724
Koyl, Charles H., Baltimore, Md., assignor to American Electrophore Company, Washington, D. C. Manufacture of porous carbon plates	279,400	June 12	998		23	2301



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Kraeger, Frederick, Brooklyn, N. Y. Sail for vessels	288,819	Nov. 20	1295	355	25	748
Kraemer, Theophila F., New York, N. Y. Cover for upright pianos	270,443	Jan. 9	750	220	23	155
Kraetzer, Edwin J., Boston, Mass. Fastener for gloves, &c.	281,376	July 17	1294	358	24	241
Kraetzer, Edwin J., Boston, Mass. Glove-fastener	290,067	Dec. 11	860	214	25	1045
Krajewski, Thomas F., Paterson, N. J. Wheeled vehicle	289,421	Dec. 4	58	17	25	897
Kraker, Michael, assignor of two-thirds to M. Israel and O. Schmidt, San Francisco, Cal. Clutch mechanism	283,493	Aug. 21	1244	349	24	736
Kralowetz, Joseph, <i>et al.</i> (See Bastam, Fredric, assignor.)						
Kramer, Bortram F., Charleston, S. C. Rock-breaker	278,801	June 5	168	49	23	2151
Kramer, Charles P., Hamilton, Ohio. Stone-pipe section	279,873	June 19	1553	434	23	2403
Kramer, William R., Delphos, Ohio. Gate	275,775	Apr. 10	1185	325	23	1437
Krebs, H. Johannes, assignor of one-half to A. D. Warner, Wilmington, Del. Manufacture of glucose	288,245	Nov. 13	565	157	25	615
Kreidler, Antro. (See Kreidler, John H., and A.)						
Kreidler, John H., Bethlehem, and A. Kreidler, Lower Nazareth, Pa. Fence-post	287,944	Nov. 6	196	57	25	541
Krein, Franz. (See Devine, James, assignor.)						
Krein, Franz, St. Louis, Mo. Tug-clip	270,082	Jan. 2	296	88	23	60
Krein, Franze. (See Mann, Amos C., assignor.)						
Kreischer, Jacob, Albany, N. Y. Method of and machine for creaming candy	282,535	Aug. 7	72	21	24	513
Kremer, Franklin W., Wadsworth, Ohio. Convertible ejector, inspirator, and injector	288,092	July 31	2213	608	24	409
Kremenz, George, Newark, N. J. Ear-ring fastener	271,084	Jan. 23	1558	448	23	316
Kremser, William H., Omaha, Neb. Plow attachment for wagon-gearing	276,975	May 1	575	151	23	1724
Krepps, Virgil A., New York, N. Y. Seal-lock	287,299	Oct. 23	1927	527	25	368
Krepps, Virgil A., New York, N. Y. Seal-lock for car-doors	290,690	Dec. 25	1674	461	25	1202
Kress, John A. (See Ord and Kress.)						
Kretsinger, Frederick S., and E. Stewart, Fort Madison, Iowa; said Stewart assignor to said Kretsinger. Scythe-snath fastening	280,486	July 3	189	50	24	35
Kribs, Anthony, Brooklyn, N. Y. Glass-mold	274,790	Mar. 27	1987	552	23	1200
Kribs, Charles C., Trempealeau, Wis. Milk-skimmer	288,093	July 31	2215	609	24	409
Kriebel, Hosea K., assignor of one-half to F. Light, Jr., West Point, Pa. Valve-gear	290,645	Dec. 18	1611	443	25	1184
Krieger, Andrew. (See Richards and Krieger.)						
Krier, Peter, Maine Prairie, Minn. Harrow-coupling	280,382	July 3	53	14	24	12
Krill, F. Adon, assignor of one-half to F. J. Hinckston, Burton, Ohio. Surgeon's operating-chair	278,241	May 22	2118	583	23	2010
Kriudenier, D., <i>et al.</i> (See De Vries, Jelle A., assignor.)						
Kriudenier, Leendert, <i>et al.</i> (See De Vries, Jelle A., assignor.)						
Krings, Fredrich P., assignor of one-half to W. H. Fletcher, Chicago, Ill. Lock	289,542	Dec. 4	212	59, 60	25	923
Krippendorf, Emile, Wood Haven, assignor to Lalance & Grosjean Manufacturing Company, New York, N. Y. Tea or coffee pot	276,976	May 1	576	151	23	1725
Kritch, Jacob, Cleveland, Ohio. Axle-box	270,903	Jan. 23	1333	385	23	280
Kritch, Karl E., Cleveland, Ohio. Water-closet apparatus	277,293	May 8	976	262	23	1800
Kriz, William J. (See Kacer and Kriz.)						
Krizik, Franz. (See Piette and Krizik.)						
Kroblen, Henry, Boone, Iowa. Car-coupling	272,840	Feb. 20	1601	448	23	735
Kroedel, Franz, and W. Wesp Hoboken, N. J. Gate-latch	284,743	Sept. 11	723	202	24	1033
Kroeschell Brothers. (See Bourgeois, David, assignor.)						
Kromer, Otto, Sandusky, Ohio. Rake-arm for harvesters	278,023	May 22	1846	503	23	1963
Kromer, Otto, and F. Rinkleff, Sandusky, Ohio. Clutch	278,024	May 22	1846	504	23	1963
Kromer, Otto, and F. Rinkleff, Sandusky, Ohio. Lathe for turning irregular forms	278,025	May 22	1847	504	23	1963
Kropff, Hermann, New York, N. Y. Air-cooling apparatus	271,716	Feb. 6	153	42	23	467
Kropff, Hermann, New York, N. Y. Process of and apparatus for malting grain	283,494	Aug. 21	1245	349	24	736
Kroulik, George, and L. Bilan, Iowa City, Iowa. Corn-planter	287,384	Oct. 23	2038	551	25	387
Kroupa, Joseph, St. Louis, Mo. Grate	286,140	Oct. 2	411	120	25	82
Krouse, William A., Williamsport, Pa. Manufacture of and mold for making cuspidors, &c.	286,830	Oct. 16	1320	360	25	254
Kruesi, John, Brooklyn, N. Y. Junction-box and connection for electrical conductors	273,859	Mar. 13	807	218	23	980
Kruesi, John, Brooklyn, N. Y. Underground electrical conductor	275,776	Apr. 10	1186	325	23	1437
Kruesi, John, Brooklyn, assignor to Electric Tube Company, New York, N. Y. Machine for insulating electrical conductors	288,454	Nov. 13	845	228 } 229 }	25	662
Krummenauer, John, Brooklyn, assignor to F. Dietz, New York, N. Y. Tubular lamp	272,841	Feb. 20	1601	448	23	735
Krummenauer, John, Brooklyn, assignor to F. Dietz, New York, N. Y. Tubular-lamp support	272,842	Feb. 20	1602	448	23	736
Krupp, Friedrich A., Essen, Germany. Production of sound ingots and apparatus therefor	271,717	Feb. 6	154	43	23	467
Kruse, Charles. (See Kendall and Kruse.)						
Kruse, Charles. (See Weiss, Charles W., assignor.)						
Kruse, J. H. (See Dusenbury, Philip S., assignor.)						
Kruse & Murphy Manufacturing Company. (See Murphy, Edward, assignor.)						
Kruse, William. (See Kaue, Frank H., assignor.)						
Kritzsch, William, assignor to Buckeye Iron and Brass Works, Dayton, Ohio. Multiple milling-machine	277,746	May 15	1504	408 } 409 }	23	1897
Krzeminski, Stanislaw, <i>et al.</i> (See Klein, Joseph, assignor.)						
Kryzki, Stanislaus, Henry, Ill. Belt-tightener	288,579	Nov. 13	994	274	25	690
Kubler, John, Hot Springs, Ark. Sash-fastener	278,802	June 5	169	50	23	2151
Kichenmeister, August, A. Gröschel, and A. Rauchenbichler, Cincinnati, Ohio. Fire-kindler	288,067	Nov. 6	344	96	25	566
Knehn, Charles A., St. Louis, Mo. Florist's form	274,006	Mar. 13	978	268	23	1009
Kuehne, Ernst. (See Hunter and Kuehne.)						
Kuehne, Frederick. (See Nuhn and Kuehne.)						
Kuehner, D., <i>et al.</i> (See Held, August S., assignor.)						
Kingemann, Edward, Chicago, Ill. Window-cornice	271,718	Feb. 6	157	43	23	467
Kugler, Ephraim R., Kingwood, N. J. Brake for vehicles	270,815	Jan. 16	1224	354	23	254
Kugler, Ephraim R., Kingwood, N. J. Turning-lathe	286,933	Oct. 16	1449	398	25	276
Kuhleman, Henry, Laclede Station, Mo. Grain-drill	290,245	Dec. 18	1079	302	25	1093
Kuhlman, David D., New York, N. Y. Automatic grain-weighing apparatus	286,934	Oct. 16	1451	398 } 399 }	25	276
Kuhlman, David D., New York, N. Y. Automatic grain-weighing apparatus	288,820	Nov. 20	1296	355	25	748
Kuhlmann, Henry F., assignor to National Saw-Guard Company, Indianapolis, Ind. Saw-guard	281,274	July 17	1168	323	24	220
Kuhlmann, Henry F., assignor to National Saw-Guard Company, Indianapolis, Ind. Saw-guard	281,275	July 17	1169	323	24	220
Kuhlmann, Henry F., assignor to National Saw-Guard Company, Indianapolis, Ind. Saw-guard	286,710	Oct. 16	1175	316	25	228
Kühmaier, Franz, Pressburg, Hungary, assignor of one-half to A. Skene, Kenna, Austria. Electric motor	289,918	Dec. 11	656	191	25	1013

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Kuhn, Edmond, Brooklyn, assignor to A. O. Jennings, New York, N. Y. Watch.....	289,352	Nov. 27	1940	539	25	874
Kuhn, James S. (See Russell, George, assignor.)						
Kuhnrich, Joseph, Röttingen-on-the-Tauber, Germany, assignor to Electric Purifier Company, New Haven, Conn. Middlings-purifier.....	288,068	Nov. 6	345	96	25	566
Kuhle, Thomas C. (See Bogard, John J., assignor.)						
Kuhns, Arthur E., and G. D. Beattie, Chicago, Ill. Steam-boiler for cooking food.....	274,503	Mar. 27	1645	457	23	1139
Kuhns, Benjamin, Dayton, Ohio. Combined seeder and fertilizer-distributor. (Reissue).....	10,323	May 8	1143	308	23	1829
Kukukuck, Frederick, and H. Arnd, St. Louis, Mo. Trunk-top.....	275,499	Apr. 10	832	225	23	1377
Kukukuck, Frederick, and H. Arnd, St. Louis, Mo. Trunk-top.....	275,500	Apr. 10	833	226	23	1377
Kukukuck, Frederick, and H. Arnd, assignors to Arnd Manufacturing Company, St. Louis, Mo. Manufacture of trunk-tops.....	279,258	June 12	800	222	23	2270
Kully, Louis, assignor of one-eighth to C. Sommer, Newark, N. J. Tailor's shears.....	280,047	June 26	1777	498	23	2448
Kulp, Isaac R., Hatfield, Pa. Water-mill.....	275,922	Apr. 17	1371	377	23	1477
Kunath, Otto. (See List and Kunath.)						
Kunkel, Daniel, Sr., Oregon, Mo. Car-coupling.....	276,977	May 1	577	151	23	1725
Kunnecke, Ernst C. L., Dayton, Ohio. Safety attachment for elevators.....	290,331	Dec. 18	1194	{ 334 } 335	{ 25 } 25	{ 1113 } 1113
Kursh, Frank, and F. S. Feraille, Philadelphia, Pa. Bracelet.....	273,110	Feb. 27	1935	542	23	800
Kurshedt Manufacturing Company. (See Groebli, Joseph A., assignor.)						
Kurtis, Joseph, Springfield, Ohio. Stove-pipe shelf.....	277,294	May 8	977	262	23	1800
Kurtz, Jacob, Delano, Minn. Whiffletree attachment.....	290,890	Dec. 25	1931	533	25	1248
Kurtz, W. M. (See Case, John M., assignor.)						
Kurtz, William E., et al. (See Thompson, William H., assignor.)						
Kurtz, William W. (See McCausland, William J., assignor.)						
Kusch, Karl G. A. (See Menze, Friedrich W., assignor.)						
Kuschke, Alexander R., Cincinnati, Ohio. Billiard-ball.....	275,923	Apr. 17	1371	377	23	1477
Kuster, John, Jr., Stamford, Conn. Extension-lock for doors.....	277,295	May 8	979	263	23	1800
Kutroff, Adolf, et al. (See Endemann, Hermann, assignor.)						
Kuykendall, John R. (See Shepard, John, assignor.)						
Kyle, Robert B. (See Freeman, George W., assignor.)						
Kyser, Cornelius R., Parsons, Kans. Ice-plow.....	279,653	June 19	1297	360	23	2359
Kyser, Louis, and A. C. Rex, Philadelphia, Pa. Toy money-box.....	281,377	July 17	1295	359	24	242
Kyser, Louis, and A. C. Rex, Philadelphia, Pa. Lemon-squeezer.....	281,378	July 17	1296	359	24	242
La Breche Viger, Joseph, Montreal, Quebec, Canada. Magnetic separator.....	278,976	June 5	441	120	23	2198
La Cosse, Callax, West Bay City, Mich. Dumping-car.....	274,890	Mar. 27	2108	556	23	1220
LaDow, John, Howard, Minn. Extension-table.....	279,957	June 26	1663	467	23	2425
La Farge, John, New York, N. Y. Manufacture of colored-glass windows.....	274,948	Apr. 3	83	23	23	1239
La Mont, C. Frederick. (See Trench, Ira J., assignor.)						
La Mont, Charles A., Turner's, N. Y. Desiccated egg.....	283,618	Aug. 21	1380		24	762
La Plant, Adonijah P., Towanda, Pa. Cartridge-loading machine.....	283,791	Aug. 28	1605	453	24	816
La Rose, Frank T., Pawtucket, R. I. Elevator-bucket.....	288,581	Nov. 13	996	274	25	690
La Rue, Silas H., Frenchtown, N. J. Coal-stove.....	286,315	Oct. 9	680	{ 181 } 152	{ 25 } 25	{ 132 } 132
La Tourette, James, St. Louis, Mo. Pump-bucket.....	276,695	May 1	206	53	23	1659
Laass, Emil, et al. (See Bustin, John H., assignor.)						
Labaw, Joseph C. S., Neshaun, N. J. Speed-regulator.....	287,134	Oct. 23	1712	469	25	331
Labelle, Felix. (See Cook and Labelle.)						
Labelle, Felix. (See Millen, Mantion, Labelle, and Cook.)						
Labelle Glass Company, legatec. (See Baggs, Andrew H.)						
Lacape & Co., J. (See Lacape, Jean, assignor.)						
Lacape, Jean, assignor to J. Lacape & Co., Paris, France. Mechanical musical instrument.....	272,269	Feb. 13	849	{ 236 } 237	{ 23 } 23	{ 600 } 600
Lacerte, Isäie. (See Lacerte, Jean H., assignor.)						
Lacerte, Jean H., Parish of St. Barnabe, Quebec, Canada, assignor to I. Lacerte, Wausau, Wis. Sash-fastener.....	279,771	June 19	1427	399	23	2382
Lacey, Frederick N., Council Bluffs, Iowa. Blacking-box holder.....	283,256	Aug. 14	942	263	24	675
Lacey, Joseph V., Salinas, Cal. Harrow.....	284,309	Sept. 4	187	53	24	936
Lachenmeyer, August, Narrowsburg, N. Y. Brewers' shavings.....	273,860	Mar. 13	809	219	23	980
Lackersteen, Mark H., Chicago, Ill. Table-sauce.....	281,276	July 17	1170		24	220
Lackersteen, Mark H., Chicago, Ill. Treating fats and oils.....	284,862	Sept. 11	863		24	1057
Lacky, James W. (See Miller, David K., assignor.)						
Lacombe, Emile H. (See Tryon, Benjamin, assignor.)						
Lacour, Charles F., Grassy Point, N. Y. Kiln-head guide.....	270,444	Jan. 9	751	220	23	155
Lacrone, Milton. (See Dungan and Lacrone.)						
Ladd, Austin S., assignor to J. W. Bennett, A. M. Moore, K. Hyde, and F. Taylor, Lowell, Mass. Wood-rim pulley.....	284,133	Aug. 28	2040	567	24	891
Ladd, Daniel E., assignor of one-half to F. B. Hooper, Baltimore, Md. Necktie-holder.....	281,703	July 24	1718	467	24	318
Ladd, Daniel E., assignor of one-half to F. B. Hooper, Baltimore, Md. Tie for bags, bales, and bundles.....	281,704	July 24	1719	467	24	318
Ladd, Fred W. (See Kendall and Ladd.)						
Ladd, George S., Providence, R. I. Watch-case.....	278,151	May 22	2000	550	23	1990
Ladd, Levi. (See Stinson, Charles K., assignor.)						
Ladd, Loren G. (See Newell and Ladd.)						
Laemmel, David, assignor of one-third to S. R. Alden, Fort Wayne, Ind. Kiln for burning tiles, earthenware, &c.....	285,776	Sept. 25	1991	563	24	1269
Lafaber, James, Indianapolis, Ind. Combined stalk-cutter and soil-pulverizer.....	275,501	Apr. 10	834	226	23	1377
Lafferty, Robert M., St. Paul, Minn. Handle-bracket for pumps.....	272,889	Feb. 27	1674	468	23	755
Lafitte, Jean J., Paris, France. Welding flux and preparing and using the same.....	286,311	Oct. 9	671		25	132
Laffer, John A., Albion, N. Y. Brick-machine.....	289,422	Dec. 4	60	17	25	897
Lafin, Perley, Warren, assignor to Wright Machine Company, Worcester, Mass. Spindle for spooling-machines, &c.....	282,331	July 31	2531	694	24	461
Lafon, Louis, New York, N. Y. Machine for making the bodies of artificial flowers.....	290,436	Dec. 18	1340	371	25	1138
Lagel, Benjamin F. (See Applegate, Benjamin F., assignor.)						
Lainz, James M., Bay City, Mich. Pump.....	284,310	Sept. 4	188	53	24	936
Laird, John, Jr., Forfar, county of Forfar, Scotland, assignor to W. Rutherford, San Francisco, Cal. Loom for weaving bags, &c.....	286,711	Oct. 16	1176	{ 316 } 317	{ 25 } 25	{ 229 } 229
Laist, Otto, Cincinnati, Ohio. Apparatus for the manufacture of glycerine.....	286,448	Oct. 9	838	227	25	163
Lake, Charles, Danbury, Conn. Movable bottom for hat-machines.....	279,772	June 19	1427	399	23	2382
Lake, Everett L., Syracuse, N. Y. Breech-loading fire-arm.....	284,213	Sept. 4	73	20, 21	24	917
Lake, Everett L., Syracuse, N. Y. Lock for fire-arms.....	289,423	Dec. 4	61	17	25	897
Lake, Ezra B., Ocean City, N. J. Cow-catcher for locomotive-engines.....	284,438	Sept. 4	340	94	24	961
Lake, Jacob S., Lebanon, N. J. Ground-marker.....	284,439	Sept. 4	341	94	24	961
Lake, Jesse S., Pleasantville, N. J. Steering apparatus.....	280,191	June 26	1929	543	23	2476
Lake, John C., Big Prairie, Ohio. Sign.....	280,192	June 26	1931	543	23	2477



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Lake, William W. (See Manchester, Richard S., assignor.)						
Lakin, James A., Westfield, Mass. Individual telephone-call	276,604	May 1	75	21	23	1641
Lakin, James A., Westfield, Mass. Telephone-transmitter	278,026	May 22	1849	505	23	1963
Lakin, James A., Westfield, Mass. Telephone-transmitter	279,401	June 12	999	277	23	2301
Lalance & Grosjean Manufacturing Company. (See Chaumont, Jules, assignor.)						
Lalance & Grosjean Manufacturing Company. (See Cochran, James, assignor.)						
Lalance & Grosjean Manufacturing Company. (See Kegreisz, Emile, assignor.)						
Lalance & Grosjean Manufacturing Company. (See Krippendorf, Emile, assignor.)						
Lalance & Grosjean Manufacturing Company. (See Milligan and Chaumont, assignors.)						
Lalance & Grosjean Manufacturing Company. (See Milligan, John C., assignor.)						
Lalance & Grosjean Manufacturing Company. (See Moubot, Emile, assignor.)						
Lalance & Grosjean Manufacturing Company. (See Raymond, Francois, assignor.)						
Laligant, Rodolphe. (See Sanlaville and Laligant.)						
Lallement, Charles C. (See Etève and Lallement.)						
Lally, Edward. (See Renshaw, David, assignor.)						
Lally, Thomas J. (See O'Neil, John, assignor.)						
Laman, Carrie R., Meadville, Pa. Lubricating-oil	282,648	Aug. 7	208		24	536
Lamar, Alfrède C., St. Paul, Minn. Flax-puller	287,445	Oct. 30	2105	{ 572 573 }	25	409
Lamb, Isaac W., Parshallville, Mich. Windmill and derrick	276,831	May 1	385	{ 102 103 }	23	1694
Lamb, John W. (See Lowe and Lamb.)						
Lamb, Patrick W., Albany, N. Y. Grate-bar for furnaces	274,949	Apr. 3	85	23	23	1240
Lamb, Robert, et al. (See Chamberlain, Blanchard, assignor.)						
Lamberot, Pierre E., and A. M. Billoud, St. Laurent les Macon, France. Educational apparatus	281,770	July 24	1809	494	24	334
Lambert, Albert S., Bridgeton, N. J. Fruit-jar	289,276	Nov. 27	1843	508	25	855
Lambert, Auguste, Fosse, Belgium. Sewing-machine	277,747	May 15	1510	{ 409 410 }	23	1898
Lambert, Catholina. (See Barton, Edwin, assignor.)						
Lambert, Harry. (See Brown and Lambert.)						
Lambert, Jules, New York, N. Y. Gage for forming foundations for artificial flowers	276,430	Apr. 24	2004	555	23	1593
Lambert, Mardochee. (See Pradon, Leopold, assignor.)						
Lambert, Mark, Newark, N. J. Apparatus for the manufacture of oxide of zinc	283,901	Aug. 28	1728	488	24	836
Lambert, T. W. (See Harris, Joshua W., assignor.)						
Lambert, William H., and G. C. Deems, Alton, Ohio. Pump	274,791	Mar. 27	1988	552	23	1200
Lambie, Edward L. (See Maltby, Sidney, assignor.)						
Lambie, Edward L. (See Tower, George B. N., assignor.)						
Lambie, Robert M., New York, N. Y. Book-holder	283,495	Aug. 21	1246	350	24	737
Lamborn, A. J. (See Wright, William A., assignor.)						
Lamborn, Lewis, Hamorton, Pa. Road-mender	277,748	May 15	1511	410	23	1898
Lamborn, Lewis, Hamorton, Pa. Road-scraper	290,246	Dec. 18	1081	302	25	1094
Lambrigger, Alfred A., Big Horn, Wyoming. Car-brake	290,588	Dec. 18	1539	424	25	1173
Lamm, John N., Paola, Kans. Cultivator	290,778	Dec. 25	1794	495	25	1221
Lammel, John D., Menasha, Wis. Counting attachment for gage-lathes	274,950	Apr. 3	86	24	23	1240
Lamont, James, Sag Harbor, assignor to Fahys Watch Case Company, New York, N. Y. Device for making watch-case backs	284,440	Sept. 4	342	95	24	961
Lamont, John. (See Tower and Lamont.)						
Lamoureux, Norman D. (See Bonney and Lamoureux.)						
Lamping, John F., Cincinnati, Ohio. Stop and waste cock	276,431	Apr. 24	2005	556	23	1593
Lamprecht, Hugo, New York, N. Y. Rocking-chair	286,449	Oct. 9	839	227	25	163
Lamson Cash Railway Company. (See Hayden, Harris H., assignor.)						
Lamson, Edwin, et al. (See Coram, John C., assignor.)						
Lamson, William S., Lowell, Mass. Automatic cash-carrier	284,863	Sept. 11	865	242	24	1057
Lamy, Louis, West Hoboken, N. J. Steam-actuated valve for pumps	284,744	Sept. 11	724	202	24	1033
Lancaster, Bradford F., assignor of one-half to R. W. Black, Augusta, Me. Ratchet-wrench	282,462	July 31	2699	742	24	491
Lancaster, Charles F., Fife Lake, Mich. Spring-seat for vehicles	290,437	Dec. 18	1340	371	25	1138
Lancaster, Elias H., Montpelier, Ind. Ditching-machine	280,631	July 3	351	98	24	62
Lancaster, Israel, Chicago, Ill. School-slate	290,691	Dec. 25	1676	462	25	1202
Lancaster, James H., Southampton, county of Hants, England, assignor of one-half to A. J. Bayless, New York, N. Y. Baby-carrier	278,437	May 29	2398	653	23	2067
Lancaster, John P., Goshen, Ind. Car-coupling	271,085	Jan. 23	1559	449	23	316
Lancaster, Litt E., et al. (See Biennan, James R., assignor.)						
Lance, Addison, and M. Yulton, Frankfort Springs, Pa. Motor	274,203	Mar. 20	1226	337	23	1060
Lance, James M., New Jerusalem, Ohio. Sap-bucket holder	289,662	Dec. 4	359	101	25	950
Lance, Shields D. (See Elliott and Lance.)						
Lançon, Gédcon, Septmoncel, near St. Claude, assignor to Ste. E. E. Kipling, Paris, France. Manufacture of artificial stones	286,023	Oct. 2	209	83	25	56
Land, Charles H., Detroit, Mich. Artificial tooth	271,476	Jan. 30	2658	593	23	411
Land, Charles H., Detroit, Mich. Artificial denture	282,094	July 31	2215	609	24	409
Landenberger, George W., assignor to I. V. Landenberger, Philadelphia, Pa. Stocking and making the same	286,141	Oct. 2	443	120	25	82
Landenberger, Ida V. (See Landenberger, George W., assignor.)						
Landenberger, Martin, Jr., Philadelphia, Pa. Cutting stocking-blanks	276,832	May 1	387	103	23	1694
Landenberger, Martin, Jr., Philadelphia, Pa. Making stockings	284,026	Aug. 28	1907	534	24	868
Lander, James N. (See Ash, Charles W., assignor.)						
Lander, Samuel, Bloomington, Ill. Safety oil-tank	290,438	Dec. 18	1342	371	25	1138
Lander, William T., Williamston, S. C. Tool-holder	274,344	Mar. 20	1418	379	23	1094
Landers, Francis, Stroudsburg, Pa. Emery-wheel for grinding twist-drills and other tools	288,069	Nov. 6	346	97	25	566
Landers, Fray & Clark. (See Alpresa, Edward A., assignor.)						
Landers, Fray & Clark. (See Webb, Rodolphus L., assignor.)						
Landers, John, et al. (See Farwell, Willard B., assignor.)						
Landes, Jacob C., Sonderton, Pa. Driving mechanism for sewing-machines	288,643	Nov. 20	1074	295	25	709
Landes, John K., Caledonia, Ohio. Folding ladder	288,455	Nov. 13	848	229	25	663
Landfear, William R., Brooklyn, N. Y. Label printing and perforating machine	288,349	Nov. 13	703	192	25	637
Landfear, William R., Brooklyn, N. Y., assignor of two-thirds to Bottum & Trescott, Springfield, and Eureka Silk Manufacturing Company, Canton, Mass. Silk and thread polishing machine	281,705	July 24	1720	467	24	318
Landgraf, Henry A., et al. (See Grundy, Arthur, assignor.)						
Landis, Frank F., Waynesborough, Pa. Steam-boiler	271,477	Jan. 30	2059	593	23	411
Landis, Frank F., Waynesborough, Pa. Traction-wheel	286,312	Oct. 9	672	{ 179 180 }	25	132
Landis, Frank F., Waynesborough, Pa. Traction-engine	286,313	Oct. 9	675	{ 180 181 }	25	132

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Landis, Israel L. (See Denney, Samuel L., assignor.)						
Landis, Israel L., Lancaster, Pa. Gate	270,957	Jan. 23	1406	405	23	291
Landis, Israel L., Lancaster, Pa. Lifting-jack	274,007	Mar. 13	979	268	23	1010
Landis, Israel L., Lancaster, Pa. Gate	284,441	Sept. 4	343	95	24	961
Landis, Israel L., and J. Riddel, Lancaster, Pa.; said Riddel assignor to said Landis. Gate	280,632	July 3	353	98	24	62
Landon, Albert, Rutland, Vt. Stamp-canceller	283,902	Aug. 28	1730	488	24	836
Landry, Alexander C., and C. Lauga, New Orleans, La. Method of and apparatus for converting amylaceous and ligneous substances into grape-sugar	278,562	May 29	2544	694	23	2093
Lane, Albert W. (See York and Lane.)						
Lane, Augustine, Bellows Falls, Vt. Nib-iron for scythe-snaths	283,406	Aug. 21	1134	321	24	717
Lane, Charles D., Albion, Idaho Ter. Gold-washing machine	275,777	Apr. 10	1188	326	23	1437
Lane, Charles E. (See Bradford, Charles W., assignor.)						
Lane, Charles W., Minneapolis, Minn. Bar and pipe cutter	280,487	July 3	190	50	24	35
Lane, Daniel S., Hooversville, Pa. Wagon-brake	288,456	Nov. 13	849	230	25	663
Lane, Erastus. (See Sawyer, Woodbury, and Lane.)						
Lane, Fernando G., Anstin, Tex. Barrel-cover	278,563	May 29	2547	694	23	2093
Lane, Fernando G., Anstin, Tex. Register for barbers' chairs	282,332	July 31	2533	694	24	462
Lane, Fred, Boston, Mass. Railway signal apparatus	288,348	Nov. 13	700	192	25	637
Lane, George M., Ashbury Park, N. J. Station-indicator	288,644	Nov. 20	1076	296	25	710
Lane, George W., Rockford, Ill. Can	290,068	Dec. 11	861	245	25	1045
Lane, Isaac T., assignor of one-half to J. H. Sloma, Flatonia, Tex. Ribbon-holder	288,070	Nov. 6	347	97	25	566
Lane, James W., Glen Cove, N. Y. Milk-can cover	277,140	May 8	801	210	23	1769
Lane, John, Hyde Park, Ill. Sulky-plow	277,749	May 15	1513	410	23	1899
Lane, John, Hyde Park, Ill. Corn-cultivator blade or shovel	277,907	May 22	1703	465	23	1939
Lane, John, Hyde Park, Ill. Vehicle-wheel	278,438	May 29	2398	653	23	2067
Lane, John, Hyde Park, Ill. Vehicle-wheel	278,665	May 29	2669	730	23	2115
Lane, John, Hyde Park, assignor to Peru City Plow Company, Peru City, Ill. Cultivator	275,502	Apr. 10	835	226	23	1377
Lane, John, Brooklyn, N. Y., assignor to L. Prang & Co., Boston, Mass. Ornamental card	279,490	June 12	1099	304	23	2317
Lane, John C. (See Swayze and Lane.)						
Lane, Joseph, Danville, Ill. Feathering paddle-wheel	274,345	Mar. 20	1419	389	23	1094
Lane, Joseph, Chicago, Ill. Rotary plow	278,711	June 5	46	14, 15	23	2132
Lane, Lorenzo, and L. D. Woodworth, Youngstown, Ohio. Mold for roofing-tiles	279,422	June 12	1000	277	23	2301
Lane, Oliver A., Peabody, Mass. Bark-conveyor	276,605	May 1	77	21	23	1641
Lane, Rufus, Beloit, Wis., assignor to Illinois Iron & Bolt Company, Carpentersville, Ill. Axle-skein	277,579	May 15	1320	354	23	1864
Lane, Samuel G., et al. (See Bloom, David, assignor.)						
Lane, Thomas W., Boston, assignor to C. Williams, Jr., Somerville, Mass. Electric switch-board and signaling apparatus	287,300	Oct. 23	1928	527	25	369
Lane, Thomas W., Boston, assignor to C. Williams, Jr., Somerville, Mass. Telephone-support	287,301	Oct. 23	1930	527	25	369
Lane, William, San Francisco, Cal. Pen or pencil holder	281,525	July 17	1483	407	24	273
Laney, William S., Baltimore, and C. F. Yost, Canal Winchester, Ohio. Rein-holder	287,031	Oct. 23	1585	436	25	306
Lanfrey, Amédée J., Chartres, France. Manufacture of explosive compounds	276,833	May 1	387		23	1694
Lang, Anthony, and H. B. Ott, Philadelphia, Pa. Shirt	290,069	Dec. 11	862	245	25	1046
Lang, Anton, Brooklyn, N. Y. Fishing-reel	283,496	Aug. 21	1248	350	24	737
Lang, Charles E. J. (See Stuart, William F., assignor.)						
Lang, John A. (See Roberts, George S., assignor.)						
Lang, John B., Ithaca, N. Y. Connecting-rod and pitman	290,332	Dec. 18	1195	335	25	1113
Lang, John C., assignor to National Shelf and File Company, Washington, D. C. Metallic bill-file case. (Reissue)	10,309	Apr. 10	1212	332	23	1441
Lang, Theodore F., Baltimore, Md. Window-sash	281,379	July 17	1297	359	24	242
Lang, Thomas. (See Brown, William, assignor.)						
Lang, William, Brooklyn, N. Y. Fire	274,617	Mar. 27	1785	496	23	1164
Lang, William, Brooklyn, N. Y. Curtain-pole ring	286,712	Oct. 16	1179	317	25	229
Langdon, James E., assignor to Union Hardware Company, Torrington, Conn. Cartridge-loading implement	272,141	Feb. 13	695	190	23	572
Langdon, James E., assignor to Union Hardware Company, Torrington, Conn. Joint or coupling for rods, &c	285,493	Sept. 25	1631	458	24	1206
Langdon, James E., assignor to Union Hardware Company, Torrington, Conn. Powder and shot measure	289,111	Nov. 27	1652	458	25	819
Langdon, Joseph A., Pittsburg, Pa. Vertical steam-boiler	281,890	July 24	1963	537	24	361
Langdon, Nelson M., Chester, N. J. Apparatus for generating gas	276,432	Apr. 24	2006	556	23	1594
Lange, Christian, Black Earth, Wis. Hame	281,526	July 17	1454	407	24	273
Lange, Edward, assignor to W. E. Johnson, Poughkeepsie, N. Y. Clamp for hand-power dumb-waiters and other purposes	286,024	Oct. 2	300	84	25	56
Lange, Gustav A., Chemnitz, Saxony, Germany. Fastening for gloves, shoes, &c	287,135	Oct. 23	1713	469	25	331
Lange, Louise, New York, N. Y. Catamenial sack	282,201	July 31	2370	652	24	433
Langenau, William C., Cleveland, Ohio. Burial-casket catch	275,503	Apr. 10	837	226	23	1377
Langenau, William C., Cleveland, Ohio. Catch for burial-caskets	281,277	July 17	1171	323	24	220
Langenbach, Charles J., Dorchester, Iowa. Alarm speed-indicator	275,222	Apr. 3	436	120	23	1301
Langenbach, Charles J., Dorchester, Iowa. Car-coupling	285,042	Sept. 18	1096	306	24	1106
Langford, Samuel B., Homer, La. Railway-gate	288,580	Nov. 13	995	274	25	690
Langill, T. Wesley, New York, N. Y. Combined vault-cover and ventilator	289,663	Dec. 4	360	102	25	950
Langley, Alfred A., 10 Kent Terrace, Clarence Gate, Regent's Park, county of Middlesex, England. Railway-buffer stop	271,478	Jan. 30	2061	593	23	412
Langrehr, Henry C., San Francisco, Cal. Lift-pump	280,834	July 10	618	173	24	113
Langrehr, Henry C., San Francisco, Cal. Compound pump	280,835	July 10	619	174	24	115
Langrehr, Henry C., San Francisco, Cal. Compound pump	283,257	Aug. 14	943	263	24	675
Langsdorf, Sigmund. (See Schulze, August, assignor.)						
Langston, Thomas, assignor to E. Miller & Co., Meriden, Conn. Lantern	279,403	June 12	1002	278	23	2302
Langston, Thomas, assignor to E. Miller & Co., Meriden, Conn. Lantern	283,258	Aug. 14	945	264	24	676
Langston, Thomas, assignor to E. Miller & Co., Meriden, Conn. Lantern	284,442	Sept. 4	344	95	24	962
Langtry, Richard, assignor of one-half to J. N. Trenholm, St. Louis, Mo. Window-sash	275,223	Apr. 3	437	120	23	1301
Lanum, Richard B., Circleville, Ohio. Receiving and burial vault	284,027	Aug. 28	1908	534	24	869
Lanham, William P., Star, Mo. Corn-planter	290,070	Dec. 11	863	245	25	1046
Lannes, Jean A. (See Oury, Eugene, assignor.)						
Lanoizelet, Barthélemy, Bourbon-Lancy, France. Agricultural implement	279,958	June 26	1664	467	23	2428
Lansburgh, Julius. (See Hester, Joseph G., assignor.)						
Lanscha, Theodore A., Flannigan, Ill. Check-rower	273,370	Mar. 6	174	48	23	864



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Lanston, Tolbert, Washington, D. C. Window-sash	290,071	Dec. 11	865	246	25	1046
Lanthier, Edouard, assignor to G. T. Slater, Montreal, Quebec, Canada. Button boot or shoe	277,580	May 15	1320	354	23	1864
Lantz, Michael H., Marionville, Mo. Railway-gate	286,713	Oct. 16	1179	317	25	229
Lantz, Michael H., assignor of one-fourth to N. T. Cleverger, Marionville, Mo. Method of and device for coaling locomotive-tenders while in motion	276,051	Apr. 17	1522	419	23	1503
Lanz, James J. (See Hirsch, Charles, assignor.)						
Lapersonnerie, Martial, N. Y. Fire-proof partition-block	287,552	Oct. 30	2242	608	25	436
Lapham, Valentine. (See Gregory and Lapham.)						
Laquey, John C., Battle Creek, Mich. Thrashing-machine	273,551	Mar. 6	399	107	23	902
Laraway, Elbert D., Hartford, Conn. Spring bed-bottom	283,903	Aug. 28	1731	488	24	836
Laraway, Elbert D., Hartford, Conn. Spring bed-bottom	283,904	Aug. 28	1732	489	24	837
Large, John R. (See Gissinger, Samuel, assignor.)						
Largey, Patrick A., et al. (See Bassford, Isaac F., assignor.)						
Largey, Patrick A. (See Weller, Thomas B., assignor.)						
Larimore, James W., Chicago, Ill. Game-board	278,712	June 5	48	15	23	2133
Lark Manufacturing Company. (See Bailey, Selden A., assignor.)						
Larkin, Frank J., Chicago, Ill. Vehicle-spring	284,214	Sept. 4	75	21	24	918
Larkin, George F., Daubury, Conn. Machine for sizing hat-bodies and sticking and scalding napped hats	275,924	Apr. 17	1372	378	23	1477
Larkin, Patrick, assignor to E. S. Amrock, Waltham, Mass. Tap and faucet	288,457	Nov. 13	850	230	25	663
Larkin, Thomas. (See Black and Larkin.)						
Larkin, William F., Haverhill, Mass. Shoe-maker's tool	285,279	Sept. 18	1372	387	24	1156
Laroche, Jules P. (See Prat and Laroche.)						
Larrabee, Thomas W., Carrollton, Ind. Underground-drain tile	272,270	Feb. 13	851	237	23	600
Larroque, Jean J. A., Paris, France. Velocipede	288,821	Nov. 20	1298	355 356	25	748
Larsen, Anders, Terrace, Utah. Composition for suppositories	273,552	Mar. 6	402		23	903
Larsen, George, assignor of one-half to J. F. E. Hopper, San Leandro, Cal. Two-wheeled vehicle	286,314	Oct. 9	679	181	25	133
Larsen, John. (See Coulthard and Larsen.)						
Larsen, Martin J., Chicago, Ill. Endless-band propeller	278,027	May 22	1850	505	23	1963
Larsen, Niels, West Point, Nebr. Sun-dial	281,527	July 17	1484	407 408	24	274
Larson, Albert J., Newhall, Cal. Harness line-holder	288,246	Nov. 13	566	157	25	615
Larson, Christopher, Chicago, Ill. Desk	278,152	May 22	2001	550	23	1990
Larson, Emanuel. (See Sjölander and Larson.)						
Larsson, Albert P., Omaha, Nebr. Horse-detacher	290,072	Dec. 11	868	246	25	1047
Lartor, Robert, assignor to himself and J. E. Hedden, East Orange, N. J. Mechanical movement	279,571	June 19	1203	333	23	2342
Lartigue, Charles F. M. T., assignor to H. Carpentier, Paris, France. System of transport on a single rail	270,083	Jan. 2	296	88	23	60
Larus, Charles D. & Herbert C. (See Mahon, Aurelius W., assignor.)						
Larzelere, Henry B., Greencastle, Pa. Hoisting apparatus	281,528	July 17	1485	408	24	274
Lasar, Godfrey H., St. Louis, Mo. Plug-tobacco-tagging machine	272,271	Feb. 13	852	238	23	600
Lascell, George W., et al. (See Silliman, Herbert R., assignor.)						
Lash, John S., assignor to J. D. Nevins, A. French, C. M. Rathburn, Philadelphia, and J. B. Cotton, Chester, Pa. Stove-aid lifter	281,278	July 17	1172	324	24	220
Lasher, Frank, Bennington, Vermont. Stocking	271,338	Jan. 30	1870	542	23	377
Lasher, Morgan E., Champaign, Ill. Hame-ting	273,743	Mar. 13	649	173	23	953
Laskey, John H., assignor of one-half to I. F. Dohson, Boston, Mass. Self-leveling berth	270,084	Jan. 2	298	89	23	61
Laskey, John H., Boston, assignor of one-half to M. M. Wilcox, New Bedford, Mass. Self-leveling berth	288,822	Nov. 20	1300	356	25	748
Laskey, Stephen, Chicago, Ill. Overalls	272,065	Feb. 13	599	162	23	556
Lasor, Sanford W., assignor to C. Chambers, Jr., Philadelphia, Pa. Sand-scraper for brick-machines	285,043	Sept. 18	1097	306	24	1106
Lasseu, Charles, Racine, Wis. Safety quilt-holder	275,671	Apr. 10	1052	285	23	1414
Latowski, Robert, Oels, Prussia, Germany. Pneumatic bell-ringing apparatus	284,311	Sept. 4	189	54	24	936
Latschaw, Ezekiah, Wolcottsville, N. Y. Connecting device for winker-straps	270,958	Jan. 23	1407	405	23	291
Latschaw, John, Indianapolis, Ind. Sand-molding machine	283,905	Aug. 28	1733	489	24	837
Latta, Adrian C., et al. (See Latta, Emmit G., assignor.)						
Latta, Emmit G., assignor of one-half to A. C. Latta, Friendship, N. Y. Bicycle	280,633	July 3	354	98, 99	24	62
Latta, Emmit G., assignor of two-thirds to A. C. Latta, Friendship, and H. D. Blakeslee, Buffalo, N. Y. Trace-buckle	283,259	Aug. 14	946	264	24	676
Latta, Emmit G., assignor of two-thirds to A. C. Latta, Friendship, and H. D. Blakeslee, Buffalo, N. Y. Trace-carrier	283,260	Aug. 14	947	264	24	676
Lattimer, Francis, assignor of ten twenty-fourths to J. Ahern, Richmond, Nova Scotia, W. H. Bates, A. Carter, A. Smith, W. F. Linton, W. McCully, S. E. Gourley, and L. J. Walker, Truro, Canada. Knob attachment	271,479	Jan. 30	2062	593	23	412
Lattimer, Francis, assignor of ten twenty-fourths to J. Ahern, Richmond, Nova Scotia, W. H. Bates, A. Carter, A. Smith, W. F. Linton, W. McCully, S. E. Gourley, and L. J. Walker, Truro, Canada. Knob attachment	290,247	Dec. 18	1082	302	25	1094
Latting, Richard G., Jr. (See Milburn and Latting.)						
Lau, Albert H., assignor to W. Irelan, Jr., and M. B. Lan, San Francisco, Cal. Locking device for whip-sockets	290,073	Dec. 11	868	247	25	1047
Lau, Margaret B., et al. (See Lau, Albert H., assignor.)						
Laub, Henry C. (See Austin, Dinsmore, assignor.)						
Laub, James W., Chapman, Nebr. Hog-ringer	282,909	Aug. 7	517	145	24	592
Laubach, Henry C., Philadelphia, Pa., assignor to E. L. Bartlett, Baltimore, Md. Drill-rest	284,967	Sept. 11	988	278	24	1081
Laubenberger, Philip, Brooklyn, N. Y. Guard for safe-locks	274,346	Mar. 20	1421	389	23	1094
Lauckner, Richard, Bay City, Mich. Valve	288,350	Nov. 13	704	193	25	638
Lauckner, Richard, Bay City, assignor of one-half to S. Jocken, East Saginaw, Mich. Boiler-feeder	281,380	July 17	1298	359	24	242
Lauder, George. (See Wilson, Duncan, and Lauder.)						
Lauder, James. (See Walker and Lauder.)						
Laue, Paul. (See Ryan and Laue.)						
Laufenburg, Michael N., assignor to Baker & Hamilton. San Francisco, Cal. Derrick-table and feeder for thrashing-machines	286,316	Oct. 9	684	182	25	134
Laufer, Christian F., assignor to himself and P. Goepel, New York, N. Y. Corset-clasp	281,771	July 24	1810	494	24	334
Laufer, Emil I. (See Berchtold and Laufer.)						
Lauga, Charles. (See Landry and Lauga.)						
Laughinghouse, Edward S., Kinston, N. C. Feed mechanism for saw-mills	284,443	Sept. 4	345	95	24	962
Laughlin, Demetrius L., Rush County, Ind. Vehicle-shaft support	288,071	Nov. 6	348	97	25	567

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Langhlin, Hugh, and E. Baumgardner, East Palestine, Ohio. Weigh-box.....	284,864	Sept. 11	866	243	24	1058
Langhlin, John L., Racine, Wis. Adjustable harrow.....	274,125	Mar. 20	1137	313	23	1044
Langhlin, John L., Racine, Wis. Cultivator.....	274,126	Mar. 20	1137	313	23	1044
Langhlin, William H., Oberlin, Ohio. Key for musical instruments.....	274,504	Mar. 27	1646	458	23	1140
Laumaster, Winfield S., Philadelphia, Pa. Glass-bodied vessel for oil.....	230,043	June 23	1778	499	23	2448
Laumaster, Winfield S., Philadelphia, Pa. Shipping-can.....	226,831	Oct. 16	1322	360	25	255
Laupher, Charles W., Norwich, N. Y. Brake for locomotives and tenders.....	275,831	Apr. 17	1261	547	23	1457
Laure, Aimé, Mazamet, France. Depilating.....	285,044	Sept. 18	1098		24	1106
Laurenson, Henry. (See Laurenson, Staden, and Laurenson.)						
Laurenson, John M., S. M. Staden, and H. Laurenson, Moreland, Pa. Grain separator and cleaner.....	270,816	Jan. 16	1225	354	23	255
Lauten, Frank H., assignor of part to E. Saunders and H. Carter, New York, N. Y. Pa-per-feeding machine.....	283,906	Aug. 28	1733	{ 489 490 }	{ 24 25 }	{ 837 163 }
Lauterman, Benjamin F., Chicago, Ill. Cutter-head.....	226,450	Oct. 9	840	227	25	163
Lauth, Jacob, Milwaukee, Wis. Thill-coupling.....	271,642	Feb. 6	71	20	23	453
Lauth, John N., Howard, Pa., and O. B. Hardy, San Francisco, Cal. Safe.....	283,120	Aug. 14	772	217	24	644
Lavallée, Augustin, <i>et al.</i> (See Therrien, Louis C., assignor.)						
Lavandol, Gabriel S., New York, N. Y. Apparatus for raising barrels or kegs for tapping.....	289,664	Dec. 4	362	102	25	951
Lavery, William A., Philadelphia, Pa. Suspenders.....	276,834	May 1	390	103	23	1694
Lavery, William A., Philadelphia, Pa. Suspender.....	282,736	Aug. 7	320	91	24	556
Lavery, Richard, Boston, Mass. Differential gearing for hoisting and other purposes.....	281,195	July 10	1061	292	24	194
Lavery, Richard, Boston, Mass. Differential gearing for hoisting and other purposes.....	286,206	Oct. 9	521	144	25	106
Lavin, John B. (See Herrman and Lavin.)						
Law, Alexander. (See Jenkins, Law, and Price.)						
Law, Lizzie H., Providence, R. I. Safety-pocket.....	288,458	Nov. 13	851	230	25	663
Lawler, James J., Scranton, Pa. Apparatus for compressing air.....	272,711	Feb. 20	1418	398	23	703
Lawlor, Michael J., Poughkeepsie, N. Y. Brake for elevators and dumb-waiters.....	276,052	Apr. 17	1524	419	23	1503
Lavrason, George B. (See Taylor, Thomas, assignor.)						
Lawrence, Alvin, Lowell, Mass. Clock-escapement.....	280,936	July 10	748	208	24	137
Lawrence, C. H. (See Wentling, Adam, assignor.)						
Lawrence, Charles W., Chelsea, assignor to Lawrence White Iron Portable Grist Mill Com-pany, Boston, Mass. Grinding-mill.....	270,817	Jan. 16	1226	354	23	255
Lawrence, Charles W., Chelsea, assignor to Lawrence White Iron Portable Grist Mill Com-pany, Boston, Mass. Grinding-mill.....	272,272	Feb. 13	854	239	23	601
Lawrence, Evan H., Social Circle, Ga. Medicinal compound.....	276,835	May 1	390		23	1694
Lawrence, Frank G., Boston, Mass. Car-coupling.....	272,712	Feb. 20	1420	398	23	703
Lawrence, Frank P. (See Trerwiler and Bast, assignors.)						
Lawrence, Franklin M., Portland, Me. Grate.....	282,333	July 31	2534	694	24	462
Lawrence, Frederick W., Brooklyn, N. Y. House.....	288,072	Nov. 6	349	97	25	567
Lawrence, George A., New York, N. Y., and E. J. Frost, Philadelphia, Pa. Ore-reducing furnace.....	287,945	Nov. 6	197	57	25	541
Lawrence, George H., assignor of one-half to W. A. Harder, Lansingburg, N. Y. Sewing-machine trimmer.....	290,895	Dec. 25	1938	534	25	1249
Lawrence, George T., Greenfield, Mass. Chin-rest for violins.....	275,672	Apr. 10	1052	286	23	1414
Lawrence, J. P. (See Howe, Jesse A., assignor.)						
Lawrence, John D. and W. C., New York, N. Y. Curry-comb.....	276,696	May 1	207	53	23	1660
Lawrence, Mortimer D., assignor to himself and P. T. Birchard, Marshalltown, Iowa. Car-riage pole.....	273,553	Mar. 6	403	108	23	903
Lawrence White Iron Portable Grist Mill Company. (See Lawrence, Charles W., assignor.)						
Lawrence, William C. (See Lawrence, John D. and W. C.)						
Lawrence, William E., New York, N. Y. Curry-comb.....	272,558	Feb. 20	1223	342	23	669
Lawrence, William E., New York, N. Y. Wrench.....	225,415	Sept. 25	1540	434	24	1190
Lawson, Allison W., Midway, Ala. Ringing burglar-alarm.....	277,296	May 8	980	263	23	1801
Lawson, Edward, Utica, N. Y. Sewer and water trap.....	274,204	Mar. 20	1227	337	23	1061
Lawson, Enoch, San Francisco, Cal. Steam bell-tinger.....	276,185	Apr. 24	1690	467	23	1540
Lawson, Enoch, San Francisco, Cal. Vehicle-wheel.....	280,634	July 3	357	99	24	63
Lawson, Enoch, San Francisco, Cal. Door-bell.....	286,714	Oct. 16	1181	318	25	229
Lawton, John E., Boston, Mass. Leather-folding machine.....	285,823	Oct. 2	49	16	25	11
Lawton, Walter T. (See Jones, Joseph D., assignor.)						
Lawver, Michael, <i>et al.</i> (See Morgan, Edgar H. and C., assignors.)						
Lay, Joseph, Ohnsted, Ohio. Broom.....	272,890	Feb. 27	1675	468	23	755
Laycock, John, and T. Clapham, Keighley, county of York, England. Apparatus for scrubbing and washing gas.....	282,994	Aug. 14	610	173	24	616
Laycock, William S., Sheffield, county of York, England. Spring-roller.....	271,339	Jan. 30	1870	542	23	377
Layng, George, Worcester, Mass. Trundle.....	225,416	Sept. 25	1541	434	24	1190
Layng, George, assignor to S. W. Goddard, Worcester, Mass. Belt-shipper for spinning and twisting frames.....	290,779	Dec. 25	1795	495	25	1225
Lazelle, James L., Jersey City, N. J. Circuit-closer for burglar-alarms.....	289,665	Dec. 4	363	{ 102 103 }	{ 25 24 }	{ 951 526 }
Le Baron, Robert, Pontiac, Mich. Splint.....	282,650	Aug. 7	210	61	24	526
Le Beau, John J. (See Vance, John D., assignor.)						
Le Bourgeois, Edward C., Springfield, Mass. Production of paper-pulp from sugar-cane or other fibrous vegetable substances.....	278,977	June 5	441		23	2199
Le Bourgeois, Edward C., Springfield, Mass. Manufacture of railway-ties from the refuse of sugar-cane.....	278,978	June 5	442		23	2199
Le Bourgeois, Edward C., Springfield, Mass. Producing pulp from sugar-cane, &c.....	287,302	Oct. 23	1931		25	369
Le Coultre, Ami, Geneva, Switzerland. Stop-watch.....	284,444	Sept. 4	346	96	24	962
Le Duke, Jeremiah, Berea, Ohio. Hoisting-crane.....	290,074	Dec. 11	869	247	25	1047
Le Grande, William W., Louisville, Ky. Leveling-instrument.....	277,037	May 8	662	172	23	1745
Le Grande, William W., assignor of three-fourths to G. Wolf, F. De Funiak, and T. J. Pot-tinger, Louisville, Ky. Electric railway-signal.....	272,142	Feb. 13	696	{ 190 191 }	{ 23 23 }	{ 572 572 }
Le Grande, William W., assignor of three-fourths to G. Wolf, F. De Funiak, and T. J. Pot-tinger, Louisville, Ky. Electric railway-signal.....	272,276	Feb. 13	858	240	23	601
Le Grando, William W., assignor to National Electric Railway Signal Company, Louisville, Ky. Electrical connection for railway-rails.....	285,494	Sept. 25	1631	458	24	1206
Le Grando, William W., assignor to National Electric Railway Signal Company, Louis-ville, Ky. Electric railway-signal.....	287,446	Oct. 30	2107	573	25	409
Le Gros, Alfred P., Louisville, Ky. Car-roof.....	280,635	July 3	358	99	24	63
Le Mée, Charles, Yffioniac, France. Apparatus for mixing meal or flour.....	286,716	Oct. 16	1183	318	25	230
Le Moult, Adolphe, New York, N. Y. Florist's frame and stand.....	284,745	Sept. 11	725	202	24	1033
Le Poudevin, Thomas, Gurnsey, England. Machinery for molding bricks and tiles.....	271,875	Feb. 6	348	97	23	532
Le Roy, John W. (See Gardner, Le Roy, and Tinker.)						
Le Vin, George W., <i>et al.</i> (See Beck, Marshall, assignor.)						
Lea, Henry, Birmingham, county of Warwick, England. Incandescent electric lamp.....	273,554	Mar. 6	403	108	23	903



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Lea, Henry E., assignor to W. S. Ray, San Francisco, Cal. Metal-tube former .....	275,504	Apr. 10	837	227	23	1377
Lea, John, London, county of Middlesex, England. Electric-arc lamp .....	281,891	July 24	1965	537 538	24	361
Leach, Charles J., and A. Olds, Hartford, Mich. Combined grain scale, bagger, and reg- ister .....	287,692	Oct. 30	2437	656	25	474
Leach, Cornelius D., Union City, Mich. Cotton-harvester .....	284,642	Sept. 11	587	166	24	1010
Leach, Jesse L., Philadelphia, Pa., assignor to S. B. Ryder, Elizabeth, N. J. Carpet-cleaner.	286,832	Oct. 16	1323	361	25	255
Leach, William F., Franklin, Ind. Table for tile-machines .....	279,259	June 12	801	222	23	2270
Leach, William F., assignor to B. F. Crampton, St. Clair, Mich. Portable steam-auger.	271,480	Jan. 30	2063	594	23	412
Leader Sewing Machine Company. (See Osborn, John H., assignor.)						
Leadley, James E. (See Hanlon and Leadley.)						
Leadley, James E. (See Hanlon, Leadley, and Gibbs.)						
Leadley, James E., Camden, N. J., and J. Hanlon, New York, N. Y., assignors to United Gas Improvement Company, Philadelphia, Pa. Steam gas-exhauster .....	271,874	Feb. 6	348	97	23	502
Leadley, James E., Camden, N. J., assignor of one-half to J. Hanlon, New York, N. Y. Water-protected valve .....	289,277	Nov. 27	1844	509	25	855
Leadley, James E., Camden, N. J., assignor of one-half to J. Hanlon, New York, N. Y. Apparatus for generating heating or illuminating gas .....	289,278	Nov. 27	1845	509 510	25	856
Leadley, James E., Camden, N. J., assignor of one-half to J. Hanlon, New York, N. Y. Process of and apparatus for manufacturing gas .....	289,279	Nov. 27	1847	510 511 512	25	856
Leadley, James E., Camden, N. J., assignor of one-half to J. Hanlon, New York, N. Y. Process of and apparatus for manufacturing gas .....	289,280	Nov. 27	1850	513	25	857
Leadley, James E., Camden, N. J., assignor of one-half to J. Hanlon, New York, N. Y. Process of and apparatus for manufacturing gas .....	289,281	Nov. 27	1853	514 515	25	857
Leadley, James E., Camden, N. J., assignor of one-half to J. Hanlon, New York, N. Y. Steam-boiler .....	289,282	Nov. 27	1856	515	25	858
Leake, Lewis C., Millville, N. J., assignor to J. Whitall, R. P. Smith, Philadelphia, Pa., J. Mickle, Millville, N. J., W. H. Nicholson, C. Roberts, Philadelphia, Pa., and C. A. Tatum, New York, N. Y. Druggist's graduate .....	272,713	Feb. 20	1422	398	23	704
Leanning, Christopher, assignor to W. H. Carlson, Newhall, Cal. Door-securer .....	288,179	Nov. 6	478	132	25	590
Leamy, John, et al. (See Wolfe, Harvey R., assignor.)						
Lear, Samuel, Pottsville, Pa. Sash-holder .....	278,439	May 29	2401	654	23	2068
Learmouth, James, Corsicana, Tex. Car-coupling .....	282,910	Aug. 7	518	145	24	592
Learned, Edward A., assignor of one-half to H. S. Durden and H. L. Welch, San Francisco, Cal. Buck-saw .....	277,141	May 8	802	210	23	1769
Leas, Asa, West Manchester, Ohio. Scoop-balance attachment for weighing-scales .....	287,136	Oct. 23	1714	469	25	331
Leas, J. Silas. (See Hanson and Leas.)						
Leathier, John H., Cleckheaton, county of York, England. Carding-cylinder .....	285,631	Sept. 25	1798	512	24	1238
Leavenwerth, Mark R., Bridgeport, Conn. Stove-truck .....	286,715	Oct. 16	1182	318	25	230
Leavitt, Erasmus D., Jr., Cambridgeport, Mass. Steam-stamp for crushing ore .....	275,224	Apr. 3	438	120 121 122	23	1301
Leavitt, Erasmus D., Jr., Cambridge, Mass., assignor to D. S. Hines, W. A. Perry, and C. C. Worthington, New York, N. Y. Direct-acting compound engine .....	283,261	Aug. 14	948	265	24	676
Leavitt, George A., Jr., New York, N. Y. Folding chair .....	272,273	Feb. 13	856	239	23	601
Leavitt, Rufus, assignor to Howe Machine Company, Bridgeport, Conn. Sewing-machine.	285,417	Sept. 25	1542	455 456	24	1191
Leavitt, Rufus, assignor to Howe Machine Company, Bridgeport, Conn. Sewing-machine shuttle .....	285,418	Sept. 25	1547	436	24	1191
Leayercraft, Edwin S., Jersey City, N. J. Pneumatic sweeping apparatus .....	279,572	June 19	1205	333	23	2342
Leayercraft, Edwin S., Jersey City, N. J. Mandrel for bending tubes .....	279,573	June 19	1206	333	23	2342
Leayercraft, Edwin S., Jersey City, N. J. Delivery-switch for pneumatic tubes .....	279,574	June 19	1207	333 334	23	2342
Leayercraft, Edwin S., Jersey City, N. J. Pipe-coupling .....	279,575	June 19	1208	334	23	2343
Leayercraft, Edwin S., Jersey City, N. J. Flanged clamp .....	279,576	June 19	1209	334	23	2343
Lebacqz, Francois, Brussels, Belgium. Self-leveling berth .....	282,049	Aug. 7	209	61	24	536
Lebandy, Gustave and J., Paris, France. Apparatus for the manufacture of sugar in in- gots .....	270,818	Jan. 16	1228	355	23	255
Lébaudy, Jules. (See Lebandy, Gustave and J.)						
Leblond, Eugène P., Paris, France. Machine for preparing and distributing tobacco .....	290,333	Dec. 18	1196	335	25	1113
Lechner, Samuel C., Columbus, Ohio. Coal-mining machine .....	287,032	Oct. 23	1586	437	25	306
Leclère, Francis, Philadelphia, Pa. Brake mechanism for anchor shuttle-box motions for looms .....	274,127	Mar. 20	1138	313	23	1044
Lecrone, Emanuel K., York, Pa. Washing-machine .....	289,775	Dec. 4	500	138	25	973
Leder, George, Demopolis, Ala. Oil-mat .....	274,128	Mar. 20	1140	314	23	1044
Lederer, Charles, and F. X. Marks, Norfolk, Nebr. Car-brake .....	281,085	July 10	917	256	24	169
Lederer, Charles, assignor to B. W. Jonas and C. M. Selby, Norfolk, Nebr. Automatic car-scale .....	283,619	Aug. 21	1381	386	24	762
Lederer, Jacob. (See Falkenberg and Lederer.)						
Lederer, Sigmund L., New York, N. Y. Ornamental chain .....	273,744	Mar. 13	650	173	23	954
Lederle, Joseph. (See Giel, Franz S., assignor.)						
Ledig & Herrlein. (See Nacke, Arnold, assignor.)						
Leduc, Constant, San Francisco, Cal. Life-preserver .....	282,651	Aug. 7	211	61	24	536
Lee, Charles, Dadeville, Mo. Seed-planter .....	276,433	Apr. 24	2007	556	23	1594
Lee, Charles A., Arlington, Tex. Miner's lamp .....	284,865	Sept. 11	867	243	24	1058
Lee, Charles A., Saginaw, Mich. Splint-cutting machine .....	290,439	Dec. 16	1342	372	25	1138
Lee, Charles E., assignor of one-half to M. M. Houck, New Britain, Conn. Permutation- lock .....	275,673	Apr. 10	1053	286	23	1414
Lee, David C., St. Louis, Mo. Wheel-hoe .....	282,202	July 31	2370	652	24	433
Lee, David P. (See Romine and Lee.)						
Lee, Earl, Corona, N. Y. Portable house .....	290,991	Dec. 25	2072	570	25	1270
Lee, Frederick J., Oswego, Kans. Door-latch .....	286,935	Oct. 16	1453	399	25	276
Lee, Frederick J., Oswego, Kans. Door-catch .....	289,666	Dec. 4	364	103	25	951
Lee, George W. (See Lee, Luther B. and G. W.)						
Lee, Harry C., Brooklyn, N. Y. Wire mask .....	287,137	Oct. 23	1715	470	25	332
Lee, Henry A., New York, N. Y. Fire-escape .....	283,620	Aug. 21	1382	386	24	763
Lee, Homer, New York, N. Y. Plate-printing machine .....	282,995	Aug. 14	612	173 174 175 176	24	616
Lee, John, Russell, Ohio. Building-brick .....	274,449	Mar. 20	1556	426	23	1118
Lee, John, Hazleton, Pa. Gage-cock .....	276,836	May 1	391	103	23	1694
Lee, John, Sterling, Ohio. Wrench .....	288,713	Nov. 20	1164	319	25	724

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Lee, John O., St. Paul, Minn. Grain-binder.....	279,773	June 19	1428	{ 399 400 }	{ 23	2382
Lee, Jonas T. B., Toronto, Ontario, Canada. Mop-holder.....	283,121	Aug. 14	773	217	24	645
Lee, Joseph, assignor of one-third to R. Fishwick, Garnerville, N. Y. Stop chamfer plane.	272,274	Feb. 13	857	239	23	601
Lee, Lewis H. (See Whiteley, Bayley, and Lee.)						
Lee, Luther B. and G. W., Ridgwood, N. Y. Head-net for horses.....	284,445	Sept. 4	347	96	24	962
Lee, Oakley T., Brooklyn, N. Y. Dish or plate lifter.....	271,340	Jan. 30	1871	543	23	377
Lee, Ogden G., Poughkeepsie, N. Y. Fire-escape.....	282,996	Aug. 14	624	176	24	617
Lee, Seth, and R. Weir, Muskegon, Mich. Elevating machine for cross-piling lumber.....	288,073	Nov. 6	350	98	25	507
Lee, Thomas, assignor of one-half to A. Record, East Livermore, Me. Apparatus for pre-serving eggs.....	269,866	Jan. 2	53	17	23	13
Lee, Thomas B., <i>et al.</i> (See Galentine, Elias C., assignor.)						
Lee, Thomas L., Paducah, Ky. Barrel-former.....	290,334	Dec. 18	1197	335	25	1113
Lee, Thomas L., Paducah, Ky. Ventilated barrel.....	290,335	Dec. 18	1198	336	25	1114
Lee, Washington I., Peekskill, N. Y. Baking-pan.....	289,667	Dec. 4	365	103	25	951
Lee, William A., Winfield, Kans. Plow.....	290,890	Dec. 25	1940	535	25	1249
Lee, William W., Northampton, Mass. Lathe-chuck.....	277,908	May 22	1704	465	23	1939
Leech, Thomas. (See Knight, John J., assignor.)						
Leech, William T., Philadelphia, Pa. Apparatus for covering rollers with toothed metal..	277,297	May 8	980	263	23	1801
Leeds, Lodowick, New London, Conn. Folding bed.....	278,564	May 29	2547	{ 694 695 }	{ 23	2093
Leeds Manufacturing Company. (See McCallum, Neil, assignor.)						
Leeds, Robinson & Co. (See Gardiner, Charles B., assignor.)						
Leerbech, John E. V., Aalborg, and F. D. Volkersen, Elsinore, Denmark. Gun-rest.....	271,251	Jan. 30	1753	507	23	357
Lees, William. (See Sumner, Herbert, assignor.)						
Lees, William. (See Ashbury, Sumner, Lees, and Sanderson.)						
Leet, Charles S., Bridgeport, Conn. Cartridge-shell extractor.....	282,997	Aug. 14	625	177	24	618
Leet, Charles S., Bridgeport, Conn. Gun-wiper.....	288,459	Nov. 13	852	230	25	664
Leet, Charles S., and W. H. Northall, Bridgeport, Conn.; said Northall assignor to said Leet. Cartridge-closing machine.....	287,693	Oct. 30	2438	656	25	474
Leet, James, and A. C. Israel, Kimmswick, Mo. Railway-switch.....	278,344	May 29	2284	624	23	2047
Leete, Frank, and W. C. Wilbur, Mapleton, Iowa. Butter-case.....	275,225	Apr. 3	441	122	23	1302
Lefevre, Julius, <i>et al.</i> (See Keller, William, assignor.)						
Lefferts, Leffert, New York, N. Y. Hydrocarbon-burner for furnaces.....	289,424	Dec. 4	62	18	25	897
Lefferts, Marshall C., assignor to Celluloid Manufacturing Company, New York, N. Y. Pro-cess of and apparatus for lining hollow articles with celluloid, &c.....	281,529	July 17	1487	408	24	274
Leffingwell, Christopher, Clarksburg, Ohio. Straw-stacker.....	277,750	May 15	1515	411	23	1899
Leffingwell, John G., assignor of one-half to R. B. Edwards, Newark, N. J. Box-fastener..	290,992	Dec. 25	2074	571	25	1270
Leffler, Samuel, Ainsworth, Iowa. Ditching-machine.....	269,946	Jan. 2	149	43	23	31
Legan, Josiah. (See Massie and Legan.)						
Leger, Edward, Chicago, Ill. Show-stand.....	271,719	Feb. 6	138	44	23	468
Legg, Benjamin A., assignor to J. A. Jeffrey, Columbus, Ohio. Chain.....	282,536	Aug. 7	74	21	24	513
Leggett, William, New York, N. Y. Toy.....	277,581	May 15	1321	355	23	1864
Leggett, William, New York, N. Y., assignor to J. N. Bookstaver, Rutherford, N. J. Toy..	272,275	Feb. 13	858	240	23	601
Leggett, William, New York, N. Y., assignor to J. N. Bookstaver, Rutherford, N. J. Car-riage-curtain fastening.....	273,745	Mar. 13	651	173	23	954
Leggott, William, Bradford, county of York, England. Transom-lifter.....	282,343	July 31	2535	694	24	462
Lehman, Henry J. (See Berchtold and Laufer, assignors.)						
Lehmann, Adolf, New York, N. Y. Car-coupling.....	288,074	Nov. 6	352	98	25	567
Lehr, John, Darmstadt, Ill. Glass-washer.....	274,792	Mar. 27	1988	553	23	1200
Lehr, William. (See Sunderland, Lee W., assignor.)						
Leigh, Edward B., assignor to American Brake Company, St. Louis, Mo. Locomotive-brake..	278,242	May 22	2119	584	23	2010
Leighton, George A. (See Carter, William, assignor.)						
Leighton, George A., Manchester, N. H. Circular-knitting machine.....	272,559	Feb. 20	1223	342	{ 23 342 }	669
Leighton, George A., Manchester, N. H. Knitting-machine.....	272,560	Feb. 20	1225	{ 343 344 }	{ 23	669
Leighton, George A., Manchester, N. H. Knitting-machine.....	272,561	Feb. 20	1237	345	23	671
Leighton, James T., New Haven, Conn. Car-wheel.....	284,028	Aug. 28	1909	535	24	869
Leighton, William E., West Pembroke, Me. Reed-organ.....	276,837	May 1	391	104	23	695
Lein, John P. (See Hoye, Stevie M., assignor.)						
Leip, George A., Leadville, Colo. Hair-tonic.....	285,045	Sept. 18	1099	.....	24	1106
Leitelt, Adolph. (See Eldredge, Alonzo W., assignor.)						
Leiter, Winfield S. (See Isard and Leiter.)						
Leland, Edgar H., East Templeton, Mass. Turning-lathe.....	275,051	Apr. 3	219	59, 60	23	1264
Leland, Edwin A., assignor of three-fourths to C. P. Lyman and H. K. Hawes, Holyoke, Mass. Device for blowing locomotive-whistles automatically.....	278,440	May 29	2401	654	23	2063
Lelie, Emilo C., St. Genevieve, Mo. Hame-tug.....	287,138	Oct. 23	1716	470	25	332
Lelm, Otto, Lodon, England. Apparatus for stretching gelatine coated sheets.....	275,226	Apr. 3	442	123	23	1302
Lemaire, Jean T., assignor to A. Cremer-Pirney & Cie., Hodimont-Verriers, Belgium. Lap-forming machine.....	276,606	May 1	78	21, 22	23	1641
Leman, Frank, Elgin, Ill. Dial-spacing machine.....	283,350	Aug. 14	1060	{ 298 299 }	{ 24	698
Lemassena, Theodore F., Newark, N. J. Pump-valve.....	289,668	Dec. 4	366	103	25	951
Lembeke, Robert, Hoboken, N. J. Electric toy.....	278,565	May 29	2548	695	23	2094
Lemieux, John B., Muskegon, Mich. Slab-sawing machine.....	290,589	Dec. 18	1540	424	25	1173
Leming, Adolphus G., Waldon, Ark. Type-writing machine.....	285,141	Sept. 18	1216	{ 342 343 }	{ 24	1126
Leming, Charles J. (See Noble, John E., assignor.)						
Lemma, Henry, Guelph, Ontario, Canada. Combination-lock.....	280,488	July 3	191	50, 51	24	35
Lemma, John. (See Cooper and Lemma.) (Reissue.)						
Lemma, William W., Portersville, Ind. Sewer-trap.....	280,193	June 26	1931	543	23	2477
Lemon, Jacob N., <i>et al.</i> (See Aldrich, Hosea L., assignor.)						
Lemon, James, <i>et al.</i> (See Chinnock, George H., assignor.)						
Lemon, Samuel H., New York, N. Y. Spirit-level.....	281,086	July 10	918	256	24	169
Lemos, Leon, San Francisco, Cal. Shirt.....	285,046	Sept. 18	1099	306	24	1106
Lenderoth, Wilhelm, New York, N. Y. Underground tube for telegraph-wires.....	284,643	Sept. 11	590	166	24	1010
Lendrum, George. (See Vollacott, James R., assignor.)						
Lenhardt, George, Detroit, Mich. Rotary motor.....	272,562	Feb. 20	1242	345	23	672
Lenhart Arthur, Portland, Oreg. Car-coupling.....	286,207	Oct. 9	522	144	25	107
Lennards, Nicholas, Harvard, Ill. Measuring device for tailors, &c.....	281,530	July 17	1489	409	24	274
Lennon, Michael, Somerville, Mass. Portable grinding apparatus.....	287,447	Oct. 30	2109	573	25	409
Lennon, Nelson, Ceylon, Ohio. Shifting-rail for vehicles.....	289,845	Dec. 11	596	{ 165 166 }	{ 25	998



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Lennon, Sayres N., Ceylon, Ohio. Buggy-top. (Reissue).....	10,380	Sept. 11	1023	287	24	1087
Lennon, Sayres N., Ceylon, assignor of two-thirds to A. H. Winchell, Huron, Ohio, and G. F. Gardner, Hillsdale, Mich. Buggy-top.....	288,247	Nov. 13	567	157 158	25	615
Lennox, David, Marshalltown, assignor to C. E. Tibbles, Burlington, Iowa. Device for tapping gas and water mains.....	284,746	Sept. 11	725	202 203	24	1033
Lenox, Edwin S., Worcester, Mass. Barbed fence-wire.....	272,563	Feb. 20	1243	346	23	672
Lenox, Edwin S., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass. Wire bale-tie.....	272,591	Feb. 27	1676	469	23	755
Lenox, Edwin S., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass. Bale-tie fastening.....	290,636	July 3	359	100	24	63
Lensiug, Bernard, Evansville, Ind. Tree-box.....	280,637	July 3	360	100	24	63
Lent, Andrew, <i>et al.</i> (See Baker, William H., assignor.).....						
Lenz, Frank, Brooklyn, N. Y. Stem-setting attachment for watches.....	288,075	Nov. 6	353	98	25	568
Leonard, Arthur G., New York, N. Y. Railway-signal.....	285,632	Sept. 25	1799	512	24	1238
Leonard, Charles H., Detroit, Mich. Mailing-packet.....	281,892	July 24	1967	538	24	361
Leonard, Francis H., Jr. (See Pidgin and Leonard.).....						
Leonard, Francis H., Boston, Mass. Chimney-cap.....	287,553	Oct. 30	2243	609	25	437
Leonard, Francis H., and S. D. Snow, Boston, Mass. Car-coupling.....	285,419	Sept. 25	1549	436	24	1191
Leonard, George A. (See Simmons, Edmond S., assignor.).....						
Leonard, George D., <i>et al.</i> (See Fryer, Robert M., assignor.).....						
Leonard, Henry, Cambridge, Vt. Pouring-spout for milk-pails.....	272,714	Feb. 20	1423	399	23	704
Leonard, Henry C., Covington, Ky. Spinning-machine.....	282,203	July 31	2371	655	24	433
Leonard, Henry P., Boston, Mass. Wig-block holder.....	282,537	Aug. 7	75	22	24	513
Leonard, Richard A., Fitchburg, Mass. Mowing-machine.....	274,793	Mar. 27	1989	553	23	1200
Leonard, Richard A., Fitchburg, Mass. Mowing-machine.....	275,227	Apr. 3	443	123	23	1302
Leonard, Sumner J. (See Hewett and Leonard.).....						
Leonard, Thomas W., Detroit, Mich. Self-sharpening horseshoe.....	269,947	Jan. 2	150	44	23	31
Leonard, William F. (See Schruben and Leonard.).....						
Leonard, William G., New York, N. Y., assignor to C. Parker Company, Meriden, Conn. Lamp-fount.....	281,531	July 17	1490	409	24	275
Leonard, William H., Philadelphia, Pa. Fire-hydrant.....	287,554	Oct. 30	2244	609	25	437
Leonard, Sydney B., Tampa, Fla. Ointment.....	271,341	Jan. 30	1872		23	377
Leonhardt, John H. (See Leonhardt, William and J. H.).....						
Leonhardt, Martin W., Sedalia, Mo. Millstone paint-staff.....	273,555	Mar. 6	405	108	23	903
Leonhardt, William and J. H., Baltimore County, Md. Dumping-wagon.....	283,262	Aug. 14	950	265	24	676
Leopold, Charles F. (See Veerkamp, Leopold, and Darker.).....						
Lepper, Henry E., Carson, Nev. Lubricating compound.....	278,243	May 22	2121		23	2011
Lepper, William, Cleveland, Ohio. Top-prop.....	278,244	May 22	2121	584	23	2011
Lepper, William, Cleveland, Ohio. Top-prop.....	282,998	Aug. 14	626	177	24	618
Lepeum, James C., Clinton, Mo. Wagon-clip.....	284,029	Aug. 28	1910	535	24	869
Lescu, Marx A., <i>et al.</i> (See Chamberlain and Harris, assignors.).....						
Lesh, Gabriel B. (See Kehler, Amos, assignor.).....						
Lesh, Charles P., Lansing, Mich. Cigar-mold press.....	278,245	May 22	2122	584	23	2011
Lesh, Joseph, Toledo, Ohio. Channeling-saw.....	285,633	Sept. 25	1800	513	24	1239
Lesh, William. (See Heller, Daniel C., assignor.).....						
Lesley, Robert W. (See Millholland, Henry, assignor.).....						
Leslie, Edward A., <i>et al.</i> (See Egau, Charles, assignor.).....						
Leslie, James G., Oregon, and W. A. Hall, Pine Rock, Ill. Combined wagon-box and hay-rack.....	277,751	May 15	1517	411	23	1899
Leslie, Joseph C., assignor to W. C. Smith, St. Albans, Vt. Portable saw-table.....	279,098	June 5	600	163	23	2226
Lesourd, John A., and J. Lotan, Portland, Oreg. Endless-chain carrier and distributor for coal, &c.....	281,087	July 10	919	257	24	169
Lessard, John A., and J. Lotan, Portland, Oreg. Hydraulic elevator.....	286,451	Oct. 9	841	228	25	164
Lesser, Gustav J., Frankfort-on-the-Main, Germany, assignor to R. E. Lester, New York, N. Y. Plastic and elastic composition for forming elastic rolls, elastic pads, and for other useful purposes.....	276,607	May 1	80		23	1641
Lesser, Gustav J., Frankfort-on-the-Main, Germany, assignor to R. E. Lester, New York, N. Y. Manufacture of glue-size.....	276,608	May 1	81		23	1642
Lesser, Gustav J., Frankfort-on-the-Main, Germany, assignor to R. E. Lester, New York, N. Y. Coloring glue.....	276,609	May 1	81		23	1642
Lesser, Max, Athens, Ga. Boot-cleaner.....	281,893	July 24	1968	538	24	262
Lesson, Philip, Newark, N. J., assignor to L. Schlesinger & Co., New York, N. Y. Child's rattle.....	276,251	Apr. 24	1770	493	23	1554
Lester, Heraeus P. (See Atwood and Lester.).....						
Lester, Julius M., <i>et al.</i> (See Ruggles, Robert B., assignor.).....						
Lester, Robert E. (See Lesser, Gustav J., assignor.).....						
Lester, Robert E., <i>et al.</i> (See Tillon and Clapp, assignors.).....						
Letchworth, George J., Buffalo, N. Y. Hame attachment.....	275,228	Apr. 3	445	124	23	1302
Letchworth, Ogden P. (See Cooper, Edward A., assignor.).....						
Letchworth, Ogden P., Buffalo, N. Y. Halter-trimming.....	272,715	Feb. 20	1423	399	23	704
Létrange, Leon, Paris, France. Process of and apparatus for reducing zinc ores.....	286,208	Oct. 9	523	144	25	107
Lett, William F. (See Kelly, Michael, assignor.).....						
Lettelier, John G., assignor to himself and E. E. Pratt, Chicago, Ill. Combined register and alarm.....	286,317	Oct. 9	686	182 183	25	135
Lettinmyer, George, Little Georgetown, W. Va. Harrow.....	271,202	Jan. 23	1698	490	23	338
Letton, Raphael E., Quincy, Ill. Piano-action.....	290,692	Dec. 25	1677	462	25	1202
Lettré, Philipp, assignor to Sandland, Capron & Co., Attleborough, Mass. Bracelet.....	290,590	Dec. 18	1541	424	25	1173
Letz, Louis H., Chicago, assignor of one-half to J. Schrum, Dolten, Ill. Corn-planter.....	283,621	Aug. 21	1383	387	24	763
Letzkus, John, Allegheny, Pa. Fire-escape.....	279,774	June 19	1431	401	23	2382
Leuffgen, George, Berlin, assignor to C. A. W. Schön, Hamburg, Germany. Glass-melting furnace.....	270,594	Jan. 16	949	274 275	23	203
Levalley, Christopher W., St. Paul, Minn. Grain-binder.....	282,335	July 31	2536	695	24	462
Lévéque, Camille, Pouzin, France. Portable refining and oxidizing apparatus.....	290,075	Dec. 11	870	247 248	25	1047
Levering & Co., E. (See Emerson, John P., assignor.).....						
Levering, Franklin W., Baltimore, Md. Spark-arrester.....	270,445	Jan. 9	752	220	23	156
Levering, William A. (See Stewart, Samuel J., assignor.).....						
Levi, Mordica. (See Gates and Levi.).....						
Levinstein, Ivan, Manchester, county of Lancaster, England. Manufacture of yellow coloring-matter.....	289,543	Dec. 4	214		25	921
Levis, O. D. (See Keefer, Israel, assignor.).....						
Levison, Philip, Chicago, Ill. Lamp.....	283,792	Aug. 28	1607	454	24	816
Levison, Wallace G., Brooklyn, N. Y. Electric-light lantern.....	289,425	Dec. 4	63	18, 19	25	898
Levy, Maurice, Paris, France. Apparatus for regulating the transmission of electric force.....	273,291	Mar. 6	56	17, 18	23	844

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Lovy, Maurice, Paris, France. Apparatus for controlling electric currents .....	286,833	Oct. 16	1323	{ 361 362 }	25	255
Levy, Maurice, Paris, France. Electric regulator for controlling the currents in electrical systems .....	286,834	Oct. 16	1327	{ 362 363 }	25	255
Levy, Michael S., assignor to M. S. Levy & Sons, Baltimore, Md. Manufacture of cloth hats .....	272,385	Feb. 13	1003	281	23	625
Levy, Sally M., Milwaukee, Wis. Knit foundation for mittens and gloves and making the same .....	273,111	Feb. 27	1936	542	23	800
Levy, Sally M., Milwaukee, Wis. Knit fabric and constructing the same .....	280,750	July 3	502	{ 142 143 }	24	89
Levy, Samuel, New York, N. Y. Preparation of yeast. (Reissue) .....	10,341	June 12	1135	.....	23	2324
Levy & Son, Henry. (See Loew, Jacques, assignor.)						
Levy & Sons, M. S. (See Levy, Michael S., assignor.)						
Lewes, Tompkins A., et al. (See Wagner and Seath, assignors.)						
Lewin, George W., Fall River, Mass. Sash-holder .....	270,229	Jan. 9	478	141	23	104
Lewin, John M., Lockport, N. Y., assignor of one-half to S. S. Mutton, Toronto, Ontario, Canada. Bottle-stopper .....	290,897	Dec. 25	1941	535	25	1250
Lewis, Benjamin B., Bristol, Conn. Mechanical movement .....	271,481	Jan. 30	2064	594	23	412
Lewis, Benjamin F., Amesbury, Mass. Center-bar for vehicle-springs .....	285,420	Sept. 25	1550	436	24	1192
Lewis, Benjamin K. (See Wells and Lewis.)						
Lewis, Burdette A., Plainville, Conn. Drawer-pull .....	289,669	Dec. 4	367	104	25	952
Lewis, Charles, Amsterdam, N. Y., assignor of one-half to R. Tomlinson Spring and Axle Works, Bridgeport, Conn. Machine for bending and forming springs .....	286,318	Oct. 9	689	183	25	135
Lewis, Charles P., Del Rio, Tex. Harrow .....	274,347	Mar. 20	1421	389	23	1024
Lewis, Charles S., Waterbury, and G. H. Blakesley, Bristol, Conn. Lock .....	270,318	Jan. 9	579	170	23	123
Lewis, Charles S., assignor to Waterbury Clock Company, Waterbury, Conn. Pendulum .....	290,186	Dec. 11	998	281	25	1071
Lewis, Daniel F. (See Fowler and Lewis.)						
Lewis, Daniel L., Bradford, Pa. Oil-well-tubing clamp .....	277,142	May 8	802	211	23	1770
Lewis, Edward B., Kirby's Creek, Ala. Churn .....	277,732	May 15	1518	412	23	1899
Lewis, Edward S. (See Braslin, John J., assignor.)						
Lewis, Edward T., Toledo, Ohio. Honey-extractor .....	278,713	June 5	49	15	23	2133
Lewis, Emma J., San Francisco, Cal. Carpet-fastener .....	277,143	May 8	804	211	23	1770
Lewis, Francis M., assignor of one-half to K. W. Becker, Lansing, Mich. Toy gun .....	287,946	Nov. 6	199	58	25	542
Lewis, George R., Fayetteville, Ga. Fertilizer-distributor .....	272,716	Feb. 20	1424	399	23	704
Lewis, George T., Philadelphia, Pa. Obtaining precious metals from refractory ores .....	286,025	Oct. 2	301	84	25	56
Lewis, George T., Philadelphia, Pa., assignor to United States Chemical Company, Camden, N. J. Apparatus for grinding substances and mixing the same with liquids .....	270,904	Jan. 23	1333	385	23	280
Lewis, George W., assignor to S. M. Lewis and E. G. Ghio, Portsmouth, Va. Nail-extractor .....	270,085	Jan. 2	299	89	23	61
Lewis, H. M., et al. (See Starr, Eli T., assignor.)						
Lewis, H. M., et al. (See Starr, Eli T. and E. E., assignors.)						
Lewis, H. M., et al., trustees. (See Groult, Charles P., assignor.)						
Lewis, H. M., et al., trustees. (See Starr, Eli T., assignor.)						
Lewis, Harry A., Boston, Mass. Cartridge-feed case .....	283,122	Aug. 14	773	218	24	645
Lewis, Henry A., Wichita Falls, Tex. Stock-car .....	276,053	Apr. 17	1524	419	23	1503
Lewis, Henry G. (See Curtis and Lewis.)						
Lewis, Henry G., assignor of one-half to J. H. Wellings and H. C. Hedges, North Lansing, Mich. Cross-bow .....	289,283	Nov. 27	1857	516	25	858
Lewis, Homer C., Columbus, Ohio. Hinge .....	279,775	June 19	1433	401	23	2383
Lewis, Jason E., Hesperia, Mich. Harvester cutter-bar .....	276,838	May 1	392	104	23	1695
Lewis, Jesse V., et al. (See Swanson, Nels, assignor.)						
Lewis, John L., Pittsburgh, Pa. Treating hot-rolled bars while cooling .....	278,246	May 22	2123	585	23	2011
Lewis, John L., Pittsburgh, Pa. Apparatus for compressing, surfacing, and straightening bars, &c .....	290,077	Dec. 11	874	248	25	1048
Lewis, Joseph, Chicago, Ill. Dynamo-electric machine .....	270,230	Jan. 9	479	{ 141 142 }	23	104
Lewis, Joseph, Chicago, Ill. Pneumatic grain-elevator .....	285,047	Sept. 18	1100	307	24	1106
Lewis, Joseph, Chicago, Ill. Bicycle .....	286,835	Oct. 16	1330	363	25	256
Lewis, Joseph, Chicago, Ill. Pneumatic elevator .....	287,033	Oct. 23	1587	437	25	306
Lewis, Joseph S., Birkenhead, county of Chester, England. Insulator for telegraph-wires .....	276,839	May 1	393	104	23	1695
Lewis, Leroy S., Rockville, assignor of one-half to J. T. Goodrich, Norwich, Conn. Fountain-pen .....	272,066	Feb. 13	600	162	23	556
Lewis, Miles K., and E. Sanders, Hastings, Nebr. Fire-escape .....	290,076	Dec. 11	873	248	25	1047
Lewis, Mortimer G., et al. (See Webster, Hanson S., assignor.)						
Lewis, Mortimer G., Lowville, N. Y. Rotary engine .....	272,964	Feb. 27	1754	490	23	768
Lewis, Mortimer G., Lowville, N. Y. Bench-vise .....	279,260	June 12	803	{ 222 223 }	23	2271
Lewis, Nathan C., Boston, Mass. Mowing-machine .....	270,231	Jan. 9	481	142	23	104
Lewis, Orlando E., Columbus, Ohio. Boot or shoe .....	270,595	Jan. 16	951	275	23	203
Lewis, Orlando E., Columbus, Ohio. Boot or shoe .....	270,596	Jan. 16	951	275	23	203
Lewis, Orlando E., Columbus, Ohio. Boot or shoe .....	283,263	Aug. 14	951	265	24	677
Lewis, Rhys F., Wilkes-Barré, Pa. Coal-scuttle .....	284,030	Aug. 28	1911	535	24	869
Lewis, Samuel M., et al. (See Lewis, George W., assignor.)						
Lewis, Seth F., Buffalo, N. Y. Mechanism for operating sewing-machines .....	279,959	June 26	1665	468	23	2429
Lewis, Thomas E., Vicksburg, Miss. Shipping-tag .....	274,348	Mar. 20	1422	390	23	1095
Lewis, Thompson A., et al. (See Wagner and Seath, assignors.)						
Lewis, Warner, Stone Bluffs, Ind. Tire-heating furnace .....	278,153	May 22	2002	550	23	1990
Lewis, William, Sauk Centre, Minn. Draft-equalizer .....	276,611	May 1	82	22	23	1642
Lewis, William D., Plymouth, Pa. Artificial leg .....	278,566	May 29	2549	695	23	2094
Lewis, William D., Plymouth, Pa. Can-opener .....	289,919	Dec. 11	687	192	25	1013
Lewis, William H. (See Blackwell, Richard C., assignor.)						
Lewis, William H. (See Furman, Samuel M., assignor.)						
Lewis, William H. (See Hughes and Blackwell, assignors.)						
Lewis, William H., Brooklyn, assignor to E. & H. T. Anthony & Co., New York, N. Y. Plate-holder for photographic cameras .....	272,717	Feb. 20	1425	399	23	704
Lewis, William J., Pittsburg, Pa. Manufacture of barbed fence-rails .....	278,714	June 5	50	15	23	2133
Libbey, Edward D., et al. (See Locke, Joseph, assignor.)						
Libbey, William L., et al. (See Locke, Joseph, assignor.)						
Libby, Horace, Lewiston, Me. Jack-screw .....	286,717	Oct. 16	1183	319	25	230
Libby, Horace, assignor of one-half to H. C. Little, Lewiston, Me. Nut-lock .....	276,252	Apr. 24	1770	493	23	1554
Libby, Silas F., Milford, Mass. Manufacture of boots and shoes .....	282,911	Aug. 7	519	145	24	592
Licht, Frederick, Brooklyn, N. Y. Treating unmalted cereals for the manufacture of fermented beverages .....	288,076	Nov. 6	355	.....	25	568



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Liddell, John P. (See Hawthorn and Liddell.)						
Liddell, John P. (See Hawthorn, Liddell, and Hawthorn.)						
Liddell, Walter J. F., Charlotte, N. C. Setting steam-boilers .....	271,482	Jan. 30	2065	{ 594 595 }	23	413
Liddell, Walter J. F., Charlotte, N. C. Portable press .....	272,718	Feb. 20	1426	400	23	705
Liddell, Walter J. F., Charlotte, N. C. Hay and cotton press .....	272,719	Feb. 20	1428	{ 400 401 }	23	705
Liddell, Walter J. F., Charlotte, N. C. Circular saw mill .....	274,129	Mar. 20	1141	314	23	1044
Liddell, Walter J. F., Charlotte, N. C. Shaft-hanger .....	274,704	Mar. 27	1990	553	23	1201
Liddell, Walter J. F., Charlotte, N. C. Shaft-coupling .....	274,705	Mar. 27	1991	553	23	1201
Liddell, Walter J. F., Charlotte, N. C. Saw-mill dog .....	285,824	Oct. 2	50	16	25	11
Liddell, Walter J. F. and W. S., Charlotte, N. C. Hay and cotton press .....	286,619	Oct. 16	1057	{ 284 285 }	25	208
Liddell, Walter S. (See Liddell, Walter J. F. and W. S.)						
Liddle, Samuel, Hamilton, Nev. Fire-proof structure .....	273,556	Mar. 6	406	109	23	903
Liddle, William E., Salem, N. Y. Ear-ring wire .....	281,088	July 10	920	257	24	170
Lidren, Christopher, assignor to himself and R. Jackson, Lafayette, Ind. Harvester-rake.	278,979	June 5	443	{ 120 121 122 }	23	2199
Lidren, Christopher, assignor to himself and R. Jackson, Lafayette, Ind. Grain-binder ..	287,694	Oct. 30	2440	{ 656 657 }	25	474
Lidren, Christopher, assignor to himself and R. Jackson, Lafayette, Ind. Grain-binding apparatus.	287,695	Oct. 30	2442	{ 657 658 }	25	474
Lidy, George F., Waynesborough, Pa. Saw-mill feed mechanism .....	290,078	Dec. 11	875	249	25	1048
Lieb, Charles A., New York, N. Y. Tool-post for lathes .....	272,277	Feb. 13	861	240	23	602
Lieb, Charles A., New York, N. Y. Ink-fountain .....	277,582	May 15	1322	355	23	1864
Lieb, John W., Newark, N. J. Traveling-bag .....	284,446	Sept. 4	348	96	24	962
Liebenfeld, Louis, <i>et al.</i> (See Shields, Francis M., assignor.)						
Lieberman, Albert, and W. Robb, Philadelphia, Pa. Electrical heating apparatus .....	276,840	May 1	394	104	23	1695
Liebeskind, Rudolph, Chemnitz, Saxony, Germany. Knitting gloves .....	286,452	Oct. 9	843	228	25	164
Liebmann, Herman F. W., assignor of one-half to H. K. Meyer, Chicago, Ill. Machine for cutting files .....	271,483	Jan. 30	2067	595	23	413
Liebreich, Oscar. (See Braun and Liebreich.)						
Liebreich, Oscar, Berlin, Germany. Manufacture of soap .....	281,089	July 10	921	.....	24	170
Liebreich, Oscar, and H. Michaelis, assignors to F. C. Glaser, Berlin, Germany. Preparing extracts of tobacco .....	283,622	Aug. 21	1385	.....	24	763
Lieckfeld, Georg. (See Körtling and Lieckfeld.)						
Liedke, Edward L., assignor of one-half to F. L. Felch, Sandusky, Ohio. Belt-joint .....	277,909	May 22	1705	465	23	1939
Liemke, Herman H., St. Louis, Mo. Fancet .....	270,819	Jan. 16	1229	355	23	255.
Liemke, Herman H., St. Louis, Mo. Signal and alarm for railway-crossings .....	271,876	Feb. 6	350	97	23	502
Liesenhoft, Franz, <i>et al.</i> (See Schmidt, Christian, assignor.)						
Liess, Wilhelm, Buffalo, N. Y. Apparatus for settling and molding starch .....	275,394	Apr. 10	700	187	23	1354
Liess, Wilhelm, and M. Maher, assignors of one-fourth to J. S. Holmes, Buffalo, N. Y. Process of and apparatus for molding starch into blocks .....	284,447	Sept. 4	350	97	24	663
Light, Fred, Jr. (See Kriebel, Hosea K., assignor.)						
Lightford, James G., and J. H. Fenton, Chicago, Ill., assignors to said Fenton. Quarter-hoot for horses .....	286,319	Oct. 9	690	184	25	135
Lighthall, Almerin H., San Francisco, Cal. Underground cable-way .....	274,505	Mar. 27	1647	458	23	1140
Lighthall, Almerin H., San Francisco, Cal. Gripper for traction-cables .....	274,506	Mar. 27	1649	458	23	1140
Lighthall, Almerin H., San Francisco, Cal. Grip for cable-railways .....	288,180	Nov. 6	479	{ 132 133 }	25	591
Lighthall, Almerin H., San Francisco, Cal. Cable switch or shifter for underground end-less-cable railways .....	288,947	Nov. 20	1448	399	25	776
Lighthall, Almerin H., San Francisco, Cal. Take-up mechanism for endless-cable railways.	288,948	Nov. 20	1449	{ 399 400 }	25	776
Lighthiser, George, Napoleon, Ohio. Car-coupling .....	284,644	Sept. 11	501	167	24	1010
Lighty, Henry, Rossville, Ind. Washing-machine .....	278,247	May 22	2124	585	23	2011
Likes, Elbridge T., Winterset, H. B. Hedge, and G. C. Baker, Des Moines, Iowa. Fence-post .....	277,493	May 15	1215	326	23	1848
Lilienfeld, David. (See Fletter, Henry, assignor.)						
Liljencrantz, Gustave A. M., Chicago, Ill. Fruit-jar opener .....	285,048	Sept. 18	1102	307	24	1107
Liljencrantz, Gustave A. M., Chicago, Ill. Fruit-jar opener .....	286,836	Oct. 16	1311	363	25	256
Lillard, La Fayette, Dixon, Cal. Traction-engine .....	278,154	May 22	2002	551	23	1900
Lillard, La Fayette, Dixon, Cal. Steam-boiler for traction-engines .....	284,134	Aug. 28	2040	567	24	891
Lilley, Henry, and J. T. Hillslev, Philadelphia, Pa. Split pulley .....	277,910	May 22	1706	466	23	1939
Lilley, John W., <i>et al.</i> (See Collins, M. Grier, assignor.)						
Lillibridge, Freeman. (See Logan, Daniel H., assignor.)						
Lillibridge, George, Jamestown, N. Y. Caddy or canister .....	279,261	June 12	806	223	23	2271
Lille, Robert B., Hanover, N. H. Soil-pulverizer .....	278,803	June 5	170	50	23	2151
Lilly, Charles. (See Wheat, John J., assignor.)						
Lily, George W., and J. E. Norman, Centre, Mo. Cultivator .....	290,440	Dec. 18	1343	372	25	1139
Lima Iron Fence Company. (See Devoe, Benjamin G., assignor.)						
Lima Paper Mill. (See Parmenter, Orville L., assignor.)						
Limbirt, Ludwig. (See Salm, Maximilian J., assignor.)						
Limeburner, Frank W., Belfast, Me. Cleat .....	271,484	Jan. 30	2069	595	23	413
Limpach, Leonhard, Hoechst-on-the-Main, Germany, assignor to Farbwerke Hoechst, vormals Meister, Lucius & Brüning. Manufacture of coloring-matters .....	280,317	Feb. 26	2094	.....	23	2505
Limpus, Sherman E., Olathe, Kans. Windmill .....	271,643	Feb. 6	71	20	23	453
Lincoln, Bacon & Co. (See Ware, Cleveland H., assignor.)						
Lincoln, Francis H., Chelsea, Mass. Water-gage .....	278,345	May 29	2285	625	23	2047
Lincoln, Frank W., Bangor, Me. Broom-handle attachment .....	277,298	May 8	981	263	23	1801
Lincoln, Horatio B., <i>et al.</i> (See Stamour, John B., assignor.)						
Lincoln, Howard H. (See Brown, Alexander T., assignor.)						
Lincoln, James H., Chattanooga, Tenn. Dental-engine hand-piece .....	274,008	Mar. 13	980	269	23	1010
Lincoln, Myron H., Bedford, Ind. Combined seed-planter and fertilizer-distributor .....	277,038	May 8	663	{ 172 173 }	23	1745
Lincoln, Peries, Coldwater, Mich. Spoke-socket .....	282,538	Aug. 7	75	22	24	513
Lincoln, Peries, Coldwater, Mich. Axle-box .....	282,539	Aug. 7	76	22	24	513
Lincoln, Peries, Coldwater, Mich. Knife or tool handle .....	286,209	Oct. 9	525	144	25	107
Lincoln, Peries, Coldwater, Mich. Sulky-plow, seeder, and cultivator .....	287,034	Oct. 23	1589	{ 437 438 }	25	307
Lincoln, Thomas, assignor to Hopkins & Dickinson Manufacturing Company, Newark, N. J. Key .....	289,284	Nov. 27	1858	516	25	858
Lind, William H., Williamsport, Pa. Car-shifter .....	289,006	Nov. 27	1523	421	25	797

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Lind, Willard W. (See Lucas, Edward R., assignor.)						
Linde, John E. (See Schwartz, Charles, assignor.)						
Lindell, Theodore, assignor of one-half to P. Swainson, Clarksville, Mo. Rock and earth boring apparatus	286,837	Oct. 16	1332	{ 363 364 }	{ 25	256
Lindemann, John G., New York, N. Y. Apparatus for stretching fabrics	280,489	July 3	193	{ 51	{ 24	35
Lindemuth, Harry H., Mount Joy, Pa. Steam-boiler	283,497	Aug. 21	1249	{ 350 351 }	{ 24	737
Lindenthal, Gustav, Pittsburg, Pa. Bridge	277,039	May 8	664	{ 173	{ 23	1746
Lindenthal, Hattie M., Sewickley, Pa. Egg-shelf	276,612	May 1	83	{ 23	{ 23	1642
Linder, William L., Burlington, Iowa. Device for attaching neckties	289,670	Dec. 4	368	{ 104	{ 25	952
Lindgren, Carl A., assignor to T. Carlsson, Eskilstuna, Sweden. Making metallic rakes	282,336	July 31	2537	{ 695	{ 24	462
Lindley, George, Jr., Philadelphia, Pa. Knitting-machine	277,299	May 8	982	{ 264	{ 23	1801
Lindley, Isaac C. (See Anderson, William H., assignor.)						
Lindley, Isaac C., Elizabethtown, Ind. Straw-stacker	274,205	Mar. 20	1228	{ 338	{ 23	1061
Lindley, J. F., Jr. (See Stephens, James, assignor.)						
Lindley, William F., et al. (See New, Albert L., assignor.)						
Lindner, Ferdinand, assignor to himself, E. Melchior, J. Clemens, and C. Finkensleper, Chicago, Ill. Meat-cutting machine	270,319	Jan. 9	580	{ 170 171 }	{ 23	123
Lindop, Charlotte F. (See Lindop, William E., assignor.)						
Lindop, William E., assignor to C. F. Lindop, St. Thomas, Ontario, Canada. Apparatus for changing and storing photographers' backgrounds, &c	281,532	July 17	1491	{ 409 410 }	{ 24	275
Lindsay, James, New York, N. Y. Carpet-stretcher	289,007	Nov. 27	1523	{ 421	{ 25	797
Lindsay, James H., trustee. (See Browning, Clinton, assignor.)						
Lindsay, John P. (See Minor, Lyman D., assignor.)						
Lindsay, Joseph H., Freeland, Pa. Combined heater and oven	278,567	May 29	2550	{ 695 696 }	{ 23	2094
Lindsay, Melville, East Orange, N. J. Parcel-carrier	272,067	Feb. 13	601	{ 163	{ 23	556
Lindsay, Melville, East Orange, N. J. Parcel-carrier	277,494	May 15	1216	{ 326 327 }	{ 23	1848
Lindsay, William, et al. (See Darling, James D., assignor.)						
Lindsay, William L., Cleveland, Ohio. Car-wheel	284,448	Sept. 4	351	{ 97	{ 24	963
Lindsey, Frank. (See Ward and Lindsey.)						
Lindsey, George W., and H. W. Raleigh, assignors of one-third to A. J. Pritchard, Baltimore, Md. Fire-escape	276,610	May 1	82	{ 22	{ 23	1642
Lindsey, John M., Crystal Springs, Ga. Transplanting implement	275,505	Apr. 10	838	{ 227	{ 23	1377
Lindsey, John M., Crystal Springs, Ga. Seeding-machine	287,035	Oct. 23	1591	{ 438	{ 25	307
Lindsey, Stephen G., Salt Lake City, Utah Ter. Amalgamator	272,564	Feb. 20	1244	{ 346	{ 23	672
Lindsey, William M., Antrim, Ohio. Animal-shears	284,968	Sept. 11	989	{ 278	{ 24	1081
Lindsey, William M., assignor to himself and B. B. Kimball, Oakwood, Tex. Cotton-planter	288,077	Nov. 6	356	{ 99	{ 25	568
Lindsley, Augustus N., assignor of one-half to H. Pike, New York, N. Y. Glass globe and shade for gas-fixtures	273,371	Mar. 6	175	{ 48	{ 23	864
Lindsly, Robert W. (See Betts, J. Hecker, assignor.)						
Linehan, Daniel J. (See Lyons and Linehan.)						
Lines, John. (See Crane and Lines.)						
Lines, Thomas D., Syracuse, N. Y. Coupling for vehicle-springs	277,583	May 15	1323	{ 355	{ 23	1864
Lines, Thomas D., Syracuse, N. Y. Coupling for vehicle-springs	277,584	May 15	1324	{ 355	{ 23	1665
Lines, Thomas D., Syracuse, N. Y. Coupling for vehicle-springs	277,585	May 15	1324	{ 356	{ 23	1865
Lines, Thomas D., Syracuse, N. Y. Carriage-spring	287,303	Oct. 23	1932	{ 528	{ 25	369
Lingley, John H., assignor of one-half to C. Amidon, Worcester, Mass. Curtain-hanger	282,912	Aug. 7	519	{ 145	{ 24	592
Link-Belt Machinery Company. (See Bachmann, Johann, assignor.)						
Link-Belt Machinery Company. (See Ewart, William D., assignor.)						
Link-Belt Machinery Company. (See Pearce, Frank I., assignor.)						
Link, Frederic W., Mount Pleasant, Ohio, assignor of one-half to N. Holloway, Chicago, Ill. Engine for converting motion	273,557	Mar. 6	407	{ 109 110 }	{ 23	904
Linn, Samuel H., St. Petersburg, Russia, assignor of one-half to R. G. Rolston, New York, N. Y. Method of and apparatus for preserving and transporting food	270,549	Jan. 9	888	{ 257	{ 23	183
Linnrott, Joseph, Galesburg, Ill. Corn-planter	277,495	May 15	1217	{ 327	{ 23	1848
Linquist, Maurice F., New Haven, Conn. Corset	280,638	July 3	361	{ 100	{ 24	63
Linquist, Maurice F., New Haven, Conn. Corset-spring	286,453	Oct. 9	843	{ 228	{ 25	164
Lins, Julius L. (See Macher and Lins.)						
Linscott, John F., Grand Rapids, Mich. Ventilator for cooking-stoves	272,720	Feb. 20	1431	{ 401	{ 23	705
Linscott, John M., assignor to himself and L. C. Peck, Lewiston, Me. Weft stop-motion for looms	278,804	June 5	171	{ 50	{ 23	2152
Linsley, Edward B., assignor to Sheffield Velocipede Car Company, Three Rivers, Mich. Hand-car	270,320	Jan. 9	585	{ 172	{ 23	124
Linsley, Edward B., assignor to Sheffield Velocipede Car Company, Three Rivers, Mich. Hand-car	271,720	Feb. 6	158	{ 44	{ 23	468
Linton, Charles B., Reading, assignor to himself and Hyde & Co., Boston, Mass. Apparatus for displaying articles in the air	286,718	Oct. 16	1184	{ 319	{ 25	230
Linton, William F., et al. (See Lattimer, Francis, assignor.)						
Linz, Michel, New York, N. Y. Window-cornice	289,544	Dec. 4	214	{ 60	{ 25	924
Lipe, John, Sharon, N. Y. Hook for hop-vines	280,639	July 3	362	{ 100	{ 24	64
Lipe, Walter. (See Ludlow, Charles A., assignor.)						
Lippert, Ernst T., Shaler, Pa. Insertible saw-tooth	283,623	Aug. 21	1386	{ 387	{ 24	763
Lippincott, Ebenezer W., Grafton, V. Va. Car-brake	280,640	July 3	363	{ 101	{ 24	64
Lippincott, Jesse H. (See Schulze-Berge, Hermann, assignor.)						
Lipps, Johan P., Dresden, Saxony, Germany. Adjustable sieve	272,278	Feb. 13	861	{ 241	{ 23	602
Lippy, David, assignor of two-thirds to T. and W. Huber, Mansfield, Ohio. Railway-crossing	273,112	Feb. 27	1937	{ 543	{ 23	800
Lippy, David, and J. Hughes, Mansfield, Ohio. Traction-engine	272,447	Feb. 20	1083	{ 305 306 }	{ 23	644
Lippy, David, Richland County, and Z. S. Stocking, Cleveland, Ohio; said Lippy assignor to said Stocking. Clover and grain thrashing machine	287,304	Oct. 23	1932	{ 528	{ 25	369
Lipsey, Andrew B., Hoboken, N. J. Nut-lock	278,248	May 22	2125	{ 585	{ 23	2011
Lipsey, Andrew B., West Hoboken, N. J., assignor to W. Bell, New York, N. Y. Gas-burner	278,568	May 29	2551	{ 696	{ 23	2094
Lipsey, Andrew B., West Hoboken, N. J., assignor to W. Bell, New York, N. Y. Rotary engine	280,194	June 26	1932	{ 543 544 }	{ 23	2477
Lipsey, Andrew B., West Hoboken, N. J., assignor to W. Bell, New York, N. Y. Apparatus for manufacturing gas	282,204	July 31	2372	{ 653	{ 24	433
Lipsey, Andrew B., West Hoboken, N. J., assignor to W. Bell, New York, N. Y. Gas-burner	282,337	July 31	2538	{ 695	{ 24	462
Lipsey, Andrew B., West Hoboken, N. J., assignor to W. Bell, New York, N. Y. Process of and apparatus for making gas	286,454	Oct. 9	844	{ 229	{ 25	164



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Lischy, Edward, New Orleans, La. Rice-huller.....	279,404	June 12	1004	278	23	2302
Liscomb, William S., Providence, R. I. Tea-kettle.....	278,569	May 29	2552	696	23	2094
Liscomb, William S., Providence, R. I. Photographer's chair.....	282,737	Aug. 7	321	92	24	556
Lisle, Jacob B. (See Irwin, William J., assignor.)						
Eissenden, George, Stockton, Cal. Gang-plow.....	273,292	Mar. 6	61	18, 19	23	845
Lissner, Adolph, New York, N. Y. Fur-cutting guide.....	269,867	Jan. 2	54	17	23	13
Lissner, Adolph, New York, N. Y. Guide for cutting fur.....	284,866	Sept. 11	868	243	24	1058
List, Adolph, and O. Kunath, Capo Girardeau, Mo. Carpet-beater.....	273,293	Mar. 6	64	19	23	845
Lister John T., Cleveland, Ohio. Armature for dynamo-electric machines.....	283,624	Aug. 21	1387	{ 387 388 }	{ 24	763
Lister, Samuel C., and J. Reixach, Manningham, near Bradford, county of York, England. Weaving double-pile fabrics and loom for weaving the same.....	270,321	Jan. 9	587	{ 172 173 }	{ 23	124
Lister, Samuel C., and J. Reixach, Manningham, county of York, England. Loom for weaving double-pile fabrics.....	282,652	Aug. 7	212	62	24	536
Lister, Samuel C., and J. Reixach, Manningham, county of York, England. Power-loom for weaving figured double-pile fabrics.....	289,671	Dec. 4	368	{ 104 105 106 }	{ 25	952
Littell, Hardin H. (See Harrison, William H., assignor.)						
Litterer, Fred. (See McKinniss and Litterer.)						
Litterer, Fred. and L. McKinniss, Decatur, Ill. Check-rower for corn-planters.....	278,441	May 29	2402	655	23	2068
Little, C. H., et al. (See Held, August S., assignor.)						
Little, Calvin W. (See Bush, Arthur W., assignor.)						
Little, David M., Boston, Mass. Shutter for photographic cameras.....	284,645	Sept. 11	592	167	24	1010
Little, Emanuel, Zanesfield, Ohio. Automatic gate.....	276,434	Apr. 24	2009	557	23	1594
Little, George H., Peabody, Mass. Combined injector and ejector.....	272,448	Feb. 20	1085	{ 306 307 308 }	{ 23	645
Little, Henry H., Chambersburg, Pa. Fire-escape.....	278,249	May 22	2125	{ 585 586 }	{ 23	2011
Little, Horace C. (See Libby, Horace, assignor.)						
Little, James R., assignor of three-fourths to C. Smith, T. Hill, and P. B. Williams, Quincy, Ill. Wheel.....	273,746	Mar. 13	652	{ 173 174 }	{ 23	954
Little, John. (See King and Little.)						
Little, John. (See Smith, John, assignor.)						
Little, John W., Muncie, Ind. Feather duster.....	271,877	Feb. 6	350	97	23	592
Little, Robert B., Providence, R. I. Elevator-bucket.....	287,139	Oct. 23	1717	470	25	332
Little, Robert B., Providence, R. I. Coal elevator and conveyer.....	287,140	Oct. 23	1718	{ 470 471 }	{ 25	332
Little, William H., Plattsburg, N. Y. Potato and seed planter.....	289,672	Dec. 4	371	{ 106 107 }	{ 25	952
Littlefield, Charles, Vinalhaven, Me. Rope-clamp.....	278,155	May 22	2003	551	23	1990
Littlefield, Frederic, Gardiner, Me. Whiffletree.....	273,372	Mar. 6	177	48	23	864
Littlefield, Henry W., Philadelphia, Pa. Fire-escape.....	288,078	Nov. 6	357	99	25	568
Littlejohn, George F., Warrenton, N. C. Fruit-jar.....	285,580	Sept. 18	1373	387	24	1156
Littlepage, Hardin B., King William Court-House, Va. Projectile.....	275,674	Apr. 10	1054	286	23	1414
Litz, Henry, Baltimore, Md. Tonic bitters.....	289,673	Dec. 4	373	.....	25	952
Litzelmann, Victor. (See Ams and Litzelmann.)						
Livermore, Charles F. (See Bartlett and Waite, assignors.)						
Livermore, Edward, assignor to H. Galpen, New York, N. Y. Furnace for consuming smoke and heating water.....	274,450	Mar. 20	1557	427	23	1118
Livermore, Edward, assignor to H. Galpen, New York, N. Y. Smoke-consumer and auxiliary generator for locomotives.....	274,451	Mar. 20	1560	427	23	1118
Livermore, Joseph P., Boston, Mass. Railway signal apparatus.....	273,558	Mar. 6	409	110	23	904
Livermore, William R., and A. H. Russell, U. S. Army. Cartridge-packing case.....	278,980	June 5	445	122	23	2199
Livet, Fountain, London, England. Steam-boiler furnace.....	288,079	Nov. 6	359	{ 99 100 }	{ 25	569
Livingood, Katherine A., Womelsdorf, Pa. Egg-beater.....	282,738	Aug. 7	324	92	24	556
Livingston, Alexander W., Des Moines, Iowa. Cultivator.....	282,540	Aug. 7	77	22	24	513
Livingston, John, assignor to Stout, Mills & Temple, Dayton, Ohio. Roller-mill.....	275,675	Apr. 10	1056	286	23	1414
Livingston, John, assignor to Stout, Mills & Temple, Dayton, Ohio. Roller-mill.....	280,195	June 26	1936	544	23	2478
Livingston, John, assignor to Stout, Mills & Temple, Dayton, Ohio. Roller-mill.....	284,135	Aug. 28	2041	{ 567 568 }	{ 24	891
Llewellyn, William M., Glasgow, county of Lanark, Scotland. Apparatus for checking the arrival of employes.....	275,229	Apr. 3	445	124	23	1302
Lloyd, Charles D., Framingham, Mass. Printing-press.....	285,421	Sept. 25	1551	437	24	1192
Lloyd, Edwin L., assignor of one-half to C. C. Joly, Philadelphia, Pa. Bottle-filling machine.....	279,776	June 19	1434	401	23	2383
Lloyd, Edwin L., assignor of one-half to C. C. Joly, Philadelphia, Pa. Bottle-stopper.....	279,777	June 19	1435	402	23	2383
Lloyd, Edwin L., assignor of one-half to C. C. Joly, Philadelphia, Pa. Bottle-stopper.....	280,196	June 26	1937	544	23	2478
Lloyd, John D., Boston, Mass. Steam-pressure-gage trap.....	281,533	July 17	1492	410	24	275
Lloyd, John T. (See Elliott and Lloyd.)						
Lloyd, Nathan, Sr., Maumee, Ind. Bee-hive.....	284,312	Sept. 4	190	54	24	937
Lloyd, Seth, and D. E. Pierce, Bethlehem, Pa. Valve.....	275,395	Apr. 10	701	187	23	1354
Lloyd, Seth, and D. E. Pierce, Bethlehem, Pa. Valve.....	275,396	Apr. 10	702	187	23	1355
Loback, Eugene B. (See Wilson and Loback.)						
Lobb, Thomas D., Moorefield, W. Va. Car-coupling.....	285,634	Sept. 25	1801	513	24	1239
Lobdell, Alonzo, Racine, Wis. Harness thill-strap.....	274,206	Mar. 20	1229	338	23	1061
Lobdell, Alonzo, Racine, Wis. Feed for sewing-machines.....	276,253	Apr. 24	1771	493	23	1554
Lobdell, Augustus C., Chicago, Ill. Lightning-rod.....	278,028	May 22	1851	506	23	1964
Lobdell, Henry, Troy, N. Y. Wall-paper.....	282,541	Aug. 7	78	.....	24	513
Lobdell, Henry, Troy, N. Y. Wall-paper. (Reissue).....	10,430	Dec. 25	2104	.....	25	1276
Lobdell, Henry, Troy, N. Y. Curtain-roller attachment.....	286,026	Oct. 2	302	84	25	57
Lobdell, Henry, Troy, N. Y. Curtain-roller.....	286,027	Oct. 2	303	85	25	57
Lochman, Julius, New York, N. Y. Shirt-bosom.....	280,836	July 10	621	174	24	116
Locke, Charles S., Joliet, Ill. Check-rower for corn-planters.....	280,641	July 3	365	101	24	64
Locke, Charles S., assignor of one-half to G. Whittier, Joliet, Ill. Barbed wire.....	277,423	May 8	1123	302	23	1825
Locke, Edwin R., Keene, assignor, by mesne assignments, to himself and A. W. Stevens, East Sullivan, N. H. Apparatus for tanning hides.....	278,981	June 5	446	122	23	2199
Locke, Joseph, Somerville, assignor to W. L. Libbey, Newton, and E. D. Libbey, Boston, Mass. Glassware.....	282,002	July 24	2092	573	24	383
Locke, Joseph, Somerville, assignor to W. L. Libbey, Newton, and E. D. Libbey, Boston, Mass. Indenting convex or spherical surfaces of glass and machine for producing the same.....	283,625	Aug. 21	1388	388	24	764
Locke, Joseph, Somerville, assignor to W. L. Libbey, Newton, and E. D. Libbey, Boston, Mass. Glass globe.....	288,582	Nov. 13	997	275	25	694

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Locke, Joseph R., Amesbury, Mass. Two-wheeled vehicle .....	290,248	Dec. 18	1083	303	25	1094
Locke, Milo W. (See Rittenhouse and Locke.)						
Locke, Peter A., Silver Cliff, Colo. Railway-rail and rail-joint .....	282,739	Aug. 7	324	92	24	556
Locke, Richard B., assignor of one-fourth to C. W. Held, Brooklyn, N. Y. Life-guard and track-clearer .....	287,036	Oct. 23	1592	438	25	307
Locke, Stephen F., assignor of one-half to A. King and J. Smith, Titusville, Pa. Steam-actuated valve .....	288,460	Nov. 13	853	231	25	664
Lockerman, William H. (See Dunnet, Edward L., assignor.)						
Lockhart, Alexander W., Sacramento, Cal. Thrashing and clover-hulling machine .....	285,492	Sept. 25	1552	437	24	1192
Lockhart, George, Tarrytown, N. Y. Swinging bracket for shade-rollers .....	272,449	Feb. 20	1088	307	23	645
Locklin, Samuel B. (See Thompson, Josiah W., assignor.)						
Lockman, William E., St. Louis, Mo. Steam trunk-lid press .....	284,215	Sept. 4	76	22	24	918
Lockwood, Charles S. (See Hyatt and Lockwood.)						
Lockwood, Charles S., assignor to Bonsilate Company, (limited,) Albany, N. Y. Domino material .....	273,559	Mar. 6	414	110	23	905
Lockwood, Charles S., assignor to Bonsilate Company, (limited,) Albany, N. Y. Plastic material .....	283,793	Aug. 28	1608	.....	24	816
Lockwood, Charles S., assignor to Bonsilate Company, (limited,) Albany, N. Y. Plastic material .....	283,794	Aug. 28	1609	.....	24	817
Lockwood, Charles S., assignor to Bonsilate Company, (limited,) Albany, N. Y. Ornamenting or applying designs to articles made of plastic material .....	283,795	Aug. 28	1610	.....	24	817
Lockwood, Charles S., assignor to Bonsilate Company, (limited,) Albany, N. Y. Zincated bone .....	283,796	Aug. 28	1611	.....	24	817
Lockwood, Charles S., assignor to Bonsilate Company, (limited,) Albany, N. Y. Plastic material .....	283,797	Aug. 28	1611	.....	24	817
Lockwood, David C., assignor to Rubber and Celluloid Harness Trimming Company, Newark, N. J. Martingale-ring of celluloid or other plastic material .....	276,435	Apr. 24	2010	557	23	1595
Lockwood, David D., Bridgeport, Conn. Lamp .....	275,230	Apr. 3	448	124	23	1303
Lockwood, Davis L., Everett, Pa. Automatic fly-brush .....	284,867	Sept. 11	869	243	24	1058
Lockwood, George A., and D. Orrill, Chariton, Iowa. Treadle .....	279,577	June 19	1210	334	23	2343
Lockwood, George E., <i>et al.</i> (See Lockwood, James F., assignor.)						
Lockwood, George R., St. Louis, Mo. Combined letter sheet and envelope .....	279,405	June 12	1005	278	23	2302
Lockwood, Henry S., assignor to Lockwood Manufacturing Company, South Norwalk, Conn. Toy velocipede .....	281,894	July 24	1969	538 539	24	362
Lockwood, Henry S., assignor to Lockwood Manufacturing Company, South Norwalk, Conn. Toy pistol .....	286,455	Oct. 9	845	229	25	164
Lockwood, James F., Philadelphia, Pa. Flue-stop .....	279,874	June 19	1554	434	23	2403
Lockwood, James F., Philadelphia, Pa., assignor to T. H. Parks and G. E. Lockwood. Oil-can .....	277,040	May 8	665	173	23	1746
Lockwood, Jared. (See Keys and Lockwood.)						
Lockwood, Jared, and W. A. Keys, New York, N. Y. Holder for scarfs, &c. ....	285,281	Sept. 18	1374	388	24	1156
Lockwood, Jeremiah, and J. Kivett, Sullivan, Ind. Fire-escape .....	285,282	Sept. 18	1375	388	24	1156
Lockwood, Jeremiah, and C. McIntire, Sullivan, Ind. Money-changing cabinet .....	288,714	Nov. 20	1165	320	25	724
Lockwood, John W. (See Smith and Lockwood.)						
Lockwood Manufacturing Company. (See Lockwood, Henry S., assignor.)						
Lockwood, Morris C., Vineland, N. J. Cooking-utensil .....	282,542	Aug. 7	79	23	24	513
Lockwood, Philo J., Auburn, Ind. Door brace or stay .....	275,832	Apr. 17	1264	347	23	1457
Lockwood, Rhodes, Boston, Mass. Pencil .....	270,959	Jan. 23	1408	405	23	291
Lockwood, Rhodes, Boston, Mass. Syringe .....	273,373	Mar. 6	178	48	23	864
Lockwood, Thomas D., Malden, Mass. Fire and district telegraph .....	273,374	Mar. 6	179	49	23	864
Lockwood, Thomas D., Malden, Mass. Transmitting apparatus for telephone-lines .....	281,895	July 24	1970	539	24	362
Lockwood, Thomas D., Malden, Mass. Signaling apparatus for telephone-exchanges .....	283,626	Aug. 21	1389	389	24	764
Lockwood, Thomas D., Malden, Mass. Telephonic repeating-circuit .....	290,898	Dec. 25	1942	535 536	25	1250
Lockwood, William C., Brooklyn, assignor to C. J. Dorrance, New York, N. Y. Telephone-transmitter .....	283,123	Aug. 14	775	218	24	645
Loe, David S., Poorman, Ohio. Fire-place .....	282,740	Aug. 7	325	93	24	557
Loeb, Adolf, assignor to himself and S. Nathan, New York, N. Y. Sheet-metal fabric .....	271,086	Jan. 23	1560	449	23	316
Loeb, Jacob, <i>et al.</i> (See Wurth, Charles N., assignor.)						
Loeb, Joseph, Philadelphia, Pa. Chenille fringe .....	281,534	July 17	1492	410	24	275
Loehner, August, assignor to Loehner & Wolff, St. Louis, Mo. Shaft-coupling .....	274,796	Mar. 27	1992	554	23	1201
Loehner & Wolff. (See Loehner, August, assignor.)						
Loeper, Jacob W. (See Kitz, Ernest, assignor.)						
Loeper, Jacob W., Indianapolis, Ind. Broom-support .....	288,181	Nov. 6	481	133	25	591
Loeser, Henriette. (See Loeser, Lazarus, assignor.)						
Loeser, Lazarus, assignor to H. Loeser, New York, N. Y. Shoe-tip .....	271,342	Jan. 30	1873	543	23	377
Loew, Jacques, assignor to H. Levy & Son, New York, N. Y. Box-fastener .....	288,351	Nov. 13	705	193	25	638
Loewenbach, Bernhard, Milwaukee, Wis. Combined letter-sheet and envelope .....	287,555	Oct. 30	2244	609	25	437
Loewenthal, Moses, assignor of one-half to L. Dannhauser, New York, N. Y. Under-garment .....	278,805	June 5	173	51	23	2152
Loewns, Leopold, <i>et al.</i> (See Gauss, Henry, assignor.)						
Lofink, Frank. (See Bertsche and Lofink.)						
Loftus, John, Albany, assignor of one-half to T. Holland, Troy, N. Y. Injector .....	290,693	Dec. 25	1678	462	25	1202
Logan, Hugh, San Francisco, Cal. Refrigerating and ice machine .....	281,090	July 10	922	257	24	170
Logan, James, Waterloo, N. Y. Grave receptacle or vault .....	275,833	Apr. 17	1265	348	23	1457
Logan, James, assignor to himself and A. C. Mayo, Rochester, N. Y. Carriage-curtain fastening .....	280,383	July 3	54	14	24	12
Logan, John, Waltham, Mass. Gage .....	283,627	Aug. 21	1391	389	24	764
Logan, John, Waltham, Mass. Manufacture of hair-springs .....	287,448	Oct. 30	2109	574	25	409
Logan, John A., <i>et al.</i> (See Hayden, Henry F., assignor.)						
Logan, Thomas, Newark, N. J. Motor for cradles .....	277,753	May 15	1518	412	23	1899
Logan, Thomas H., Lowell, Mass. Cartridge-reloading tool .....	281,636	July 17	1620	443	24	295
Logan, Thomas H., Lowell, Mass. Device for connecting picking-straps to the picking-sticks of looms .....	290,899	Dec. 25	1943	536	25	1250
Logue, Edward, M. T. Jones, and C. E. Morrill, Deering, Me., assignors to said Morrill. Composition for tanning .....	283,798	Aug. 28	1612	.....	24	817
Lohges, John, Algiers, La. Implement for expanding and cutting boiler-tubes .....	270,446	Jan. 9	753	221	23	156
Lomas, John R., assignor of one-half to B. Shoninger, New Haven, Conn. Organ-case .....	280,197	June 26	1938	545	23	2478
Lomas, Thomas, New Haven, Conn. Machine for fitting billiard-cue tips .....	282,741	Aug. 7	326	93	24	557
Lomax, George H., Somerville, Mass. Manufacture of glass lamps .....	288,715	Nov. 20	1166	320	25	724
Lombard, John. (See Palmer, George E., assignor.)						
Lommer, Francis X. (See Van Tassel, George W., assignor.)						
Lomorgan, James E., and H. K. Farrell, Worcester, Mass. Combined salt and pepper caster .....	275,231	Apr. 3	449	124	23	1303
Lomorgan, John F., St. Louis, Mo. Cooper's bevel .....	270,086	Jan. 2	300	89	23	61



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Long, Alford C., Flora Dale, Pa. Car-coupling.....	281,535	July 17	1493	410	24	275
Long, Archibald M. (See Case, Pattee, and Long.)						
Long, Charles R., Louisville, Ky. Chair-seating needle.....	278,982	June 5	447	{ 122 123 }	23	2199
Long, George A., Northfield, Mass. Steam road-vehicle.....	281,091	July 10	923	258	24	170
Long, George S., Hartford, Conn. Pulley.....	274,349	Mar. 20	1422	390	23	1095
Long, George S., Hartford, Conn. Pulley.....	285,635	Sept. 25	1802	513	24	1239
Long, Harry E., London, Ontario, Canada. Electrical connector.....	273,346	May 29	2256	625	23	2048
Long, Henry L., Keithsburg, Ill. Check-row planter.....	270,232	Jan. 9	483	{ 142 143 }	23	104
Long, John H., Walkerton, Ontario, Canada. Device for retarding the descent of falling bodies.....	285,283	Sept. 18	1376	388	24	1156
Long, John J. (See Darling and Long.)						
Long, Malcolm W., Hyde Park, Mass. Automatic circuit-breaker for railway-signals.....	289,008	Nov. 27	1524	421	25	797
Long, Nathan H., Muncie, Ind. Combined truck and bench.....	279,778	June 19	1436	402	23	2383
Long, Nathan H., Muncie, Ind. Clothes-rack.....	283,645	Nov. 20	1078	296	25	710
Long, Oliver, assignor of one-half to A. M. Brown, Brooklyn, N. Y. Insole.....	283,407	Aug. 21	1135	321	24	717
Long, Peter, and W. S. Turney, Greensburg, Pa. Railway-signal.....	276,254	Apr. 24	1772	{ 493 494 }	23	1554
Long, William A., Steubenville, Ohio. Machine for making suppositories.....	286,719	Oct. 16	1185	{ 319 320 }	25	230
Long, William R., Stellaspolis, Iowa. Wagon-brake.....	287,037	Oct. 23	1593	438	25	307
Longcor, Leonard S. (See Dawson, Simpson, and Longcor.)						
Longcor, Leonard S., Belvidere, Ill. Bridle-bit.....	279,171	June 12	707	192	23	2254
Longley, Charles H. (See Bray, John, assignor.)						
Longmore, James, Liverpool, county of Lancaster, England. Utilizing cotton-seed-oil residue, &c.....	284,313	Sept. 4	191	.....	24	937
Longmore, James, Liverpool, county of Lancaster, England. Manufacture of soap and extractive matter from cotton-seed oil, &c.....	290,079	Dec. 11	876	.....	25	1048
Longmore, Lewis F., Lowell, Mass. Drill guide and rest.....	284,449	Sept. 4	352	97	24	963
Longsdorf, David E., Mechanicsburg, Pa. Machine for cutting green corn from the cob.....	276,054	Apr. 17	1525	420	23	1503
Longstreet, Aaron, Chicago, Ill. Passenger-car.....	275,397	Apr. 10	703	188	23	1355
Longstreet, Christopher S., New York, N. Y. Actuating mechanism and safety-brake for elevators.....	272,965	Feb. 27	1755	490	23	768
Longstreth, Edward, <i>et al.</i> (See Wilder and Parry, assignors.)						
Lonsbery, Richard W. (See Stewart, Edward, assignor.)						
Lonsdale, William, Grand Crossing, Ill. Rotary shuttle for sewing-machines.....	273,747	Mar. 13	653	174	23	954
Look, John C., Yuba City, Cal. Car-coupling.....	272,386	Feb. 13	1004	281	23	625
Look, John C., Yuba City, Cal. Car-coupling.....	277,300	May 8	983	264	23	1801
Look, John C., Olathe, Kans. Breast-strap fender.....	267,696	Oct. 30	2447	659	25	475
Look, Obed, Bridgeport, Conn. Vehicle-wheel.....	281,279	July 17	1172	324	24	220
Loomis, Burdett, Hartford, Conn. Manufacture of bricks, &c.....	280,837	July 10	622	175	24	116
Loomis, Burdett, Hartford, Conn. Device for burning gaseous fuel in kilns.....	280,838	July 10	624	175	24	116
Loomis, Carrie J., Joliet, Ill. Shoe.....	290,249	Dec. 18	1053	303	25	1094
Loomis, Francis D., and J. B. Dupont, Framingham, Mass. Insect-destroyer.....	276,613	May 1	84	23	23	1642
Loomis, George P., Albany, N. Y. Nut-lock.....	281,196	July 10	1063	293	24	195
Loomis, Horace S., Auburn, N. Y. Dumping-wagon.....	288,823	Nov. 20	1301	356	25	749
Loomis, Jason B. (See Cooper, John W., assignor.)						
Loomis, John, Jeffersonville, Ind. Solution for seasoning and preserving wood.....	273,861	Mar. 13	810	219	23	981
Loomis, Leverett W., Carrollton, Ill. Erasable register.....	287,837	Nov. 6	57	17	25	517
Looney, George W., Sr., Rnsville, Ind. Fire-escape.....	280,937	July 10	748	208	24	137
Lopes, Antonio, Brooklyn, N. Y. Banjo.....	280,839	July 10	626	176	24	116
Lord, Andrew H., Chicago, assignor of one-half to C. A. Hitchcock, Austin, Ill. Metallic tile for floors, &c.....	285,636	Sept. 25	1804	514	24	1239
Lord, Drew H. (See Handy and Lord.)						
Lord, Drew H., Northfield, Minn. Mill-stuff-recovering machine.....	277,301	May 8	984	264	23	1802
Lord, Drew H., Northfield, Minn. Eccentric-bearing.....	281,197	July 10	1064	293	24	195
Lord, Henry S. (See Birkery and Lord.)						
Lord, Henry S., and R. E. Day, assignors to Hartford Sanitary Plumbing Company, Hartford, Conn. Float for water-closet valves.....	276,436	Apr. 24	2011	557	23	1595
Lord, Peter, assignor of two-thirds to J. B. and A. S. Vinet, Montreal, Quebec, Canada. Universal joint.....	276,186	Apr. 24	1691	467	23	1540
Lord, Peter, assignor of two-thirds to J. B. and A. S. Vinet, Montreal, Quebec, Canada. Press.	280,840	July 10	627	176	24	117
Lorenz, Friedrich, Rendsburg, Prussia, Germany. Process of and apparatus for obtaining ammonia.....	277,041	May 8	666	174	23	1746
Lorenz, Wilhelm, Karlsruhe, Baden, Germany. Machine for capping cartridges.....	274,018	Mar. 27	1785	{ 496 497 }	23	1164
Lorenz, Wilhelm, Karlsruhe, Baden, Germany. Chuck for holding rose-cutters or similar tools.....	283,124	Aug. 14	776	218	24	645
Lorenzen, Immanuel, assignor to Peerless Wire Mattress Company, Hartford, Conn. Device for stretching bed-bottoms.....	272,721	Feb. 20	1432	401	23	706
Lorcy, William, Philadelphia, Pa. Angle-iron.....	280,841	July 10	629	177	24	117
Lorillard & Co., P. (See Harmon, Orville S., assignor.)						
Loring, Charles T., assignor to Adjustable Telephone Support Company, Boston, Mass. Telephone-support.....	281,381	July 17	1299	360	24	242
Loring, Charles T., assignor by mesne assignments, to Adjustable Telephone Support Company, Boston, Mass. Telephone-switch.....	289,353	Nov. 27	1940	539	25	874
Loring, Charles T., and G. W. Pierce, assignors to American Bell Telephone Company, Boston, Mass. Telephone.....	271,878	Feb. 6	351	98	23	502
Loring, Harrison. (See McIntyre, James, assignor.)						
Lorsch, Dreyfus & Co. (See Dreyfus, Henry, assignor.)						
Loryea, Abram M., and C. H. Palmer, New York, N. Y., assignors to Star Electric Light and Power Company of the United States. Dynamo-electric machine.....	278,983	June 5	448	123	23	2200
Loryea, Abram M., and C. H. Palmer, New York, N. Y. Dynamo-electric machine.....	283,498	Aug. 21	1250	351	24	738
Losse, Henry, Pinckenville, Ill. Cylinder washing-machine.....	279,960	June 26	1666	468	23	2429
Lossow, Casimir, Cleveland, Ohio. Safety-brake for elevators.....	285,760	Sept. 25	1962	{ 555 556 }	24	1266
Lotan, James. (See Lesourd and Lotan.)						
Loth, Henry, Philadelphia, Pa. Chamber-pot or commode.....	288,824	Nov. 20	1301	{ 356 357 }	25	748
Lothrop, Charles H., Lyons, Iowa. Line-changer for telephonic and other electrical purposes.....	277,145	May 8	805	211	23	1770
Lothrop, Charles H., Lyons, Iowa. Combined cut-out and ground-switch for telegraph and telephone lines.....	284,031	Aug. 28	1912	535	24	869

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Lothrop, Channey M., Walpole, and H. L. Hewins, Sharon, Mass. Belt-awl.....	289,009	Nov. 27	1526	422	25	797
Lothrop, Henry O., Boston, Mass. Machine for shaping ferrules.....	290,250	Dec. 18	1084	303	25	1095
Lothrop, Henry O., Boston, Mass. Machine for making wire tubes.....	290,694	Dec. 25	1679	462	25	1203
Lothrop, Henry O., Boston, Mass. Machine for cutting tubes.....	290,695	Dec. 25	1681	463	25	1203
Lotz, Arthur, Paris, France. Paper-fastener.....	290,336	Dec. 18	1199	336	25	1114
Lotz, William H., <i>et al.</i> (See Hartman, George J., assignor.)						
Louch, John H., Cincinnati, Ohio. Illuminated decorative sign.....	251,536	July 17	1494	411	24	275
Loud, Philologus H., Williston, S. C. Traction-engine.....	271,343	Jan. 30	1873	543	23	377
Loud, Philologus H., assignor of one-half to Philologus H. Loud, Jr., Williston, S. C. Floating caisson.....	272,722	Feb. 20	1432	402	23	706
Louden, William, Fairfield, Iowa. Hay-stacker.....	252,003	July 24	2093	574	24	383
Louden, William, Fairfield, Iowa. Hay-carrier.....	290,591	Dec. 18	1542	424	25	1173
Loudenbeck, John H., Union, Ill. Grain-separator.....	279,491	June 12	1102	304	23	2317
Loudon, John, Big Rapids, Mich. Railway and other ticket holder and press.....	280,049	June 26	1779	499	23	2449
Loudon, Joseph A. (See Armstrong and Loudon.)						
Lougee, Amanda M. (See Driscoll, Lawrence J., assignor.)						
Lougee, Charles A., Hyde Park, Mass. Automatic tool-guiding device.....	287,838	Nov. 6	58	17	25	518
Loughhead, William H., and J. B. Fleming, Xenia, Ohio. Fruit-drier.....	286,936	Oct. 16	1454	399	25	276
Loughrey, John. (See Robson, Robert S., assignor.)						
Loughridge, William, Baltimore, Md. Dumping-cart.....	270,905	Jan. 23	1334	385	23	280
Louis, Michael A. W., Washington, D. C. Calendering-machine.....	275,676	Apr. 10	1056	287	23	1415
Louis, Michael A. W., Washington, D. C. Ventilator.....	289,426	Dec. 4	65	19	25	898
Lourie, Herbert M. (See Aldrich and Lourie.)						
Lövaas, Olaus O., Moss, Norway. Striking mechanism for clocks.....	276,437	Apr. 24	2011	558	23	1595
Love, Aaron, Whitechurch township, county of York, Ontario, Canada. Thrashing-machine..	273,113	Feb. 27	1938	543	23	800
Love, John. (See Savage and Love.) (Reissue.)						
Love, Samuel Y., Pittsburg, Pa. Sewing-machine.....	285,359	Sept. 18	1465	412	24	1171
Loveday, Thomas, Islip, county of Northampton, England. Horse-collar.....	288,248	Nov. 13	569	158	25	616
Lovell Manufacturing Company. (See Walker, Addison W., assignor.)						
Lovegrove, Thomas G. (See Hall, Henry M., assignor.)						
Lovegrove, Thomas J., Philadelphia, Pa. Arch.....	271,344	Jan. 30	1874	{ 543 544 }	23	378
Lovejoy, Albert J., <i>et al.</i> (See Rice, Darius C., assignor.)						
Lovejoy, Andrew W., Rochester, N. Y. Window-screen.....	272,068	Feb. 13	602	163	23	556
Lovejoy, Daniel, Lowell, Mass. Belt-fastener.....	284,868	Sept. 11	870	244	24	1058
Loveland, Lucius N., New Haven, Ind. Gate.....	290,646	Dec. 18	1612	443	25	1185
Loveland, Oscar, Adams, N. Y. Hay-carrier.....	284,869	Sept. 11	871	244	24	1058
Loveless, Charles B., Worthington, Minn. Smoking-tube.....	273,294	Mar. 6	65	19	23	845
Lovell, Albert A. (See Lovell, George A., assignor.)						
Lovell, George A., Orange, assignor of one-half to A. A. Lovell, Worcester, Mass. Preparing and hardening paper-board for japanning and enameling purposes.....	270,820	Jan. 16	1230	.....	23	255
Lovell, George A., Orange, assignor of one-half to A. A. Lovell, Worcester, Mass. Case or cabinet for sewing machines.....	279,875	June 19	1554	435	23	2404
Lovell, Henry H. and H. T., Ionia, Mich. Refrigerator.....	288,583	Nov. 13	998	275	25	690
Lovell, Homer T. (See Lovell, Henry H. and H. T.)						
Lovett, Armstead M., Zanesville, Ohio. Seed-planter.....	278,156	May 22	2004	551	23	1990
Lovett, James A. B., Huntsville, Ala. Railway-crossing alarm.....	272,723	Feb. 20	1434	{ 402 403 }	23	706
Low, A. Augustus. (See Johnson and Low.)						
Low, Alvin H. (See Norris and Moore, assignors.)						
Low, David W., Gloucester, Mass. Life-saving apparatus for boats.....	280,842	July 10	630	177	24	117
Low, George H. (See Enos, John A., assignor.)						
Low, Harry N., Washington, D. C. Adjustable pivot-joint.....	283,907	Aug. 28	1735	490	24	837
Low, Jesse B., Pulaski, N. Y. Electric brake-setting apparatus.....	271,721	Feb. 6	160	44	23	468
Low, Joel B., San Francisco, Cal. Rope-railway.....	288,646	Nov. 20	1078	296	25	710
Low, Joel B., San Francisco, Cal. assignor of one-half to W. B. Reaney, Baltimore, Md. Railway operated by underground ropes.....	280,384	July 3	54	15	24	12
Low, Robert. (See Evans and Low.)						
Low, William R., San Francisco, Cal. Follower for ram-elevators.....	288,352	Nov. 13	706	{ 193 194 }	25	638
Lowa, Gustavus, St. Louis, Mo. Carriage-door.....	275,398	Apr. 10	704	188	23	1355
Lowbridge, Jabez. (See Stütt, Lowbridge, and Rosenkranz.)						
Lowcock, Arthur, Shrewsbury, Shropshire, and J. Taylor, Salford, county of Lancaster, England; said Taylor assignor to said Lowcock. Cleaner for steam-boilers.....	287,038	Oct. 23	1594	439	25	308
Lowder, John E., Boonsville, Tex. Seed-planter.....	273,748	Mar. 13	654	174	23	954
Lowe, Henry, Brooklyn, N. Y. Circle-switch for galvanic batteries.....	274,452	Mar. 20	1563	427	23	1119
Lowe, James, Marlborough, Mass. Buoyant propeller-ship.....	271,203	Jan. 23	1699	{ 490 491 }	23	338
Lowe, Oscar F., Hampton, Iowa. Equalizer for spring-carriages.....	278,984	June 5	450	123	23	2200
Lowe, Samuel, Denver, Col. Reversible railway-skid.....	277,302	May 8	985	265	23	1862
Lowe, Samuel, and J. W. Lamb, Nottingham, county of Nottingham, England. Knitting-machine.....	270,682	Jan. 16	1060	{ 303 304 305 }	23	223
Lowe, Thomas, assignor of one-half to J. W. Fisher, Wild Rose, Wis. Potato-planter.....	273,560	Mar. 6	415	111	23	905
Lowe, William T. J., Buffalo, N. Y. Spoon-bait for fishing.....	276,055	Apr. 17	1527	420	23	1504
Lowell, Seth W., Fillmore, N. Y. Fruit-evaporator.....	284,450	Sept. 4	352	98	24	963
Lowentraut, Peter, <i>et al.</i> (See Roth, George, assignor.)						
Lowerre, Frederick H., New York, N. Y. Bottle-stopper.....	287,141	Oct. 23	1723	472	25	332
Lowerre, Thomas R., Mott Haven, N. Y. Letter-box.....	277,586	May 15	1325	356	23	1865
Lowers, David, Spring Valley, N. Y. Stone-cutter's mallet.....	280,050	June 26	1780	499	23	2449
Löwig, Carl, Breslau, Prussia, Germany. Manufacturing caustic alkalies.....	274,619	Mar. 27	1786	.....	23	1164
Lowne, Robert M., East End Finchley, county of Middlesex, England. Electric log or apparatus for ascertaining the speed of ships and the rate of currents.....	272,724	Feb. 20	1435	403	23	706
Lowrey, John M., Perdue Hill, Ala. Seed-planter.....	288,080	Nov. 6	360	100	25	569
Lowrey, Milton, Sprague, Mo. Hedge-trimming machine.....	272,843	Feb. 20	1603	{ 448 449 }	23	736
Lowrie, Harvey C., Denver, Colo. Automatic flush-valve.....	271,644	Feb. 6	72	30	23	453
Löwy, Benjamin, Berlin, Germany. Flower-pot for artificial flowers.....	281,706	July 24	1721	468	24	318
Lubin, David, assignor of one-half to H. Weinstock, Sacramento, Cal. Check-box.....	285,495	Sept. 25	1633	458	24	1207
Lubin, David, assignor of one-half to H. Weinstock, Sacramento City, Cal. Envelope.....	272,725	Feb. 20	1438	403	23	707
Luburg, Charles E., assignor to G. H. Jackson, Philadelphia, Pa. Reclining-chair.....	288,095	July 31	2216	609	24	409
Lucan, William H., Hermon, Ill. Car-coupling.....	279,654	June 19	1297	360	23	2359
Lucas, Charles H., assignor of one-half to W. W. Chaffin, Canton, Me. Device for fitting hair-springs to watches.....	278,347	May 29	2287	625	23	2043



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Lucas, Edward R., assignor of one-half to W. W. Lind, Peoria, Ill. Machine for amalgamating ores.	272,726	Feb. 20	1438	{ 403 404 }	23	707
Lucas, Eliza P., Starkville, Miss. Salvo.	284,314	Sept. 4	193		24	937
Lucas, Francis M. (See Sleeth and Lucas.)						
Lucas, Heman S., Chester, Mass. Safety device for emery-wheels.	286,210	Oct. 9	526	145	25	107
Lucas, James A. (See McDonald, Gilbert, assignor.)						
Lucas, John, Hastings, Minn. Cockle-machine.	274,797	Mar. 27	1993	554	23	1201
Lucas, Thomas H., Valley City, Dak. Tor. Grate.	277,754	May 15	1519	412	23	1900
Lucats, Salomon, Nashville, Tenn. Grinding-mill.	287,839	Nov. 6	59	18	25	518
Luce, Stephen B., Newport, R. I. Dead-eye.	290,993	Dec. 25	2075	571	25	1371
Luce, Theodore, Detroit, assignor of one-half to E. B. Harrington, Port Huron, Mich. Pantaloon-stretcher.	279,262	June 12	807	223	23	2271
Lucia, Joel, Little Suamico, Wis. Log-roller for saw-mills.	273,561	Mar. 6	416	111	23	905
Lucia, Joel, Little Suamico, Wis. Saw-mill.	284,870	Sept. 11	872	{ 244 245 }	24	1059
Luck, Edward, Stamford Street, Blackfriars, county of Surrey, England. Apparatus for the conversion of unmaltd grain.	278,985	June 5	450	{ 123 124 }	23	2200
Luck, Edward, Stamford Street, Blackfriars, county of Surrey, England. Apparatus for exposing liquors to the action of atmospheric air.	278,986	June 5	451	124	23	2200
Lockett, Samuel B., Crawfordsville, Ind. Cloth-measuring machine.	271,879	Feb. 6	352	98	23	502
Luckey, George E., assignor of one-half to W. W. Luckey and B. Cavitt, Paris, Tenn. Pea-thresher.	275,052	Apr. 3	220	60	23	1264
Luckey, Walter W., et al. (See Luckey, George E., assignor.)						
Luckner, Robert, Sr., New Orleans, La. Cigar-box.	270,683	Jan. 16	1064	305	23	223
Lude, Stefan, Chicago, Ill. Folding bed.	271,485	Jan. 30	2069	596	23	413
Lüdeke, Waldemar, Hoboken, N. J., assignor of one-half to H. Baumeister, New York, N. Y. Glove-sewing machine.	275,506	Apr. 10	839	{ 227 228 }	23	1377
Lüdeke, Waldemar, Hoboken, N. J., assignor to himself and H. Baumeister, Brooklyn, N. Y. Glove and fur sewing machine.	288,949	Nov. 20	1451	400	25	777
Ludington, Francis H., St. Louis, Mo. Bag-fastener.	285,908	Oct. 2	165	47	25	32
Ludlam, J. S. (See Claus, Adolph, assignor.)						
Ludlow, Abraham R., Springfield, Ohio. Drill-hoe point.	273,375	Mar. 6	181	49	23	865
Ludlow, Charles A., Bridgeport, Conn., assignor of one-half to W. Lipe, New York, N. Y. Lock.	283,125	Aug. 14	777	218	24	645
Ludlow, Samuel W., Cincinnati, Ohio, assignor of one-fourth to J. Fitton. Vehicle-spring.	290,251	Dec. 18	1085	303	25	1095
Ludlow, William E. (See Beckert and Ludlow.)						
Ludlow, William E., Sandusky, Ohio. Coal, iron-ore, and merchandise derrick.	282,543	Aug. 7	80	23	24	514
Ludowici, Wilhelm, Ludwigshafen-on-the-Rhine, Germany. Roofing-tile.	283,126	Aug. 14	778	219	24	645
Ludwig, Eugen, Hoboken, N. J. Polishing-paste.	282,913	Aug. 7	520		24	593
Ludwig, John C., and W. Wainwright, San Francisco, Cal.; said Ludwig assignor to said Wainwright. Vapor-lamp burner.	290,337	Dec. 18	1199	336	25	1114
Ludwig, Matthew, Stamford, Conn. Billiard-table.	280,198	June 26	1939	545	23	2478
Ludwig, Thomas I., Fremont, Ohio. Plow.	282,999	Aug. 14	626	{ 177 178 }	24	618
Luehrs, Michel D., Cleveland, Ohio. Bolt-threading die.	289,674	Dec. 4	373	107	25	952
Lufkin, Edward T., Cleveland, Ohio. Headed lumber-rule.	272,279	Feb. 13	862	241	23	602
Lufkin, Edward T., Cleveland, Ohio. Machine for forming and dressing lumber-rules.	272,892	Feb. 27	1677	469	23	755
Lufkin, John W. (See Hitchcock and Lufkin.)						
Lufkin, John W., Chelsea, Mass. Button-hole sewing-machine.	277,755	May 15	1521	{ 412 413 }	23	1900
Lugenbell, Peter, assignor of one-half to J. Pool and A. Reiter, Greensburg, Ind. Two-wheeled vehicle.	272,280	Feb. 13	863	241	23	602
Luger, Anton, Vienna, Austria-Hungary. Sealing device for jars, &c.	290,038	July 10	750	208	24	138
Lumbert, Daniel, Centerville, Mass. Cranberry-gatherer.	289,446	Dec. 11	597	166	25	998
Lumbye, Hans, and A. De Bevoise, Brooklyn, N. Y. Compound for skating-rinks, &c.	277,043	May 8	668		23	1746
Lumpp, Oscar, Lyons, France. Drying materials of extensive superficial area.	280,490	July 3	194	51	24	35
Lundy, Richard W., New York, N. Y. Sewing-machine.	276,056	Apr. 17	1523	420	23	1504
Lung, Charles J., Rochester, N. Y. Fire-escape.	287,142	Oct. 23	1724	472	25	333
Lüngen, Adam, assignor of one-half to R. Edwards, New York, N. Y. Electric gas-lighting burner.	290,441	Dec. 18	1344	372	25	1139
Lunkenheimer, Frederick, Cincinnati, Ohio. Device for proving globe-valves.	277,756	May 15	1525	413	23	1901
Lunn, John W. (See Bolt and Lunn.)						
Lunte, Frank H. (See Aborn, Frank, assignor.)						
Luppen, Luppe, Pekin, Ill. Seed-planter.	271,345	Jan. 30	1877	544	23	378
Luppen, Luppe, Pekin, Ill. Cultivator.	274,798	Mar. 27	1994	554	23	1201
Luppert, George, Williamsport, Pa. Tenoning-machine.	286,546	Oct. 9	935	257	25	184
Lürmann, Fritz, Osnabrück, Germany. Apparatus for the continuous distillation, sublimation, or roasting of solid materials.	279,099	June 5	601	{ 163 164 }	23	2226
Luscher, Daniel, Cincinnati, Ohio. Fire-escape.	276,057	Apr. 17	1529	420	23	1504
Luscher, Emil G., Bergen, N. Y. Coal-hod.	278,157	May 22	2005	551	23	1991
Luscomb, James E., assignor to M. Rooney, New York, N. Y. Box for bottles.	271,087	Jan. 23	1560	449	23	317
Luse, David N., and J. W. Bell, Audubon, Iowa. Cultivator.	284,565	Sept. 4	490	138	24	987
Luse, David N., and J. W. Bell, Audubon, Iowa. Plow.	287,143	Oct. 23	1725	472	25	333
Lusk, George H., Pittsford, N. Y. Sleigh-thill.	277,843	May 15	1623	442	23	1918
Lusk, Lewis N., Alamo, Mich. Gang corn-planter.	271,722	Feb. 6	161	45	23	468
Luther, Charles J., Yonkers, N. Y. Gas-burner.	285,049	Sept. 18	1103	307	24	1107
Luther, Conrad, Scranton, Pa. Car-coupling.	287,385	Oct. 23	2028	551	25	387
Luther, Henry C., Providence, R. I. Manufacture of imitation stone for jewelry.	274,350	Mar. 20	1424	390	23	1095
Luther, Henry C., Providence, R. I. Metallic eye for buttons.	281,637	July 17	1622	443	24	295
Luther, Henry C., Providence, R. I. Undercut imitation stone.	290,442	Dec. 18	1346	372	25	1139
Luther, James H., Karnes City, Pa. Gas-regulator.	272,221	Feb. 13	864	242	23	602
Luther, James H., Karnes City, Pa. Gas-regulator.	272,232	Feb. 13	865	242	23	602
Luther, James H., Karnes City, Pa. Hose-coupling.	274,951	Apr. 3	87	24	23	1240
Luther, John, St. Joseph, Mo. Portable sink.	274,952	Apr. 3	88	24	23	1240
Luton, James H., Norfolk, Va. Packing for hydraulic cylinders.	289,776	Dec. 4	501	139	25	973
Lutted, James, Buffalo, N. Y. Machine for making confections.	284,136	Aug. 28	2043	568	24	891
Lutz, Albert J., New York, N. Y. Roller-skate.	277,911	May 22	1707	466	23	1940
Lutz, Charles H., assignor of one-half to F. C. Brown and J. F. Estill, Lewisburg, W. Va. Animal-trap.	282,463	July 31	2700	742	24	491
Lutz, George W., Indianapolis, Ind. Speculum and vaginal irrigator.	277,042	May 8	667	174	23	1746
Lutz, George W., Indianapolis, Ind. Stem-pessary.	277,424	May 8	1124	302	23	1826
Lutz, George W., assignor of one-half to J. S. Trimble, Wheeling, W. Va. Steam-generator.	288,584	Nov. 13	1000	275	25	691
Lutz, John, Xenia, Ohio. Wagon end-gate.	277,303	May 8	986	265	23	1802

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Lutz, John W. (See Way and Lutz.)						
Lutz, W. Clay, Bedford, assignor of one-half to J. Du Bois, Everett, Pa. Fire-escape.....	290,080	Dec. 11	879	249	25	1049
Luttf, C. G. (See Campfield, Matthew E., assignor.)						
Lux, John H. and P., Earlville, Iowa. Harrow .....	280,751	July 3	503	143	24	90
Lux, Philip. (See Lux, John H. and P.)						
Lybrand, Lucius. (See Emmons, Lucius H., assignor.)						
Lydecker, John J. (See Decker, William J., assignor.)						
Lyell, Albert G., Hunnewell, Mo. Apparatus for supplying water for stock.....	280,051	June 26	1781	499	23	2449
Lyford, S. C. (See Michaelis, Otho E., assignor.)						
Lyle, Hugh F., Staunton, assignor of one-third to W. S. Humphries, Vesuvius, Va. Plow-point and colter .....	272,283	Feb. 13	866	242	23	603
Lyle, Robert W., Rochester, N. Y. Apparatus for cutting sewer-pipe into sections .....	272,727	Feb. 20	1440	404	23	707
Lyman, Asa, <i>et al.</i> (See Ingalls, William A., assignor.)						
Lyman, Charles F., <i>et al.</i> (See Leland, Edwin A., assignor.)						
Lyman, Daniel T., <i>et al.</i> (See Ingalls, William A., assignor.)						
Lyman, Fordyce A., Cleveland, Ohio. Gas-generator .....	275,677	Apr. 10	1058	287	23	1415
Lyman, Seymour, White Plains, N. Y. Puzzle-card for object-teaching.....	274,799	Mar. 27	1995	555	23	1202
Lyman, William H. (See Chadwick, John L., assignor.)						
Lynam, John, Cleveland, Ohio. Wire-reeling machine.....	274,953	Apr. 3	89	24	23	1240
Lynam, Joseph, San José, Cal. Cell-case for eggs.....	289,010	Nov. 27	1527	422	25	797
Lynch, George B., Darlington, Ind. Grain-meter .....	283,351	Aug. 14	1064	299	24	699
Lynch, George B., and T. J. Griffith, Darlington, Ind. Grain-meter .....	270,821	Jan. 16	1230	355	23	255
Lynch, Howard, New York, N. Y., and F. L. Sheldon, Rahway, N. J. Shirt .....	270,821	Jan. 2	301	89	23	61
Lynch, John, Portland, Me. Tile, architectural terra-cotta work, and pottery articles.....	271,088	Jan. 23	1561	450	23	317
Lynch, John, Portland, Me. Drain-tile .....	271,089	Jan. 23	1562	450	23	317
Lynch, John, Allegheny city, Pa. Cupel-furnace .....	275,232	Apr. 3	449	125	23	1303
Lynch, John, Washington, D. C. Underground conduit .....	275,233	Apr. 3	450	125	23	1303
Lynch, John B., administrator. (See Lynch, Owen.)						
Lynch, John S., and M. A. Heath, Providence, R. I. Machine for pressing gimp.....	282,544	Aug. 7	82	23	24	514
Lynch, John T., New York, N. Y. Pin for neck-wear shields.....	275,234	Apr. 3	451	125	23	1303
Lynch, Matthew W., assignor to D. Curtis, Madison, Wis. Horse-collar pad .....	270,960	Jan. 23	1409	405	23	291
Lynch, Owen, deceased, J. B. Lynch, Leadville, Colo., administrator. Cable-stopper.....	276,441	May 1	395	105	23	1695
Lynd, Ives, Troy, N. Y. Lamp-wick .....	270,447	Jan. 9	754	221	23	156
Lynes, John, Price, Mo. Fodder-frame .....	270,233	Jan. 9	484	143	23	105
Lynn, Adam, Pataskala, Ohio. Hand-planter .....	283,499	Aug. 21	1252	351	24	738
Lyon, Albert, New York, N. Y. Molding .....	280,752	July 3	504	143	24	90
Lyon, George L., Albany, N. Y. Ice-creeper.....	288,647	Nov. 20	1080	296	25	711
Lyon, Henry, New York, N. Y., assignor to American Postal Telegraph Company. Telegraph-transmitter.....	283,716	Aug. 21	1503	424	24	786
Lyon, James B., Pittsburg, Pa. Mold for pressing articles of glassware .....	285,496	Sept. 25	1633	459	24	1207
Lyon, James W., Brooklyn, N. Y. Metal-screw machine .....	270,433	Apr. 24	2013	558	23	1505
Lyon, Philip, East Stroudsburg, Pa. Railway-switch .....	271,486	Jan. 30	2070	596	23	414
Lyon, Philip, and J. H. Bossard, East Stroudsburg, Pa. Fruit-jar .....	274,620	Mar. 27	1787	497	23	1164
Lyon, Robert H., <i>et al.</i> (See Phelan, John, assignor.)						
Lyon, William B., Pontiac, Ill. Hog-nose cutter .....	279,779	June 19	1437	402	23	2383
Lyons, Albert. (See Knoch, Charles, assignor.)						
Lyons, D. B. (See Lyons, James W., assignor.)						
Lyons, James W., assignor of one-third to D. B. Lyons, Des Moines, Iowa. Sash-balance..	278,348	May 29	2288	626	23	2048
Lyons, Thomas, Hartford, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Sliding door-pull .....	287,039	Oct. 23	1595	439	25	308
Lyons, Timothy D., and D. J. Linehan, Brooklyn, N. Y. Cock and valve.....	273,262	Mar. 13	810	219	23	981
Lyons, William H. (See Robie and Lyons.)						
Lytile, Henry B., Boston, Mass. Flexible electrical conductor.....	284,216	Sept. 4	77	22	24	918
Lytile, Henry B., Boston, Mass., assignor to American Electrical Works, Providence, R. I. Apparatus for threading wires through tubes .....	273,295	Mar. 6	66	19	23	845
Lytile, Joseph, Cincinnati, Ohio. Car-brake .....	277,587	May 15	1326	356	23	1665
Maas, Harry R., Burbugton, N. J. Shading drawings .....	282,653	Aug. 7	214	63	24	537
Mabillo, Philippe, assignor to Mason & Hamlin Organ and Piano Company, Boston, Mass. Music-stand for organs, &c. ....	270,234	Jan. 9	485	143	23	105
Mabry, Hincbe P., Fort Worth, Tex. Ore-concentrator .....	287,840	Nov. 6	60	18	25	518
MacCarty, Samuel, Aurora, Ill. Fire-escape .....	284,451	Sept. 4	353	98	24	964
MacDonald, John, Norwood, Mass. Sink-trap .....	279,655	June 19	1298	361	23	2359
MacEachran, Dugald, Greenock, county of Renfrew, Scotland. Refining, purifying, or clarifying saccharine or other substances .....	276,843	May 1	397	.....	23	1696
MacEachran, Dugald, Greenock, county of Renfrew, Scotland. Apparatus for separating iron from charcoal, &c. ....	289,545	Dec. 4	215	60, 61	25	924
MacFarlane, James, Claremont, N. H. Vertical loom .....	278,715	June 5	51	16	23	2133
MacKay, Donald D., Whitestone, N. Y., and B. A. Armstrong, New London, Conn. Silk-tester .....	280,491	July 3	195	51	24	36
MacLaine, Alexander, Belfast, Ireland. Piston for steam and other engines.....	2-8,082	Nov. 6	362	101	25	569
Mac Mahon, Michael, assignor of five-eighths to S. Van Ness and D. Sullivan, Brooklyn, N. Y. Car-axle lubricator .....	281,538	July 17	1496	411	24	276
MacMackin, Bernard. (See Young, William H., assignor.)						
Macann, Crowell S., Rahway, assignor of one-half to A. Cook, Newark, N. J. Ticket-holder for car-seats .....	274,621	Mar. 27	1788	497	23	1164
Macaulay, Thomas A., New York, N. Y. Sewing-machine .....	272,844	Feb. 20	1604	449	23	736
Macaulay, Thomas A., New York, N. Y. Tension-release for sewing-machines.....	273,562	Mar. 6	418	112	23	905
Macaulay, Thomas A., New York, N. Y. Sewing-machine. (Reissue) .....	10,317	Apr. 24	2150	598	23	1618
Macaulay, Thomas A., New York, N. Y. Sewing-machine .....	276,842	May 1	396	105	23	1695
Macaulay, Thomas A., New York, N. Y. Mechanical movement.....	278,806	June 5	173	51	23	2152
Macaulay, Joseph H. (See Fuller and Macaulay.)						
Macbeth, George A. (See Dietrich, Henry, assignor.)						
Macbeth, Norman, Bolton le Moors, county of Lancaster, England. Sheet-metal pulley and drum .....	286,028	Oct. 2	304	85	25	57
Macbair, Charles C., Cincinnati, Ohio. Device for stippling, shading, or tinting printing stones or plates .....	289,081	Nov. 6	361	100	25	569
Macdonald, Hugh, Detroit, Mich. Steam-radiator .....	271,723	Feb. 6	163	45	23	468
Macdonell, Allan G., New York, N. Y. Automatic advertising-table .....	283,408	Aug. 21	1135	321	24	717
Macdonough, Thomas, Benton, Mich. Fire-escape .....	286,456	Oct. 9	846	229	25	165
Mace, Charles. (See Steel, Robert, assignor.)						
Mace, Charles. (See Stites, George, assignor.)						
Mace, Theodore. (See Atwood, James E., assignor.)						
Mace, Theodore, Plainfield, N. J. Insulator for electric conductors.....	272,069	Feb. 13	603	163	23	556



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Macfarland, Harriet M. (See Knight and Macfarland.)						
Macfarlane, Thomas, Acton Vale, Quebec, assignor of one-half to A. Ramsay, Montreal, Canada. Manufacture of anhydrous sulphide of zinc	271,090	Jan. 23	1562	.....	23	317
Maegorge, Ebenezer F., St. James Park, Hawthorn, near Melbourne, Victoria. Method of and apparatus for determining the inclination of borings	270,597	Jan. 16	952	275	23	203
Maegorge, Ebenezer F., St. James Park, Hawthorn, Victoria. Clinometer-compass and apparatus for reading its indications	281,772	July 24	1811	495	24	334
Machen, August W. (See Blomquist and Buskirk, assignors.)						
Macher, Christian, and J. S. Lins, Wilmington, Ill. Bung-extractor	287,305	Oct. 23	1934	528	25	370
Machette, Samuel T., et al. (See Townsend, William H., assignor.)						
Mack, Albert G., Chicago, assignor of one-half to J. F. Quinn, Englewood, Ill. Combined chamber and slop bucket	289,011	Nov. 27	1528	422	25	797
Mack, Alfred L., assignor of one-half to M. L. Best, L. L. and J. Miller, Canton, Ohio. Reservoir for burning-fluids	286,211	Oct. 9	527	145	25	107
Mack, Eugene. (See Hosner, Riley J., assignor.)						
Mack, Eugene, Addison, Mich. Door-hanger	281,537	July 17	1495	411	24	276
Mack, Frank M. (See Rheubottom and Mack.)						
Mack, George J., De Forest, Wis. Lash-cutter	273,749	Mar. 13	655	175	23	954
Mack, Jacob A. (See Phelps and Hanson, assignors.)						
Mack, John M., Cedar Vale, Kans. Nut-lock	272,565	Feb. 20	1245	347	23	672
Mack, John M., Cedar Vale, Kans. Windmill	272,566	Feb. 20	1246	347 348	23	673
Mack, Russell L. (See Bewley and Mack.)						
Mack, William. (See Deeds, John B., assignor.)						
Mack, William. (See Deeds and Mack.)						
Mack, William, Indianapolis, Ind. Barrel-hoist	278,570	May 29	2553	696	23	2095
Mackay, Frederick N. (See Siddeley and Mackay.)						
Mackay, John W. (See Baujard, Edmond O., assignor.)						
Mackay, John W. (See Baujard, Edmund, assignor.)						
Mackay, John W. (See De Castro, Hector, assignor.)						
Mackel, John B., Las Vegas, N. Mex. Ter. Cork-soled shoe	272,284	Feb. 13	867	242	23	603
Mackenzie, James, Osnaburgh Street, county of Middlesex, England. Portable voltaic battery	270,551	Jan. 9	891	258	23	184
Mackenzie, James U., New York, N. Y. Electrical visual indicator	273,563	Mar. 6	419	112 113	23	906
Mackenzie, James U., Brooklyn, N. Y. Puzzle	278,571	May 29	2553	697	23	2095
Mackenzie, Oscar C., Chicago, Ill. Temporary binder	280,199	June 26	1941	545	23	2478
Mackey, Thomas B., Dallas, Tex. Running-gear for wagons	271,487	Jan. 30	2071	597	23	414
Mackinney, Herbert G., Providence, R. I. Joint for jewelry-pins	273,564	Mar. 6	423	113	23	907
Mackinney, William C., assignor to J., C. C., and W. B. Butterworth, Philadelphia, Pa. Vacuum-valve	284,452	Sept. 4	355	98	24	964
Mackinnon, John, Denver, Colo. Self-acting dough-breaker	273,114	Feb. 27	1939	544	23	801
Mackintosh, James, Philadelphia, Pa. Electric wire cable	269,868	Jan. 2	55	17	23	13
Maclea, Charles W., Melbourne, Victoria. Counterbalance attachment to grab-operating mechanism	270,598	Jan. 16	953	276	23	204
Macloed, William A., Boston, Mass. Attachment for sewing-machines	283,799	Aug. 28	1613	454	24	817
Macomber, Samuel M., Grand Isle, Vt. Hand corn-planter	277,757	May 15	1526	414	23	1901
Macpherson, David J., Sioux Falls, Dak. Ter. Electric car-brake	273,565	Mar. 6	424	113 114	23	907
Macpherson, David J., assignor of one-half to J. B. Young, Sioux Falls, Dak. Ter. Automatic car-brake	288,461	Nov. 13	854	231	25	664
Macray, William W., and R. Sykes, Castleford, county of York, England. Stoppering of bottles	277,758	May 15	1527	414	23	1901
Macy, William, Monroe, Ohio. Grain-separator	290,592	Dec. 18	1544	425	25	1173
Madden, John H., New York, N. Y. Grinding and polishing wheel	287,144	Oct. 23	1726	472	25	333
Maddin, Mary. (See Maddin, Samuel D., assignor.)						
Maddin, Samuel D., St. Paul, Minn., assignor to M. Maddin, Miamisburg, Ohio. Harvester.	288,353	Nov. 13	707	194	25	638
Madison, James O., New York, N. Y. Spacing-instrument	287,145	Oct. 23	1727	473	25	333
Madsen, Niels C., and H. J. Nielsen, Copenhagen, Denmark. Apparatus for soring cream.	279,876	June 19	1555	435	23	2404
Madson, Cornelius, Oslo, Wis., assignor to R. T. Tuttle, Perry, N. Y. Harvester-rake	283,409	Aug. 21	1136	321	24	718
Maeder, Maria A., Chelsea, Mass. Spoon-rest	277,304	May 8	987	265	23	1802
Magaw, Frederick L., Flatlands, N. Y., assignor of two-thirds to J. A. Peer, Grass Valley, Cal., and W. C. Edes, Boston, Mass. Chain sawing-machine	279,780	June 19	1438	402 403	23	2383
Magaw, Frederick L., Flatlands, N. Y., assignor of two-thirds to J. A. Peer, Grass Valley, Cal., and W. C. Edes, Boston, Mass. Chain cutter	279,781	June 19	1439	403	23	2384
Magge, Daniel W., New York, N. Y., assignor to E. P. Miner, Hartford, Conn. Ejector.	284,453	Sept. 4	356	99	24	964
Magge, Frank A. (See Bostwick, Seymour A., assignor.)						
Mager, Daniel. (See Miller and Mager.)						
Maggio, Antonino, New Orleans, La. School-slate	279,656	June 19	1299	361	23	2359
Magner, David P., et al. (See Hoffman, Edward J., assignor.)						
Magner, Patrick J., et al. (See Hoffman, Edward J., assignor.)						
Magnus, Eugene B., Brooklyn, N. Y. Car-coupling	272,285	Feb. 13	868	243	23	603
Magoun, Thomas P. L., Bath, Me. Piano-stool	286,457	Oct. 9	847	230	25	165
Magowan, Francis A., Trenton, N. J., and R. M. Bassett, Birmingham, Conn. Manufacture of pottery	290,443	Dec. 18	1347	373	25	1139
Magreevy, William P., assignor of one-half to J. B. Baldwin, New Orleans, La. Steam-generator	277,844	May 15	1624	442	23	1918
Magruder, George C. W., Tennytown, assignor of one-half to S. B. Muncaster, S. D. Webb, and W. O. Denison, Washington, D. C. Curry-comb	282,338	July 31	2540	695	24	463
Maguire, Jacob C., Little Falls, N. J. Dyeing and finishing plush fabrics	283,500	Aug. 21	1253	.....	24	738
Maguire, John, assignor of one-half to W. Maguire, Toronto, Ontario, Canada. Waterproof coat	273,115	Feb. 27	1940	544	23	801
Maguire, John A., Philadelphia, Pa. Horseshoe	274,800	Mar. 27	1996	555	23	1202
Maguire, Terrence G., Boston, Mass. Chair	277,759	May 15	1528	414 415	23	1901
Maguire, William. (See Maguire, John, assignor.)						
Mahan, Frank M., assignor of three-fourths to C. B. Kelley, Chicago, Ill. Paper wheel.	290,081	Dec. 11	879	249	25	1049
Mahan, Miles. (See Bassford and Mahan.)						
Mahaney, John J., et al. (See Hilbert, Charles, assignor.)						
Mahar, Michael W., National Military Home, Ohio, assignor of three-fourths to J. M. Patterson, Windfall, Ind. Sash-fastener	275,778	Apr. 10	1189	326	23	1437
Mahar, Michael W., National Military Home, Ohio, assignor of three-fourths to J. M. Patterson, Windfall, Ind. Sash-fastener	275,779	Apr. 10	1190	326	23	1437

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Mahar, Michael W., National Military Home, Ohio, assignor of three-fourths to J. M. Patterson, Windfall, Ind. Pocket-book.....	275,780	Apr. 10	1191	326	23	1437
Mahar, Michael W., National Military Home, Ohio, assignor of three-fourths to J. M. Patterson, Windfall, Ind. Fare-box.....	275,781	Apr. 10	1191	327	23	1437
Mahar, Michael W., National Military Home, Montgomery county, assignor of one-third to P. Mitchell, Dayton, Ohio. Pocket-book holder.....	281,638	July 17	1623	443	24	295
Maher, Martin. (See Liess and Maher.)						
Maher, Thomas A. (See Rogers and Maher.)						
Mahle, Clemence A. (See Hall and Mahle.)						
Mahon, Alexander B., Pensacola, Fla. Car-coupling.....	288,083	Nov. 6	364	101	25	570
Mahon, Aurelius W., assignor of one-half to C. D. & H. C. Larus, Richmond, Va. Tobacco-press.....	277,912	May 22	1707	466	23	1940
Mahoney, John, and D. W. Shockley, Wilmington, Del. Railway cross-tie.....	280,200	June 26	1942	546	23	2478
Mahoney, John J. (See Welch, Coughlin, and Mahoney.)						
Mahoney, Michael J., et al. (See Davey, John F., assignor.)						
Mahrenholz, Henry J., New York, N. Y. Boot-top.....	275,678	Apr. 10	1059	287	23	1415
Main, Prentice. (See Clark, William, assignor.)						
Main, Sylvester V., Napoleon, Ind. Corn-planter.....	274,351	Mar. 20	1424	390	23	1095
Mais, Michel, South Bend, Ind. Vehicle-brake.....	280,939	July 10	751	209	24	138
Major, Charles G. (See Stevens, Major, and Edwards.)						
Majors, Archibald C. (See Reams and Majors.)						
Majors, Green. (See Sharpneck, William S., assignor.)						
Malcolmson, Thomas, assignor of one-half to O. B. Goodwin, Oil City, Pa. Steam-engine governor.....	270,684	Jan. 16	1065	305	23	323
Malcolmson, Thomas, assignor of one-half to O. B. Goodwin, Oil City, Pa. Steam-governor.....	289,427	Dec. 4	66	19	25	898
Malcolmson, Thomas, assignor of one-half to O. B. Goodwin, Oil City, Pa. Steam-governor.....	289,428	Dec. 4	67	19	25	898
Malcom, Robert, assignor to himself and W. F. Milford, Cornwall, N. Y. Fruit-jar.....	288,084	Nov. 6	365	101	25	570
Malick, Wesley. (See Burns and Malick.)						
Malick, Wesley, Girard, assignor of one-third to J. M. Force and H. C. Yard, Erie, Pa. Combined mop and wringer.....	290,187	Dec. 11	999	222	25	1071
Maliphant, Charles, New Brighton, assignor to himself and G. Clark, Tompkinsville, N. Y. Fire-escape.....	284,871	Sept. 11	873	245	24	1059
Mallard, William S., Darien, Ga. Rice-field trunk and gate.....	283,264	Aug. 14	952	266	24	677
Malleson, Frederick, Brooklyn, N. Y. Fishing-reel.....	284,217	Sept. 4	79	22	24	918
Mallett, Charles H., and Z. T. Furbish, Augusta, Me. Screw-driver.....	275,235	Apr. 3	452	125 126	23	1303
Mallett, Francis W., assignor to C. Howard & Co., Brockton, Mass. Needle-machine.....	275,782	Apr. 10	1192	327	23	1438
Mallinckrodt Brake Company. (See Katzenmayer, Ernest, assignor.)						
Mallinckrodt Brake Company. (See Mallinckrodt, John F., assignor.)						
Mallinckrodt Brake Company. (See Mallinckrodt, John F., assignor.) (Reissue.)						
Mallinckrodt, John F., Zaleski, Ohio, assignor to Mallinckrodt Brake Company, East St. Louis, Ill. Car-brake.....	273,566	Mar. 6	426	114	23	907
Mallinckrodt, John F., Denver, Colo., assignor to Mallinckrodt Brake Company, East St. Louis, Ill. Car-brake.....	273,567	Mar. 6	427	114 115	23	907
Mallinckrodt, John F., Denver, Colo., assignor, by mesne assignments, to Mallinckrodt Brake Company, East St. Louis, Ill. Car-brake. (Reissue).....	10,318	Apr. 24	2152	599	23	1619
Mallinson, Joseph, Selby, county of York, England. Piano-forte action.....	270,322	Jan. 9	589	173 174	23	125
Mallory, Alonzo R., et al. (See Mathis, Sanford, assignor.)						
Mallory, Augustus H., et al. (See Mathis, Sanford, assignor.)						
Mallory, Charles M., Toledo, Ohio. Hay-elevator.....	282,654	Aug. 7	216	63	24	537
Mallory, Frank B., New York, N. Y. Awning and curtain frame for boats.....	270,448	Jan. 9	754	221	23	156
Mallory, Frank B., New York, N. Y. Curtain-fixture.....	277,760	May 15	1530	415	23	1902
Mallory, Frank B., New York, N. Y. Curtain-fixture.....	284,454	Sept. 4	358	99	24	964
Mallory, Frank B., New York, N. Y. Awning.....	284,872	Sept. 11	875	246	24	1060
Mallory, Jeremiah D. (See Ernst, John G., assignor.)						
Mallory, Thomas H., Red Wing, Minn. Milk-cooler.....	290,900	Dec. 25	1944	536	25	1250
Mallory, Wheeler & Co. (See Andrews, William H., assignor.)						
Malloy, Francis, Norristown, Pa. Holy-water font made from glass, porcelain, or other suitable material.....	288,085	Nov. 6	366	101	25	570
Malone, Abner J. (See Rinderknecht, Charles, assignor.)						
Malone, John D., and J. F. Hamel, Pittsburg, Pa. Steam plowing-machine.....	277,761	May 15	1530	415 416	23	1902
Malone, Thomas H., Milwaukee, and G. A. Whiting, Neenah, Wis. Instrument for forming metal seals.....	276,058	Apr. 17	1530	421	23	1504
Malone, Thomas H., Milwaukee, and G. A. Whiting, Neenah, Wis. Attaching seals to cars.....	282,205	July 31	2374	653	24	434
Malone, William D. (See Fraley, Alexander, assignor.)						
Maloney, James A., Washington, D. C. Telephonic repeater and relay.....	287,449	Oct. 30	2111	574	25	410
Maloney, James, assignor to J. W. Coffin, Providence, R. I. Extractor for brakedown guns.....	271,645	Feb. 6	74	20	23	453
Maloney, James A., Washington, D. C., assignor to S. H. Carney, trustee, New York. Secondary battery.....	271,880	Feb. 6	353	98	23	502
Maloney, James A., Washington, D. C., assignor to S. H. Carney, trustee, New York. Receiving-telephone.....	274,352	Mar. 20	1426	391	23	1095
Maloney, James A., Washington, D. C., assignor to S. H. Carney, trustee, New York. Electric telephone-transmitter.....	274,353	Mar. 20	1427	391	23	1095
Maloney, James A., assignor of one-half to G. W. Cooper, Washington, D. C. Telegraphic relay and repeater.....	289,285	Nov. 27	1859	516	25	858
Maloney, Philip S., Philadelphia, Pa. Paving-tool.....	288,825	Nov. 20	1303	357	25	749
Malouy, William. (See Sinclair, James H., assignor.)						
Maloney, William A., Denver, Colo. Spark-arrester.....	284,646	Sept. 11	593	167	24	1011
Malsbary, Joh. (See Rader and Malsbary.)						
Malthy, Christopher C., and J. F. Sabine, Chico, Cal. Surcingle.....	274,801	Mar. 27	1997	555	23	1202
Maltby, Horace, Stapleton, N. Y., and A. K. Gardner, Jersey City, N. J. Ornamenting woven cloth fabrics.....	289,249	Nov. 13	570	158	25	616
Maltby, Oliver E., et al. (See Buie, Duncan M., assignor.) (Reissue.)						
Maltby, Sidney, assignor of one-half to E. L. Lambie, Washington, D. C. Piston.....	277,305	May 8	988	265 266	23	1802
Man, Buel A. (See Wilson, George W., assignor.)						
Manahan, John F., Lowell, Mass. Ladder-hook.....	285,637	Sept. 25	1805	514	24	1240
Manahan, Thomas, New York, N. Y. Pad for exterminating insects.....	276,844	May 1	398	105	23	1696
Manchester, Francis L. (See Richardson and Manchester.)						
Manchester, Richard S., assignor of one-half to W. W. Lake, Dayton, Ohio. Gage-cock.....	272,266	Feb. 13	869	243	23	603



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Mandevill, James H. (See Baker, Cyrus M., assignor.)						
Mandeville, James H. (See Baker, Sanford J., assignor.)						
Mandeville, James H., trustee. (See Reynolds, John M., assignor.)						
Mandrill, George W., Gloversville, N. Y. Glove-fastener.....	274,507	Mar. 27	1649	459	23	1140
Mangold, Leonard. (See Cahill and Mangold.)						
Manhattan Brass Company. (See Hipwell, Thomas, assignor.)						
Manhattan Brass Company. (See White, James H., assignor.)						
Manley, Aaron R., San José, Cal. Roof-scaffolding.....	283,908	Aug. 28	1737	490	24	838
Manley, Aaron R., San José, Cal. Flour bin and sifter.....	283,909	Aug. 28	1738	491	24	838
Manley, Charles W., North Abington, Mass. Scarf.....	276,845	May 1	399	105	23	1696
Manley, William, Rochester, N. Y. Machine for finishing boot and shoe heels.....	284,566	Sept. 4	491	{ 138 139 }	24	988
Manly & Cooper Manufacturing Company. (See Manly, Robert P., assignor.)						
Manly, Robert P., assignor of one-half to Manly & Cooper Manufacturing Company, Philadelphia, Pa. Fire-proof shutter.....	281,198	July 10	1064	293	24	195
Mann, Amos C., St. Louis, Mo. Grate-bar.....	275,679	Apr. 10	1060	287	23	1415
Mann, Amos C., assignor of one-fourth to F. Krein, St. Louis, Mo. Producing Babbit metal.....	285,638	Sept. 25	1806	.....	24	1240
Mann, Augustine A. (See Notley, William, assignor.)						
Mann, Bela A., Hamden, Conn. Stop-motion for looms for weaving elastic webbing.....	288,462	Nov. 13	855	231	25	664
Mann, Charles A., Buffalo, N. Y. Barbed-wire fence.....	276,439	Apr. 24	2014	559	23	1595
Mann, Charles A., Buffalo, N. Y. Wire fence.....	284,218	Sept. 4	80	22	24	918
Mann, Charles B. (See Boyden, George A., assignor.)						
Mann, Charles W., San Marcos, Tex. Gin-saw.....	287,450	Oct. 30	2112	574	25	410
Mann, David. (See Cubberley and Mann.)						
Mann, Frederic C., East Bridgewater, Mass. Bat-gathering attachment for cotton-condensers.....	271,488	Jan. 30	2072	597	23	414
Mann, Frederic C., East Bridgewater, Mass., and H. Schumacher, Navasota, Tex. Oil-press mat.....	276,846	May 1	399	106	23	1696
Mann, Frederick C. (See Strong and Mann.)						
Mann, Henry F., Pittsburg, Pa. Quoit.....	281,773	July 24	1814	495	24	335
Mann, Henry F., Pittsburg, Pa. Implement for capping and uncapping cartridge-shells.....	288,950	Nov. 20	1452	401	25	777
Mann, James W. (See Cook, Thomas G., assignor.)						
Mann, Lewis. (See McCormick, David A., assignor.)						
Mann, Lewis, et al. (See Cowell, Edward R. E., assignor.)						
Mann, Oscar H. (See Gamble, Henry E., assignor.)						
Mann, Robert M. (See Russell, John M., assignor.)						
Mann, William H., et al. (See Cartwright, Edward, assignor.)						
Mann, William I. (See Stevens and Mann.)						
Mann, William I., Braddock, Pa. Hose and pipe coupling.....	270,323	Jan. 9	590	174	23	125
Mann, William T., et al. (See Beechey, Charles G., assignor.)						
Manneck, Charles H., Brooklyn, N. Y., and W. Witte, New Haven, Conn. Box-covering machine.....	278,442	May 29	2403	{ 655 656 }	23	2068
Manner, Charles V. (See Steber, Joseph C., assignor.)						
Mannie & Co., George A. (See Titus, James M., assignor.)						
Manning, Charles E., et al. (See Teall, Augustus T., Jr., assignor.)						
Manning, Charles H., Washington, D. C. Eyeglass-case.....	272,450	Feb. 20	1090	307	23	645
Manning, Harry W. (See Strickle and Manning.)						
Manning, James H., Albany, N. Y. Manufacture of buttons.....	286,620	Oct. 16	1060	285	25	209
Manning, John C. (See Galivan and Manning.)						
Manning, John J., Great Barrington, Mass. Method of and apparatus for exhausting the air and extracting the water from the suction-boxes of paper-machines.....	282,096	July 31	2217	610	24	409
Manning, John J., Great Barrington, Mass. Method of and apparatus for exhausting the air and extracting the water from the suction-boxes of paper-machines.....	282,097	July 31	2219	610	24	410
Manning, John J., Great Barrington, Mass. Beating and refining engine for paper-pulp ..	282,098	July 31	2221	610	24	410
Manning, John N., et al. (See Ritchie, John, assignor.)						
Manning, John W., Arkansas City, Kans. Feed-trough.....	273,116	Feb. 27	1941	544	23	891
Manning, William, et al. (See Teall, Augustus T., Jr., assignor.)						
Manny, Abraham J., St. Louis, Mo. Cane-mill.....	282,339	July 31	2541	696	24	463
Manny, John P., Rockford, Ill. Harvester.....	276,847	May 1	401	106	23	1696
Manor, Edward P. (See Blodgett, Gardner S., assignor.)						
Mansbach, Louis H., Milwaukee, Wis. Lacing-stud for gloves, &c.....	285,050	Sept. 18	1104	308	24	1107
Mansfield, Eben B., Malden, assignor of one-half to T. Curley, Waltham, Mass. Roller for parlor-skates.....	278,666	May 29	2670	730	23	2115
Mansfield, Eben B., Malden, assignor of one-half to T. Curley, Waltham, Mass. Roller for parlor-skates.....	279,406	June 12	1005	278	23	2302
Mansfield, James H., Gloucester, Mass. Detachable cover for boats.....	277,146	May 8	806	212	23	1770
Manson, William, Chicago, Ill. Hoisting-derrick.....	290,780	Dec. 25	1795	496	25	1225
Manton, Joseph H. (See Millen, Manton, Labelle, and Cook.)						
Mantle, Alfred W., Eckernförde, Germany. Thrashing-machine.....	278,716	June 5	53	16	23	2134
Mantle, Alfred W., Eckernförde, Germany. Thrashing-machine.....	278,717	June 5	55	17	23	2134
Mantle, Lee, et al. (See Bassford, Isaac F., assignor.)						
Manton, Frank S. (See Winter and Manton.)						
Mantz, William H., and R. Blum, Mount Vernon, Ill. Toy milch cow.....	275,053	Apr. 3	221	60	23	1264
Manvel, Homer. (See Williams and Manvel.)						
Maples, Melvin, Hartwick, N. Y. Folding table.....	287,306	Oct. 23	1935	528	25	370
Maranville, Egbert L., assignor of one-half to M. D. Nicholson, Rutland, Vt. Attachment for ovens of cooking-stoves.....	274,009	Mar. 13	981	269	23	1010
Maranville, Egbert L., assignor of one-half to E. Bowman, Rutland, Vt. Turn-table for stove-ovens.....	286,029	Oct. 2	305	85	25	57
Marbach, Hermann L., Cleveland, Ohio. Dart.....	275,236	Apr. 3	453	123	23	1303
Marchand, Charles, New York, N. Y. Manufacture of hydrogen-peroxide.....	273,569	Mar. 6	430	115	23	908
Marchand, Charles, assignor to L. F. Beckwith, E. Gillet, and A. J. Rossi, trustees, New York, N. Y. Compound for use in refrigerating-machines.....	275,834	Apr. 17	1266	.....	23	1457
Marchand, Francis T., Annapolis, Md. Maintaining power for clock-springs.....	278,572	May 29	2555	697	23	2095
Marchand, Henry E., Allegheny city, Pa. Measuring-pump.....	275,680	Apr. 10	1060	288	23	1415
Marchand, Henry E., Allegheny City, Pa. Mechanical movement.....	290,901	Dec. 25	1945	536	25	1250
Marchand, Henry E., assignor to Marchand Manufacturing Company, (limited), Allegheny, Pa. Measuring-pump.....	287,697	Oct. 30	2447	659	25	475
Marchand Manufacturing Company. (See Marchand, Henry E., assignor.)						
Marchant, Joseph. (See Phillips, Elwood C., assignor.)						
Marconx, Moïse, St. Engène de Grantham, Quebec, Canada. Shingle-sawing machine.....	285,051	Sept. 18	1105	{ 308 309 }	24	1107
Marcus, Morris, Chicago, Ill. Suspenders.....	289,429	Dec. 4	69	20	25	899

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Marcus, Morris H., Edenburg, assignor of one-half to L. A. Katz, Bradnock, Pa. Sample-dummy.....	290,188	Dec. 11	1001	282	25	1071
Marcus, Siegfried, Vienna, Austria-Hungary. Magneto-electric machine.....	275,237	Apr. 3	454	126	23	1301
Marcus, Siegfried, Vienna, Austria-Hungary. Vaporizer.....	275,238	Apr. 3	456	127	23	1304
Marcus, Siegfried, Vienna, Austria-Hungary. Rotary engine and pump.....	282,340	July 31	2543	696	24	464
Marcus, Siegfried, Vienna, Austria-Hungary. Gas-engine.....	286,030	Oct. 2	306	86, 87	25	57
Marcy, Frederick I. (See Covell, William W., assignor.)						
Marcy, Frederick I. (See Walcott, Jabez E., assignor.)						
Marden, Aldis H., Cambridge, Mass. Car-brake.....	270,962	Jan. 23	1410	406	23	292
Mardi, T. F., et al. (See Schwane, Christian C., assignor.)						
Marembeck, George W., Philadelphia, Pa. Air-heating furnace.....	290,902	Dec. 25	1946	537	25	1250
Marett, John T., assignor to Halstead & Spencer, Philadelphia, Pa. Street-car bell.....	284,032	Aug. 28	1912	536	24	869
Margileth, Bernard C., Aurora, Ind. Fire-escape.....	289,286	Nov. 27	1860	517	25	858
Margileth, Bernard C., Aurora, Ind. Fire-proof box for fire-escapes.....	289,287	Nov. 27	1861	517	25	859
Margot, Henry D., Mountain View, Cal. Floor-clamp.....	284,747	Sept. 11	26	203	24	1034
Marin, Charles, assignor of one-half to G. J. Dailey, St. Louis, Mo. Horse-collar.....	283,717	Aug. 21	1505	424	24	766
Marion, Joseph, Brooklyn, N. Y. Oil-stove.....	278,574	May 29	2557	698	23	2095
Mariotte, Abel, Véreux, France. Method of milling and apparatus used therein.....	270,906	Jan. 23	1335	{ 385 386 }	{ 23 23 }	280
Mariotte, Abel, Véreux, France. Grist or flouring mill.....	278,718	June 5	56	17	23	2134
Maris, George, New York, N. Y. Pestle-handle.....	278,575	May 29	2558	698	23	2096
Marix, Arthur. (See McCarty, William F. C., assignor.)						
Mark, Charlie E., Flint, Mich. Car-coupling.....	275,054	Apr. 3	222	61	23	1264
Mark, Charlie E., Flint, Mich. Car-coupling.....	278,573	May 29	2556	697	23	2095
Mark, Charlie E., Flint, Mich. Railway-chair.....	285,142	Sept. 18	1221	343	24	1126
Mark, Henry J., St. Louis, Mo. Veneer-cutting knife.....	288,463	Nov. 13	357	231	25	664
Mark, Henry J., assignor of one-half to H. B. Gaus, Jr., St. Louis, Mo. Veneer-cutting machine.....	288,585	Nov. 13	1001	{ 275 276 }	{ 25 25 }	691
Markees, Julius, St. Louis, Mo. Toy ten-pin table.....	270,088	Jan. 2	301	90	23	61
Markel, John L. (See Megow, Charles, assignor.)						
Marker, Stephen A., Newark, N. J. Harness-saddle.....	278,349	May 29	2289	696	23	2048
Markie, James, London, England. Metal last.....	272,143	Feb. 13	698	191	23	572
Markley, Watson, and E. Ingraham, Minneapolis, Kans. Cultivator-plow.....	290,593	Dec. 18	1544	425	25	1174
Marks, Bennett D., Louisville, Ky. Dish or basket.....	271,881	Feb. 6	354	98	23	503
Marks, Bennett D., Louisville, Ky. Bottle-stopper fastener.....	281,199	July 10	1066	294	24	195
Marks, Bernard A. (See Delue, George V., assignor.)						
Marks, Frank R. (See Poolman and Marks.)						
Marks, Frank X. (See Lederer and Marks.)						
Marks, Herman P., assignor to Stirn & Lyon, New York, N. Y. Toy gun.....	277,496	May 15	1218	{ 327 328 }	{ 23 23 }	1848
Marks, James, Newark, N. J. Laying underground electric wires.....	277,588	May 15	1328	356	23	1865
Marks, Thomas H., Baltimore, Md. Refrigerator.....	278,158	May 22	2005	552	23	1991
Marks, Walter E., Chapinville, N. Y. Variable feed device for grain-drills.....	277,306	May 8	991	266	23	1803
Marlay, James A. (See Runstetler and Marlay.)						
Marley, John W., Chicago, Ill. Electro-magnetic car-signal.....	271,882	Feb. 6	355	99	23	503
Marlin, Charles, New Point, Ind. Map-holder.....	279,961	June 26	1667	468	23	2429
Marlin, John M., New Haven, Conn. Ejector for magazine-guns.....	271,091	Jan. 23	1563	450	23	317
Marmon, Daniel W., Indianapolis, Ind., assignor to Nordyke & Marmon Company, of Indiana. Roller-mill.....	274,508	Mar. 27	1651	{ 459 460 }	{ 23 23 }	1140
Marmon, Daniel W., Indianapolis, Ind., assignor to Nordyke & Marmon Company, of Indiana. Roller-mill.....	275,835	Apr. 17	1267	{ 348 349 }	{ 23 23 }	1458
Marmon, Daniel W., assignor to Nordyke & Marmon Company, Indianapolis, Ind. Roller-mill.....	276,440	Apr. 24	2015	559	23	1595
Marmon, Daniel W., assignor to Nordyke & Marmon Company, Indianapolis, Ind. Roller-mill.....	277,307	May 8	992	{ 266 267 }	{ 23 23 }	1803
Marmon, Daniel W., assignor to Nordyke & Marmon Company, Indianapolis, Ind. Automatic feed-gate.....	281,707	July 24	1723	468	24	318
Marmon, Daniel W., and J. Warrington, Indianapolis, Ind., assignors to Nordyke & Marmon Company, of Indiana. Roller-mill.....	275,055	Apr. 3	223	61, 62	23	1264
Marneffe, Henri, Liege, Belgium. Vehicle brake and starter.....	277,308	May 8	993	267	23	1803
Maroney, John J., Bergen Point, N. J. Vehicle-axle.....	271,489	Jan. 30	2073	597	23	414
Marquart, Frank, and W. P. Hooper, New York, N. Y. Advertising.....	280,318	June 26	2094	589	23	2505
Marquis, Francis M., Zanesfield, Ohio. Propulsion of boats.....	276,144	Apr. 17	1639	{ 451 452 }	{ 23 23 }	1523
Marrett, Walter H., Brunswick, Me. Pole and shaft for vehicles.....	284,033	Aug. 28	1913	536	24	869
Marrin, Charles C. (See Barry, Joseph E., assignor.)						
Marsden, Horatio, and H. Schofield, Sheffield, county of York, England. Vacuum-box used in paper-making machinery.....	289,675	Dec. 4	374	107	25	953
Marsden, Joseph, Far Rockaway, N. Y. Well-pump tubing.....	285,909	Oct. 2	166	47	25	32
Marsh, Charles W., et al. (See Blood, Maurice E., assignor.)						
Marsh, Charles W., et al. (See Whitney, Charles, assignor.)						
Marsh, Edward. (See Graves, Charles G., assignor.)						
Marsh, Edward B. (See Shields, James H., assignor.)						
Marsh, George A., Littleton, Mass., assignor to Avery Lactate Company, Portsmouth, N. H. Manufacture of lactates and lactic acid.....	290,252	Dec. 18	1086	.....	25	1095
Marsh, George A., Littleton, Mass., assignor to Avery Lactate Company, Portsmouth, N. H. Manufacture of lactates for the production of lactic acid.....	290,253	Dec. 18	1088	.....	25	1095
Marsh, James A. (See Scherer, Moll, and Marsh.)						
Marsh, Napoleon P., Joseph's Mills, W. Va. Hay-rack.....	275,239	Apr. 3	457	127	23	1304
Marsh, Riverius. (See Webster, Charles E., assignor.)						
Marsh, Riverius, New Brunswick, N. J. Lamp.....	272,567	Feb. 20	1247	348	23	673
Marsh, Riverius, New Brunswick, N. J. Decorated frame, pedestal, vase, &c.....	285,423	Sept. 25	1554	437	24	1192
Marsh, Wesley F., North Platte, Nebr. Portable trestle.....	284,873	Sept. 11	877	246	24	1060
Marsh, William W., et al. (See Blood, Maurice E., assignor.)						
Marsh, William W., et al. (See Whitney, Charles, assignor.)						
Marsh, William W., and M. E. Blood, Sycamore, Ill. Grain-binding harvester.....	275,681	Apr. 10	1062	{ 288 289 290 }	{ 23 23 23 }	1416
Marshall, Albert W., Indianapolis, Ind. Stereotype-plate holder.....	282,655	Aug. 7	216	63	24	537
Marshall, Andrew, assignor to I. Marshall, Pittsburg, Pa. Lathe.....	281,539	July 17	1497	411	24	276
Marshall, Charles E., Lockport, N. Y. Combination-tool.....	286,458	Oct. 9	847	230	25	165
Marshall, Flavius H., Darlington, Ind. Pitchfork attachment.....	273,568	Mar. 6	429	115	23	908
Marshall, George. (See Durkee, William H., assignor.)						
Marshall, George E., Turner's Falls, Mass. Paper-making machinery.....	275,056	Apr. 3	227	62	23	1265



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Marshall, George E., Turner's Falls, Mass. Boiler for digesting wood for paper-pulp.....	286,031	Oct. 2	311	88	25	58
Marshall, Harry C. (See Conde and Marshall.)						
Marshall, Ida. (See Marshall, Andrew, assignor.)						
Marshall, John, Cordova, Ill. Bowlder-grapple.....	271,490	Jan. 30	2074	597	23	414
Marshall, John E., Buffalo, N. Y. Double-address envelope.....	283,000	Aug. 14	629	178	24	618
Marshall, Moses J. S., et al. (See Bloom, David, assignor.)						
Marshall, Nathaniel, Arkwright Street, Nottingham, county of Nottingham, assignor to W. S. Thomson & Co., London, England. Knitting-machine.....	288,648	Nov. 20	1081	{ 297 } 298	25	711
Marshall, William C., New York, N. Y. Preserving meats.....	270,089	Jan. 2	302	281	23	62
Marshall, William P., assignor of one-half to A. R. Shroyer, Logansport, Ind. Dinner-pail.....	272,387	Feb. 13	1005	281	23	625
Marshall, William S., Philadelphia, Pa. Folding valise.....	277,497	May 15	1219	328	23	1848
Marshall, William S., Chicago, Ill., assignor of one-half to H. H. McGaffey, Indianapolis, Ind. Pump.....	289,288	Nov. 27	1862	517	25	859
Marshman, Newman R., New York, N. Y. Mechanical musical instrument.....	277,309	May 8	995	267	23	1804
Marskey, Charles F., East Saginaw, Mich. Fire-escape.....	278,807	June 5	174	51	23	2152
Marsters, James F., Brooklyn, N. Y. Cartridge-loading mechanism.....	284,874	Sept. 11	878	246	24	1060
Mart, George W., assignor of one-third to G. Delker, Henderson, Ky. Spring-vehicle.....	284,455	Sept. 4	359	99	24	965
Martial, Antoine W., Houston, Tex. Cot.....	270,961	Jan. 23	1409	406	23	292
Martignoni, Johann, Bockenheim, near Frankfort-on-the-Main, Germany. Machine for cutting helical grooves in twist-drills.....	270,235	Jan. 9	486	143	23	105
Martignoni, Johann, Bockenheim, Germany. Groove-cutter.....	271,646	Feb. 6	75	21	23	453
Martin, Abram J., Catskill, N. Y. Secondary battery.....	274,802	Mar. 27	1998	555	23	1202
Martin, Adolf. (See Bell, Robert, assignor.)						
Martiu, Andrew D., Abbeville, assignor to M. E. Petetin, New Iberia, La. Harness-oil.....	278,808	June 5	176	.....	23	2152
Martiu, Annie M., administratrix. (See Nagele, Jacob, assignor.)						
Martiu, Bruno, East Saginaw, Mich. Tobacco-reswearing device.....	278,029	May 22	1853	506	23	1964
Martin, C. M., et al. (See Ball, Jacob, assignor.)						
Martin, Charles L., Charlottesville, Va. Lifting-jack.....	284,875	Sept. 11	879	247	24	1060
Martin, Christian C. (See Nagele, Jacob, assignor.)						
Martin, Daniel H., Ipswich, Queensland. Apparatus for the manufacture of air-gas.....	280,201	June 26	1943	546	23	2479
Martin, Edward, et al. (See Gartside, Joseph H., assignor.)						
Martin, Edwin H., Cleveland, Ohio. Pumping-engine.....	279,407	June 12	1006	279	23	2302
Martin Electric Wire Conducting Company. (See Martin, John F., assignor.)						
Martin, Gaylord, assignor to T. C. Gurney, Milwaukee, Wis. Brick-machine.....	288,649	Nov. 20	1085	298	25	711
Martin, George W., assignor of one-half to J. B. Martin, Covington, Ind. Horseshoe-calk.....	279,408	June 12	1007	279	23	2303
Martin, Harry T., Fort Robinson, Nebr. Auxiliary rifle-barrel for guns.....	271,883	Feb. 6	356	99	23	503
Martin, Henry D., Ypsilanti, Mich. Lawn and field mower.....	270,090	Jan. 2	303	90	23	62
Martin, Henry D., Ypsilanti, Mich. Bush-hammer.....	281,092	July 10	925	258	24	171
Martin, J. K., et al. (See Carr, William, assignor.)						
Martin, James, assignor of two-thirds to W. H. Martin and J. H. Middleton, Martin's Mills, Tenn. Coffin-lid fastener.....	281,382	July 17	1299	360	24	243
Martin, James, and A. S. Flint, Chicago, Ill. Vehicle-shaft support.....	282,545	Aug. 7	83	24	24	514
Martin, James P., St. Paul, Minn. Apparatus for milking cows.....	289,546	Dec. 4	217	61	25	924
Martin, John B. (See Martin, George W., assignor.)						
Martin, John C., Richmond, county of Surrey, England. Apparatus for grinding white lead, &c.....	286,720	Oct. 16	1186	320	25	231
Martin, John C., Richmond, county of Surrey, England. Apparatus for drying white lead.....	286,721	Oct. 16	1187	320	25	231
Martin, John C., Richmond, county of Surrey, England. Manufacture of white lead.....	290,444	Dec. 18	1348	.....	25	1139
Martin, John C., assignor of one-half to G. T. Redsell and W. W. Rogers, Tuscarora, Nev. Miner's candlestick.....	275,057	Apr. 3	229	62	23	1265
Martin, John F., Chicago, Ill. Compound for electric-wire insulators.....	282,914	Aug. 7	521	146	24	593
Martin, John F., Chicago, Ill. Electrical-wire insulator.....	286,937	Oct. 16	1455	400	25	277
Martin, John F., Chicago, Ill. Conduit for electric wires.....	286,938	Oct. 16	1456	400	25	277
Martin, John F., Chicago, Ill. Underground distributor for electric wires.....	286,939	Oct. 16	1459	401	25	277
Martin, John F., Chicago, Ill. Conduit for electric wires.....	286,940	Oct. 16	1460	401	25	277
Martin, John F., Chicago, Ill. Coupling for tubular insulators for electric wires.....	286,941	Oct. 16	1462	{ 401 } 402	25	278
Martin, John F., Chicago, Ill. Distributor for electric wires.....	286,942	Oct. 16	1464	{ 402 } 403	25	278
Martin, John F., Chicago, Ill. Supporting insulators for electric wires in underground conduits.....	286,943	Oct. 16	1467	403	25	279
Martin, John F., Chicago, Ill. Insulator for underground electric conductors.....	286,944	Oct. 16	1468	403	25	279
Martin, John F., Chicago, Ill. Conduit for electric conductors.....	286,945	Oct. 16	1470	404	25	279
Martin, John F., Chicago, Ill. Insulator for electric wires.....	286,946	Oct. 16	1471	404	25	279
Martin, John F., Chicago, Ill. Insulator for underground electric conductors.....	286,947	Oct. 16	1472	404	25	279
Martin, John F., Chicago, Ill. Underground multiple-wire cable.....	286,948	Oct. 16	1473	404	25	280
Martin, John F., Chicago, Ill. Distributing-box for electric wires.....	286,949	Oct. 16	1474	405	25	280
Martin, John F., Chicago, Ill. Conduit for electric wires.....	286,950	Oct. 16	1476	405	25	280
Martin, John F., Chicago, Ill. Electric-wire insulator.....	287,146	Oct. 23	1728	473	25	333
Martin, John F., assignor to Martin Electric Wire Conducting Company, Chicago, Ill. Insulating compound for electrical wires.....	274,622	Mar. 27	1788	.....	23	1164
Martin, John F., assignor to Martin Electric Wire Conducting Company, Chicago, Ill. Conduit for electrical wires.....	275,399	Apr. 10	705	188	23	1355
Martin, John H., Bidwell's Bar, Cal. Hydraulic-mining apparatus.....	277,762	May 15	1532	416	23	1902
Martin, Joseph B., assignor to Howes, Babcock & Ewell, Silver Creek, N. Y. Flour-packer.....	277,845	May 15	1625	443	23	1919
Martin, Joseph C., Burlington, Vt. Automatic cash-box system.....	276,441	Apr. 24	2016	560	23	1596
Martin, Joseph C., Burlington, Vt. Automatic cash-box system.....	284,456	Sept. 4	360	100	24	965
Martin, Michael I., Fort Wayne, Ind. Water-wheel.....	276,442	Apr. 24	2019	560	23	1596
Martin, Moritz, Bitterfeld, Prussia, Germany. Safety-lift.....	271,884	Feb. 6	357	99	23	503
Martin, Morris, Malden, Mass. Thermometric electric-circuit closer.....	286,722	Oct. 16	1189	320	25	231
Martin, Morris, Malden, assignor of two-thirds to E. A. and F. O. Jeffery, Boston, Mass. Electric heat-alarm.....	272,893	Feb. 27	1678	469	23	755
Martin, Morris T. (See Campbell and Martin.)						
Martin, Pearl, Medford, Mass. Vapor-stove.....	275,058	Apr. 3	230	63	23	1265
Martin, Robert H., Brooklyn, N. Y. Plastic cement mixture.....	276,697	May 1	208	.....	23	1660
Martin, Robert T., Toronto, Ontario, Canada. Numeral-frame.....	279,263	June 12	807	223	23	2271
Martin, Samuel, and J. F. Richards, Pittsburg, Pa. Electric-arc lamp.....	270,449	Jan. 9	756	222	23	156
Martin, Samuel W., Springfield, Ohio. Stop-valve.....	271,491	Jan. 30	2075	598	23	415
Martin, Sarah A., et al. (See Weiss, Charles W., assignor.)						
Martin, Sobiesky S., et al. (See Jones, Frank, assignor.)						
Martin, Thomas. (See Schaffert, John L., assignor.)						
Martin, Watts, Pennsborough, assignor of one-half to T. E. Davis, Harrisville, W. Va. Stock-car.....	273,570	Mar. 6	431	116	23	908

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Martin, W. Smith, Georgetown, S. C. Horse-detacher .....	288,464	Nov. 13	858	232	25	664
Martin, William, assignor to F. Dickson, Havana, N. Y. Sully-plow .....	273,696	Mar. 6	584	155 156	23	934
Martin, William A., Laurens Court-House, S. C. Wheel for drawing water from wells .....	274,011	Mar. 13	984	270	23	1010
Martin, William F., Dannemora, assignor of two-thirds to B. S. W. Clark, Plattsburg, and G. M. Clark, Dannemora, N. Y. Machine for sizing and shrinking hats .....	274,623	Mar. 27	1789	497	23	1164
Martin, William F., Dannemora, assignor to himself and W. Carroll, New York, N. Y. Machine for heating up napped hats .....	275,925	Apr. 17	1373	378	23	1477
Martin, William H., <i>et al.</i> (See Martin, James, assignor.)						
Martindale, Elijah B. (See Olsen and Fulton, assignors.)						
Martindale, Elijah B., Indianapolis, Ind. Belt pulley or wheel .....	286,320	Oct. 9	691	184	25	135
Martindale, Elijah B., Indianapolis, Ind. Pavement and floor .....	286,321	Oct. 9	692	184	25	136
Martindale, Elijah B., Indianapolis, Ind. Sheave-wheel .....	286,322	Oct. 9	693	184	25	136
Martindale, Elijah B., Indianapolis, Ind. Sheave-wheel .....	286,323	Oct. 9	694	185	25	136
Martindale, Elijah B., Indianapolis, Ind. Impervious paving-block .....	289,289	Nov. 27	1863	517	25	859
Martindale, John R., Buena Vista, Ind. Washing-machine .....	272,666	Feb. 20	1365	383	23	694
Martindale, Moses A., Georgetown, Colo. Irrigating agricultural and other lands .....	272,728	Feb. 20	1442	405	23	708
Martine, Alfred H., Fall River, Mass. Apparatus for melting anchor-ice .....	279,901	June 19	1526	444	23	2409
Martinelli, Martin E. (See Martinelli, Stephen and M. E.)						
Martinelli, Stephen and M. E., Watonsville, Cal. Box-fastener .....	273,863	Mar. 13	811	219	23	981
Martinez, Rafael, assignor to E. Gutmann and H. Goodman, New York, N. Y. Mat or removable floor-covering .....	281,540	July 17	1499	412	24	276
Martinez, Rafael, assignor to E. Gutmann and H. Goodman, New York, N. Y. Mat .....	283,501	Aug. 21	1254	352	24	738
Martinez, Rafael, assignor to E. Gutmann and H. Goodman, New York, N. Y. Mat .....	284,457	Sept. 4	362	100	24	965
Martinez, Rafael, assignor to E. Gutmann and H. Goodman, New York, N. Y. Mat .....	284,567	Sept. 4	498	140	24	988
Martius, Carl, Berlin, Germany. Producing a basic coloring-matter from xylydine. (Reissue) .....	10,353	July 10	1101		24	201
Marty, Jean A. H., Villefranche, France. Animal-trap .....	200,082	Dec. 11	880	250	25	1049
Martyn, William H., Jr., Manchester, N. H. Clothes pole and line holder .....	289,290	Nov. 27	1864	518	25	859
Marvil, Joshua H., Laurel, Del. Basket .....	273,864	Mar. 13	812	220	23	981
Marvin, George A., Seneca, Kans. Calf-weaner .....	280,642	July 3	367	102	24	65
Marvin, Russell, <i>et al.</i> (See Baker, William T., assignor.)						
Marvin, William, assignor of one-half to G. Richardson, Petoskey, Mich. Bake-oven .....	286,142	Oct. 2	444	120	25	82
Marzan, Manuel, Havana, Cuba. Construction of ships .....	274,624	Mar. 27	1790	498	23	1165
Marx, George. (See Geary, John, assignor.)						
Maschmeyer, Charles, Bridgeport, Conn., assignor to Craighead & Elwell Manufacturing Company, New York, N. Y. Pulley-block .....	271,252	Jan. 30	1754	507	23	357
Mascotte Stove Company. (See Meysenburg, Edward A., assignor.)						
Maseth, John A., <i>et al.</i> (See Maseth, Joseph, assignor.)						
Maseth, Joseph, assignor of one-half to J. A. and J. L. Maseth, Detroit, Mich. Machine for rolling coupling pins .....	286,324	Oct. 9	694	185	25	136
Maseth, Joseph L., <i>et al.</i> (See Maseth, Joseph, assignor.)						
Mason, Charles E., Columbus, Ohio. Micrometer regulator for watches .....	288,086	Nov. 6	366	102	25	570
Mason, Charles E., Columbus, Ohio. Reversible center-pinion for time-keepers .....	288,087	Nov. 6	367	102	25	570
Mason, Charles E., Columbus, Ohio. Stem winding and setting device for watches .....	290,903	Dec. 25	1947	137	25	1251
Mason, Charles T., Jr., Sumter, S. C. Cotton-harvester .....	286,032	Oct. 2	313	88	25	58
Mason & Co., Perry. (See White, Charles D., assignor.)						
Mason, Edward, Detroit, Mich. Tobacco-receptacle .....	274,954	Apr. 3	90	25	23	1241
Mason, Edward R., Des Moines, Iowa. Adjustable and detachable arbor for grindstones .....	282,546	Aug. 7	84	24	24	514
Mason, Edwin S., Attleborough Falls, Mass. Sleeve-button .....	281,093	July 10	926	258	24	171
Mason, Freeman C., Ransom, Mich. Apparatus for measuring and weighing grain .....	272,729	Feb. 20	1443	405	23	708
Mason, George L. (See Richardson, Edward M., assignor.)						
Mason & Hamlin Organ and Piano Company. (See Mabile, Philippe, assignor.)						
Mason & Hamlin Organ and Piano Company. (See Richardson, John P., assignor.)						
Mason, Henry W. (See Sargent, Joseph F., assignor.)						
Mason, James, Eynsham Hall, Whitney, county of Oxford, England. Furnace for burning pyrites .....	274,453	Mar. 20	1564	428	23	1119
Mason, James P., assignor of one-half to F. T. Weed, Philadelphia, Pa. Machine for making washers .....	276,848	May 1	402	106 107	23	1697
Mason, Joshua, Paterson, N. J. Method of and apparatus for heating cars .....	271,885	Feb. 6	358	99	23	503
Mason, Lowell C., Providence, R. I. Crank for sewing-machines .....	283,001	Aug. 14	630	178	24	619
Mason, Lowell C., assignor to S. W. Baker Manufacturing Company, Providence, R. I. Temple for looms for weaving tubular fabrics .....	283,127	Aug. 14	779	219	24	645
Mason, Matinda C., Chicago, Ill. Dish-washer .....	272,894	Feb. 27	1679	469	23	756
Mason, Oliver J., Tallmadge, Ohio. Machine for making clay smoking-pipes .....	272,966	Feb. 27	1757	491	23	768
Mason, Robert E., W. Smalley, and G. Schofield, assignors to J. A. McDowell, Newark, N. J. Hat and making the same .....	277,913	May 22	1709	466	23	1940
Mason, Samuel O., Snow Hill, N. C. Cultivator .....	282,341	July 31	2544	697	24	464
Mason, Volney W., Providence, R. I. Safety apparatus for elevator-platforms .....	276,849	May 1	404	107	23	1697
Mason, William, Puyallup, Wash. Ter. Gate .....	288,088	Nov. 6	368	102	25	570
Mason, William, assignor to Winchester Repeating Arms Company, New Haven, Conn. Machine for feeding metallic cartridge-shells into tubes .....	271,886	Feb. 6	359	100	23	504
Mason, William, assignor to Winchester Repeating Arms Company, New Haven, Conn. Magazine fire-arm .....	278,987	June 5	453	124 125	23	2200
Mason, William, assignor to Winchester Repeating Arms Company, New Haven, Conn. Magazine for fire-arms .....	285,284	Sept. 18	1377	389	24	1156
Mason, William, assignor to Winchester Repeating Arms Company, New Haven, Conn. Magazine fire-arm .....	289,676	Dec. 4	375	107 108	25	953
Mason, William B., Boston, assignor of one-half to W. A. Perry, Brookline, Mass. Governor .....	274,625	Mar. 27	1791	498	23	1165
Mason, William T. (See Babb, William J., assignor.)						
Mason, William T. (See Babb, William J., assignor.) (Reissue.)						
Massar, Abram A. (See Schilling and Massar.)						
Massari, Silvio E., Columbus, Ohio. Vegetable-slicer .....	279,782	June 19	1440	403	23	2384
Masseron, Edouard J., Paris, France. Alarm-lock .....	279,409	June 12	1008	279 280	23	2303
Massey, Albert P., assignor to American Seed Oil Company, Cleveland, Ohio. Apparatus for use in the extraction of oil from seeds, &c. .....	290,083	Dec. 11	881	250	25	1049
Massey, John T., assignor to himself and R. Price, Round Mountain, Tex. Bridle-attachment .....	278,988	June 5	455	125	23	2201
Massey, William. (See Smalstig and Massey.)						
Massicot, Eugene, New Orleans, La. Attachment for sewing-machines .....	273,571	Mar. 6	432	116	23	908
Massie, Cumberland, and J. Legan, Long Lane, Mo. Churn .....	275,059	Apr. 3	232	63	23	1265
Massie, James, Toronto, Ontario, Canada. Machine for making barrels .....	285,285	Sept. 18	1378	389	24	1156



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Mast & Company, P. P. (See Gardiner, Charles O., assignor.)						
Masten, Benjamin F. (See Gore and Eisele, assignors.)						
Masten, Cornelius E., Boston, Mass. Percussion signal-light	277,498	May 15	1220	328	23	1848
Masters, Egbert C., Woodland, Cal. Lock-hinge	283,128	Aug. 14	780	219	24	646
Masters, John and M., Bureau Junction, Ill. Compound meal or flour and process of making the same	286,033	Oct. 2	315	.....	25	58
Masters, Miles. (See Masters, John and M.)						
Masters, William, Kansas City, Mo. Stove or furnace	274,130	Mar. 20	1142	{ 314 315 422 423 167 168 }	{ 23 25 24 }	{ 1045 798 1011 }
Matcham, George D., Pittsfield, Ohio. Road-scraper	289,012	Nov. 27	1529	.....	25	798
Matcham, George D., Pittsfield, Ohio. Road-scraper	284,647	Sept. 11	596	.....	24	1011
Matheuy, Timothy G., <i>et al.</i> (See Henning, William B., assignor.) (Reissue.)						
Mather, Alonzo C., Chicago, Ill. Stock-car	272,451	Feb. 20	1090	308	23	645
Mather, Alonzo C., Chicago, Ill. Lacing for gloves	281,541	July 17	1500	412	24	276
Mather, Charles A. (See Perry, James L., assignor.)						
Mather, Frank J., Morristown, N. J. Manufacture of paper felting	278,350	May 29	2291	.....	23	2048
Mather, Henry W., Bloomingdale, N. J. Stair-pad	289,920	Dec. 11	687	192	25	1013
Mather, John, Leominster, Mass. Saw-swage	277,589	May 15	1329	357	23	1865
Mather, Richard H., Windsor, Conn. Coupling shunt dynamo-electric machines	286,325	Oct. 9	695	185	25	136
Mather, Thomas W., New Haven, Conn. Station-call for electric circuits	288,089	Nov. 6	369	{ 102 103 }	{ 25 }	571
Mather, Thomas W., assignor to Automatic Safety Boiler and Engine Company, New Haven, Conn. Automatic boiler-feeder	272,730	Feb. 20	1444	405	23	708
Mathes, Michael, assignor of one-half to G. Steup, Jersey City, N. J. Silicated paint	270,450	Jan. 9	757	.....	23	156
Mathes, Philip, Idlewood, Pa. Door-latch	276,255	Apr. 24	1775	494	23	1555
Mathes, Philip, Idlewood, Pa. Sash-fastener	283,502	Aug. 21	1255	352	24	738
Mathesius, Alexander H., Brooklyn, N. Y. Wire-rope grip	287,451	Oct. 30	2113	574	25	410
Mathews, John L., West Troy, N. Y. Wool-oiling machine	288,465	Nov. 13	859	{ 232 233 }	{ 25 }	665
Mathews, William C., Shenandoah, Iowa. Sash-holder	280,643	July 3	367	102	24	65
Mathias, David H., Albany, N. Y. Lunch-case	271,724	Feb. 6	163	45	23	469
Mathiason, P. B. (See Schnicible, Joseph, assignor.)						
Mathieson, Henry, Mile End, county of Middlesex, England. Process of and composition for making a drier for ink used for printing on metals	277,499	May 15	1221	.....	23	1849
Mathieson, Henry, Mile End, county of Middlesex, England. Transferring printed designs from paper to sheets of tin, &c.	278,030	May 22	1854	.....	23	1964
Mathieu, Jean A., Philadelphia, Pa. Separating and collecting the component substances in animal and vegetable matter	276,256	Apr. 24	1776	494	23	1555
Mathieu, Jean A., Philadelphia, Pa. Furnace for distilling and carbonizing wood, &c.	282,342	July 31	2544	697	24	464
Mathieu, Jean A., Philadelphia, Pa. Manufacturing charcoal	288,716	Nov. 20	1167	.....	25	724
Mathis, George W., <i>et al.</i> (See Caley, Jeremiah, assignor.)						
Mathis, Sanford, assignor of two-thirds to A. H. and A. R. Mallory, Madison, Ga. Remedy for diphtheria	276,257	Apr. 24	1778	.....	23	1555
Mathisen, Johan, Christiania, Norway. Door-lock	278,719	June 5	58	17, 18	23	2135
Mathison, Louis C., Manhattan, Kans. Wagon running-gear	283,628	Aug. 21	1392	369	24	764
Matlick, Isaac N., Edina, Mo., assignor of one-half to J. N. Prather, San José, Cal. Elevator and conveyor	289,291	Nov. 27	1865	518	25	860
Matlock, David B., Millville, Cal. Truss-bridge	272,568	Feb. 20	1248	348	23	673
Matt, Wilhelm, assignor, by mesne assignments, to Patent Marble Veneer Company, New York, N. Y. Artificial stone for veneers, &c. (Reissue.)	10,343	June 19	1588	.....	23	2410
Matt, Wilhelm, assignor to Patent Marble Veneer Company, New York, N. Y. Artificial stone for veneers, molded articles, &c.	289,112	Nov. 27	1653	.....	25	819
Matteeson, Arthur E., Chicago, Ill. Artificial crown for teeth	280,052	June 26	1782	500	23	2449
Matteeson, Rufus S., Providence, R. I. Machine for making ornamental chains	274,955	Apr. 3	91	25, 26	23	1241
Matthews, Ambrose T., <i>et al.</i> (See Bennett, John H., assignor.)						
Matthews, Elizabeth, <i>et al.</i> (See Albertson, Albert, assignor.)						
Matthews, Elizabeth, <i>et al.</i> , executors. (See Matthews, John.)						
Matthews, Frederick, <i>et al.</i> , executors. (See Matthews, John.)						
Matthews, George, <i>et al.</i> (See Albertson, Albert, assignor.)						
Matthews, George, <i>et al.</i> , executors. (See Matthews, John.)						
Matthews, George G. and R., Wichita, Kans. Door-check	281,542	July 17	1502	412	24	276
Matthews, James M., San Antonio, Tex. Insect-destroying apparatus	284,034	Aug. 28	1916	536	24	870
Matthews, John. (See Baynes, John, assignor.)						
Matthews, John, <i>et al.</i> (See Albertson, Albert, assignor.)						
Matthews, John, deceased, New York, N. Y., E., G., and F. Matthews, executors. Dispensing-faucet for soda-water and other beverages	289,547	Dec. 4	221	62	25	925
Matthews, John, deceased, E., G., and F. Matthews, executors, New York, N. Y. Soda-water apparatus	289,777	Dec. 4	501	139	25	973
Matthews, Rodolph. (See Matthews, George G. and R.)						
Matthiessen, Franz O., Irvington, N. Y. Automatically cooling hot journals	270,236	Jan. 9	486	144	23	105
Matthiessen, Franz O., Irvington, N. Y. Apparatus for keeping cool the shaft-bearings in mills	270,237	Jan. 9	488	144	23	105
Matthiessen, Franz O., Irvington, N. Y. Adjustable dam for starch-troughs	273,572	Mar. 6	433	116	23	908
Matthiessen & Wichers Sugar Refining Company, F. O. (See Niese and Dinkel, assignors.)						
Mattice, Asa, Cleveland, Ohio. Device for constructing brick floors and arches	271,346	Jan. 30	1879	544	23	378
Mattice, Christopher, Delhi, N. Y. Gage for cutting car-braces	284,035	Aug. 28	1917	536	24	870
Mattice, Christopher, Delhi, N. Y. Stove	287,765	Oct. 30	2544	684	25	492
Matton, Fredrik V., Philadelphia, Pa. Valve-gear	285,286	Sept. 18	1379	390	24	1157
Mattson, Morris, New York, N. Y. Medical-powder injector	280,202	June 26	1945	546	23	2479
Mattson, William H., <i>et al.</i> (See Hope, Charles, assignor.)						
Mattson, William H. (See Werts, William, assignor.)						
Matzeliger, Jan E., assignor of two-thirds to M. S. Nichols and C. H. Delnow, Lynn, Mass. Lasting-machine	274,207	Mar. 20	1230	{ 338 339 340 }	{ 23 }	1061
Maui, William M., <i>et al.</i> (See Pfantz, Daniel M., assignor.)						
Maule, Francis I., Philadelphia, Pa. Handle for steam-valves	271,887	Feb. 6	362	100	23	504
Maullick, Gottlieb, Beaver Falls, Pa. Car-coupling	281,094	July 10	997	259	24	171
Maurer, Jacob, <i>et al.</i> (See Bastam, Fredric, assignor.)						
Mans, Clement A., Indianapolis, Ind. Apparatus for and process of cooling and condensing the foam which forms on the surface of fermenting liquor	280,385	July 3	55	15	24	12
Mans, Frank A., Indianapolis, Ind. Two-wheeled vehicle	281,896	July 24	1971	539	24	362

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Maas, Mathias A., Indianapolis, Ind. Lock-nut for pipe-couplings .....	288,250	Nov. 13	571	158	25	616
Mausner, Paul, Oberndorf-on-the-Neckar, Württemberg, Germany. Magazine fire-arm .....	270,599	Jan. 16	955	276 277	23	204
Manser, Paul, Oberndorf-on-the-Neckar, Württemberg, Germany. Magazine fire-arm .....	289,113	Nov. 27	1654	459	25	819
Mantner, Ludwig. (See Mayrhofer, Charles A., assignor.)						
Mautner, Ludwig, Vienna, Austria-Hungary. Pneumatic and electric clock system .....	271,347	Jan. 30	1880	545 546 547	23	378
Mautner, Ludwig, Vienna, Austria-Hungary. Apparatus for drying and roasting malt, &c. ....	275,097	Apr. 3	286	78, 79	23	1275
Mawhinney, Samuel, Worcester, Mass. Metal last and jack for boots or shoes .....	276,059	Apr. 17	1532	421	23	1505
Maxfield, Charles A., New York, N. Y. Coating or waterproofing paper .....	278,443	May 29	2405		23	2069
Maxfield, William H., Maysville, Ind. Combined register and ventilator .....	290,084	Dec. 11	883	251	25	1049
Maxfield, William P., Philadelphia, Pa. Card-cylinder and making the same .....	273,573	Mar. 6	434	117	23	909
Maxim, Hiram S., Brooklyn, N. Y. Gas-machine .....	275,060	Apr. 3	233	63, 64	23	1266
Maxim, Hiram S., Paris, France. Gas-engine .....	273,750	Mar. 13	656	175 176 177	23	954
Maxim, Hiram S., Paris, France. Manufacturing carbons for incandescent lamps .....	277,846	May 15	1627	443	23	1919
Maxim, Hiram S., Paris, France. Gas-engine .....	279,657	June 19	1300	361 362	23	2359
Maxim, Hiram S., Brooklyn, assignor to United States Electric Lighting Company, New York, N. Y. Electric lamp .....	283,629	Aug. 21	1393	390	24	765
Maxim, Samuel, Wayne, Me. Oil-lamp .....	275,682	Apr. 10	1065	290	23	1416
Maxim, Samuel, Wayne, Me. Oil-lamp .....	284,876	Sept. 11	880	247	24	1061
Maxson, John F., Portville, N. Y. Gas-regulator .....	286,326	Oct. 9	696	186	25	136
Maxwell, Frank, Cedar Vale, Kans. Lock-nut .....	289,430	Dec. 4	70	20	25	899
Maxwell, George S., assignor of one-half to C. K. Caron, Louisville, Ky. Electric railway-signal .....	290,338	Dec. 18	1200	336	25	1114
Maxwell, John, and H. F. Quint, said Maxwell assignor to Chappell, Chase, Maxwell and Company, Oneida, N. Y. Burial-casket .....	283,002	Aug. 14	631	178	24	619
Maxwell, Robert C. (See Walker, James, assignor.)						
Maxwell, William H., and J. M. Stearns, Jr., Brooklyn, N. Y. Method of and appliance for controlling and preventing fires in buildings .....	286,021	Oct. 16	1062	286	25	209
May, Harvey B., Oregon City, Oreg. Tire-tightener .....	289,114	Nov. 27	1655	459	25	820
May, James H. (See Hubbard, Wales, assignor.)						
May, John L., Martinsburg, Pa. Device for holding and forming chair-frames .....	274,803	Mar. 27	1999	556	23	1203
May, Joseph B., Lexington, Ky. Gate .....	287,947	Nov. 6	200	58	25	542
May, Philip M., Washington, D. C. File-holder .....	282,742	Aug. 7	327	93	24	557
May, S. Elwood. (See Silver, Thomas, assignor.)						
May, Samuel, Toronto, Ontario, Canada. Billiard-cushion .....	283,129	Aug. 14	781	219	24	646
May, William. (See Cunningham, Houssart, and May.)						
Mayall, Thomas J., Reading, Mass. Ornamenting rubber veneer and enamel .....	286,034	Oct. 2	316		25	59
Mayall, Thomas J., Reading, Mass. Insulation of wires for telegraph-lines .....	286,035	Oct. 2	316	88	25	59
Mayall, Thomas J., Reading, Mass. Insulated electric conductor .....	286,036	Oct. 2	317	89	25	59
Mayall, Thomas J., Reading, Mass. Elastic fabric for goring .....	286,037	Oct. 2	318	89	25	59
Mayall, Thomas J., Reading, Mass. Machine for applying cement and flock to cloth .....	286,038	Oct. 2	319	89	25	59
Mayall, Thomas J., Reading, assignor to Brunswick Antimony Company, Boston, Mass. Water-proof cloth .....	286,039	Oct. 2	320		25	59
Mayall, Thomas J., Reading, assignor to Brunswick Antimony Company, Boston, Mass. Fluid cement .....	286,040	Oct. 2	321		25	59
Mayall, Thomas J., Reading, assignor to Brunswick Antimony Company, Boston, Mass. Syringe education-tube .....	286,041	Oct. 2	322	90	25	59
Mayall, Thomas J., Reading, assignor to Brunswick Antimony Company, Boston, Mass. Car-spring .....	286,042	Oct. 2	323	90	25	59
Mayall, Thomas J., Reading, assignor to Brunswick Antimony Company, Boston, Mass. Floor-covering .....	286,043	Oct. 2	324	90	25	60
Maybeck, Bernard J. (See Paulding and Maybeck.)						
Maybeck, M. Addie, Syracuse, N. Y. Plaiting-machine .....	273,206	Mar. 6	68	20	23	846
Mayberry, Victor A., La Grange, Mo. Device for sharpening plow-collars .....	285,287	Sept. 18	1381	390	24	1157
Maybury, William, assignor to himself, J. Greenwood, and T. Wolstenholme, Garnersville, N. Y. Steam-drying cylinder .....	284,877	Sept. 11	881	247	24	1061
Mayer, Charles. (See Berens, William E., assignor.)						
Mayer, David E., New York, N. Y. Shield for neck-wear .....	272,731	Feb. 20	1447	405	23	708
Mayer, Esrom, et al. (See Tobias, Cyrus, assignor.)						
Mayer, Ferdinand, assignor of one-half to W. F. Cox, Union Hill, N. J. Self-closing spigot. ....	272,732	Feb. 20	1447	406	23	708
Mayer, Georges. (See Bollack and Mayer.)						
Mayer, John L., and J. Sutter, McLean County, Ill. Automatic grain-measure .....	274,626	Mar. 27	1793	498	23	1165
Mayer, John M., Rondout, N. Y. Buckboard-wagon .....	290,445	Dec. 18	1349	373	25	1139
Mayer, Louis G., Cincinnati, Ohio. Vehicle .....	271,092	Jan. 23	1566	451	23	317
Mayer, Solomon, et al. (See Knoepf, John B., assignor.)						
Mayer, Theodore J., et al. (See Simpson, Andrew J., assignor.)						
Mayers, Edwin D., Mullin's Depot, S. C. Seeder and fertilizer-distributor .....	269,669	Jan. 2	56	17	23	13
Mayer, Thomas, Albany, N. Y. Wave-power apparatus .....	273,117	Feb. 27	1942	545	23	801
Mayer, Thomas A., Phillipsburg, Pa. Mining-tool .....	279,962	June 26	1668	469	23	2429
Mayhew, Joseph, and E. D. Payne, Cincinnati, Ohio. Hoisting-machine .....	277,147	May 8	808	213	23	1771
Maynadier, Gustavus B., assignor of one-half to W. H. Cilley, Boston, Mass. Grinding-mill .....	284,648	Sept. 11	597	168	24	1011
Maynadier, Gustavus B., assignor of one-half to W. H. Cilley, Boston, Mass. Grinding-mill .....	286,838	Oct. 16	1334	364	25	257
Maynard, Henry O., assignor to D. B. Fisk & Co., Chicago, Ill. Device for blocking hats .....	274,012	Mar. 13	984	270	23	1011
Maynard, William H. (See Steelman and Maynard.)						
Maynz, Edward, Boston, Mass. Fastening for belts .....	281,708	July 24	1724	468	24	318
Maynz, Edward, Boston, Mass. Manufacture of boots and shoes .....	281,709	July 24	1725	468	24	318
Mayo, Arthur C. (See Logan, James, assignor.)						
Mayo, Israel C., Gloucester, Mass. Cow-tail holder .....	281,543	Aug. 17	1502	412	24	276
Mayo, Lewis. (See Center, Joshua C., assignor.)						
Mayo, Uriel K., Boston, Mass. Anesthetic mixture .....	283,800	Aug. 28	1613		24	817
Mayo, Uriel K., Boston, Mass. Composition for preparing a heating and illuminating gas .....	288,090	Nov. 6	372		25	571
Mayo, William H., St. Joseph, Mich. Knitting-machine .....	274,208	Mar. 20	1238	340 341	23	1062
Mayrhofer, Carl A., assignor to himself and V. Otto, Paris, France. Electric pneumatic clock system .....	278,159	May 22	2006	552 553	23	1991
Mayrhofer, Charles A., assignor to L. Mautner, Vienna, Austria-Hungary. Hydropneumatic-clock system .....	271,888	Feb. 6	362	100 101	23	504
Mayser, Charles. (See Wullen and Mayser.)						
McAdam, Neil L., San Francisco, Cal. Vehicle-spring .....	284,748	Sept. 11	796	204	24	1034



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dis.	Vol.	Page.
McAdams, John, Boston, Mass. Paging-machine.....	277,310	May 8	996	267	23	1804
McAfee, John F., Pleasant Hill, Mo. Yarn-hanking machine.....	271,889	Feb. 6	365	101	23	505
McAllister, Charles, Philadelphia, Pa. Spade, fork, &c.....	275,783	Apr. 10	1195	328	23	1438
McAllister, Charles, Philadelphia, Pa. Spring-bufler for ships.....	281,280	July 17	1174	324	24	220
McAllister, Guy W., assignor to Chemical Fire Company, Boston, Mass. Apparatus for vaporizing and burning petroleum.....	272,287	Feb. 13	870	243	23	603
McAllister, Guy W., assignor to himself, E. L. York, and A. L. Waite, Boston, Mass. Steam-generator.....	287,452	Oct. 30	2115	575	25	410
McAllister, Guy W., assignor to himself, E. L. York, and A. L. Waite, Boston, Mass. Store.....	287,453	Oct. 30	2116	575	25	411
McAllister, James A., Shelbyville, Ill. Bushing for millstone-spindles.....	290,904	Dec. 25	1947	537	25	1251
McAllister, Lewis C., Fort Worth, Tex. Sewing-machine.....	278,809	June 5	176	51, 52	23	2153
McAllister, William, Lawrence, Mass. Machine for dyeing skeins of yarn.....	280,644	July 3	368	102	24	65
McAlpin, Joseph, assignor of one-half to R. G. Adair, San Francisco, Cal. Wrench.....	277,590	May 15	1330	357	23	1865
McAlpine, Adam H., Columbus, Ohio. Brake-beam.....	289,431	Dec. 4	70	20	25	899
McAnespey, John, Philadelphia, Pa. Soap-holder.....	280,053	June 26	1783	500	23	2449
McAnley, Frank. (See Heaton, Frank, assignor.)						
McAnley, Robert G. (See Appel and McAnley.)						
McAvery, Thomas, Jr., St. John, New Brunswick, Canada. Radiator.....	281,897	July 24	1972	539	24	362
McBee, Randolph, Washington, D. C. Stench-trap.....	286,051	Oct. 16	1477	405	25	280
McBrayer, David W., Atlanta, Ill. Cartridge implement.....	290,594	Dec. 18	1546	425	25	1174
McBride, John G. (See Stapleton, Timothy W., assignor.)						
McBride, John H., Des Moines, Iowa. Riding attachment for plows.....	284,036	Aug. 28	1917	537	24	870
McCabe, Frank, Providence, R. I. Faucet for drawing liquids.....	282,206	July 31	2375	653	24	434
McCabe, Frank, Providence, R. I. Steam-whistle.....	285,639	Sept. 25	1807	514	24	1240
McCabe, Thomas, Ottawa, Ontario, Canada. Stamp-canceling device.....	274,627	Mar. 27	1794	499	23	1166
McCabe, John, assignor to himself and New England Butt Company, Providence, R. I. Braiding-machine.....	275,061	Apr. 3	235	64	23	1266
McCahon, James H., et al. (See Fulton, John M., assignor.)						
McCaine, Daniel and D. St. Paul, Minn. Treating pyroxyline, &c.....	286,212	Oct. 9	529	.....	25	108
McCaine, David. (See McCaine, Daniel and D.)						
McCaine, Helen J. (See McCaine, William, assignor.)						
McCaine, William, assignor to H. J. McCaine, St. Paul, Minn. Treating pyroxyline compounds.....	276,443	Apr. 24	2020	.....	23	1597
McCall, Hugh, and M. M. Nye, Crawfordsville, Ind. Car-brake.....	289,921	Dec. 11	688	192	25	1014
McCall, Duncan J., Cameron, Tex. Combined cultivator and cotton-and corn planter.....	278,810	June 5	178	52	23	2153
McCall, George, Philadelphia, Pa. Railway-switch.....	289,677	Dec. 4	379	108 109	25	953
McCall, Joseph W. (See McCall, Robert S. and J. W.)						
McCall, Robert S. and J. W., Kansas City, Mo. Bicycle.....	280,054	June 26	1783	500	23	2449
McCall, William, San Francisco, Cal. Railway-switch.....	273,865	Mar. 13	813	220	23	981
McCall, William, and J. V. DeVry, San Francisco, Cal. Cable railway.....	286,044	Oct. 2	325	90, 91	25	60
McCalla, James W., Galion, Ohio. Clothes-pounder.....	272,288	Feb. 13	870	243	23	603
McCallip, William W., Columbus, Ohio. Billet-guide for rolling-mills.....	271,725	Feb. 6	165	45	23	469
McCallip, William W., Columbus, Ohio. Continuous rolling-mill.....	277,044	May 8	669	174	23	1746
McCallum, De Witt C., Minneapolis, Minn. Car-coupling.....	279,658	June 19	1303	362	23	2360
McCallum, Neil, Philadelphia, Pa., assignor, by mesne assignments, to Leeds Manufacturing Company, Brooklyn, N. Y. Composition to be used as a paint or dye.....	283,265	Aug. 14	953	.....	24	677
McCalland, William L., Philadelphia, Pa. Fire-escape.....	290,254	Dec. 18	1088	304	25	1095
McCann, Marion W., Posey, Ind. Cultivator.....	283,910	Aug. 28	1739	491	24	838
McCarroll, James, New York, N. Y. Application of wire-gauze in the construction of floors, partitions, &c.....	275,240	Apr. 3	458	127	23	1304
McCarthy, John J., Orrwood, Miss. Plow-fender.....	289,432	Dec. 4	71	20, 21	25	899
McCarthy, Christopher, and J. P. Cumming, assignors of one-third to O. E. Doolittle, Boston, Mass. Covering for walls and roofs, &c.....	274,354	Mar. 20	1428	391	23	1095
McCarthy, Dennis, and G. R. Davis, St. John, New Brunswick, Canada. Piano.....	276,258	Apr. 24	1778	495	23	1555
McCarthy, John, Syracuse, N. Y. Mop-wringer.....	283,911	Aug. 28	1740	491	24	839
McCarthy, John, assignor to N. McCarthy, Syracuse, N. Y. Coffin-handle.....	272,289	Feb. 13	871	244	23	604
McCarthy, Nora. (See McCarthy, John, assignor.)						
McCarthy, William C., Pittsburg, Pa. Constructing anvils.....	277,311	May 8	997	268	23	1804
McCarthy, William C., Pittsburg, Pa. Manufacture of anvils.....	286,459	Oct. 9	848	230	25	165
McCarthy, Adelbert D., East Hampton, Conn. Device for making polygonal tubes.....	271,492	Jan. 30	2077	598	23	415
McCarthy, Cornelius M., Romney, W. Va. Calcimining compound.....	283,130	Aug. 14	781	.....	24	646
McCarthy, Cremera F., Boston, Mass. Heating and cooking apparatus.....	272,290	Feb. 13	872	244	23	604
McCarthy, Eugene, Spanish Fort, Tex. Cotton cultivator and chopper.....	275,062	Apr. 3	236	65	23	1266
McCarthy, Robert A., Port Huron, Mich., and C. M. Johnson, assignors of one-third to C. B. Allaire, Peoria, Ill. Cash-carrier.....	283,912	Aug. 28	1741	492	24	839
McCarthy, William F. C. M., Berlin, Germany. Process of and apparatus for decomposing and transforming fatty substances into fatty acids and glycerine.....	282,547	Aug. 7	85	24	24	515
McCarthy, William F. C. M., Berlin, Germany. Apparatus for distilling.....	283,003	Aug. 14	632	179	24	619
McCarthy, William F. C., Berlin, Germany, assignor to A. Marix, St. Petersburg, Russia. Process of and apparatus for treating fats and oils for obtaining fatty acids.....	283,266	Aug. 14	954	266	24	677
McCaslin, George W., Cleveland, Ohio. Ruffing attachment for sewing-machines.....	271,890	Feb. 6	366	101	23	505
McCaughy, William, Greenville, Ohio. Fire-escape.....	270,451	Jan. 9	757	222	23	157
McCauley, Patrick H., Des Moines, Iowa. Apparatus for hoisting and conveying earth from sewer-trenches.....	280,645	July 3	369	103	24	65
McCanley, Ronben A., Baltimore, Md. Odorless excavating apparatus.....	285,288	Sept. 18	1381	390	24	1157
McCansland, William J., assignor to W. W. Kurtz, Philadelphia, Pa. Optical attachment for printing-telegraphs.....	270,907	Jan. 23	1338	386	23	280
McChesney, George G., assignor to Wheeler, Madden & Clemson Manufacturing Company, Middletown, N. Y. Handsaw.....	270,822	Jan. 16	1231	355	23	256
McChesney, Joseph B. M., et al. (See Hunt, Robert H. H., assignor.)						
McChesney, Martin H., Detroit, Mich. Key-board for musical instruments.....	281,898	July 24	1972	540	24	362
McChesney, Reuben, Frankfurt, N. Y., assignor to Hall & Brown, St. Louis, Mo. Band-saw guide.....	276,259	Apr. 24	1779	495	23	1555
McClave, William, Scranton, Pa. Grate for stoves and furnaces.....	272,733	Feb. 20	1448	406	23	708
McClave, William, Scranton, Pa. Steam-blower.....	281,774	July 24	1815	496	24	335
McCleary, Frank O., Washington, D. C. Scarf.....	278,444	May 29	2406	656	23	2069
McCleary, John, et al. (See Carter and Smith, assignors.)						
McCleary, Samuel, Watervliet Centre, N. Y. Combination numerical instruction puzzle.....	284,037	Aug. 28	1919	537	24	870
McCleary, James B. (See Page and McCleary.)						
McClellan, John W. (See Romans, John W., assignor.)						
McClellan, William, East Saginaw, Mich. File-cutting machine.....	276,698	May 1	208	53	23	1600
McClelland, John A., Louisville, Ky. Pyroxyline fabric.....	271,493	Jan. 30	2077	598	23	415

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McClelland, John A., Louisville, Ky. Veneering or covering articles with pyroxyline compounds, &c.	271,494	Jan. 30	2078	598	23	415
McClelland, John A., Louisville, Ky. Apparatus for veneering or covering articles with pyroxyline, &c.	271,495	Jan. 30	2080	599	23	415
McClelland, John A., Louisville, Ky. Mold for veneering or covering articles with pyroxyline or other plastic material.	271,496	Jan. 30	2082	599	23	416
McClelland, Stephen. (See Nix and McClelland.)						
McClelland, Stephen, Paris, Tex. Combined chair, cot, and bed	282,343	July 31	2546	698	24	464
McClelland, Thomas, Mattoon, Ill. Revolving harrow	290,781	Dec. 25	1796	496	25	1225
McClellen, J. W., <i>et al.</i> (See Collings, William, assignor.)						
McClinchic, Uriah. (See Bulter and McClinchic.)						
McClintick, Jackson, Millbury, Ohio. Ironing-board	275,836	Apr. 17	1271	349	23	1458
McClintock, George W. (See Bray and McClintock.)						
McClintock, George W., Boston, Mass. Sleigh-bell	282,344	July 31	2547	698	24	465
McClintock, J. Y. (See Gibbs and McClintock.)						
McCloskey, John, Boston, Mass. Dynamometer	287,841	Nov. 6	61	18	25	518
McCloskey, Riley, and D. J. Coleman, Walla Walla, Wash. Ter.; said McCloskey assignor to said Coleman. Buckle	280,319	June 26	2095	589	23	2505
McCloskey, Riley, and D. J. Coleman, Walla Walla, Wash. Ter.; said Coleman assignor to said McCloskey. Sash-fastener	282,005	July 24	2095	574	24	383
McClure, Charles Y. (See Pasmore and McClure.)						
McClure, Christopher C., <i>et al.</i> (See Armistead, Thomas J., assignor.)						
McClure, James H., Martin's Ferry, Ohio. Button-fastener	281,899	July 24	1974	540	24	363
McClure, Samuel, Brooke township, Lambton county, Ontario, Canada. Grain-sieve	271,497	Jan. 30	2083	599	23	416
McCollum, James C., assignor to H. H. Bixby, Los Angeles, Cal. Horse and cattle fetter	283,503	Aug. 21	1256	352	24	738
McCollum, Matthew C., Espy, assignor to Atlas Manufacturing Company, Danville, Pa. Step-ladder	283,004	Aug. 14	633	179	24	619
McComb, Albert G. and L. H., Columbus Grove, Ohio. Plant-protector	288,251	Nov. 13	571	159	25	616
McComb, Linden H. (See McComb, Albert G. and L. H.)						
McConnell, Daniel M. (See McConnell, Fleming, assignor.)						
McConnell, Fleming, assignor of one-half to D. M. McConnell, Florence, Pa. Hog-nose ringer	275,241	Apr. 3	458	127	23	1304
McConnell, George W., <i>et al.</i> (See Corbin, Elijah H., assignor.)						
McConnell, H. H. (See Sage, Eugene, assignor.)						
McConnell, Horace C., Rock Island, Ill. Harness-saddle	273,118	Feb. 27	1942	545	23	802
McConnell, James, and E. H. Taylor, Vassar, Mich. Tongue-support	289,013	Nov. 27	1529	423	25	798
McConnell, James H., and M. W. Chandler, Pultney, N. Y. Basket-handle	281,900	July 24	1975	541	24	363
McConnell, John, Cleveland, Ohio. Oil-stove	276,187	Apr. 24	1692	467 468	23	1540
McConnell, Joseph T. (See McTighe and McConnell.)						
McConnell, Joseph T., Pittsburg, Pa. Electric-arc lamp	288,826	Nov. 20	1303	357	25	749
McConnell, Mark M., <i>et al.</i> (See Corbin, Elijah H., assignor.)						
McConnell, Robert, Omaha, Neb. Pipe-coupling	290,446	Dec. 18	1350	373	25	1139
McConnell, Robert B., assignor to L. W. Emery, Paducah, Ky. Oil or liquid can	270,685	Jan. 16	1066	306	23	224
McConnell, William, Washington, R. I. Winding-on mechanism for spinning-mules	286,460	Oct. 9	849	230 231	25	165
McConway, William, Pittsburg, Pa. Car-coupling	281,901	July 24	1976	541	24	363
McCook, Joshua P., assignor of one-third to J. H. Bruce, Richmond, Va. Balanced slide-valve	289,678	Dec. 4	380	109	25	954
McCool, Horace B., Pottsville, Pa. Game apparatus to imitate base-ball	270,963	Jan. 23	1411	406	23	292
McCool, William A., Perrysville, Ohio. Making guide and sign boards	286,045	Oct. 2	327	91	25	60
McCord, Hercules, St. Louis, Mo. Banjo	279,172	June 12	709	193	23	2254
McCord, Hercules, St. Louis, Mo. Banjo	279,173	June 12	709	193	23	2254
McCord, Hercules, St. Louis, Mo. Banjo	283,352	Aug. 14	1065	300	24	699
McCord, John, assignor of one-half to C. P. Heyward, New York, N. Y. Press for stearine, &c.	275,926	Apr. 17	1374	378	23	1477
McCormack, James J., Boston, Mass. Spring-bed	270,453	Jan. 9	760	223	23	157
McCormack, Charles W., Cleveland, Ohio. Setting thimbles for hanging grindstones	283,630	Aug. 21	1394	390	24	765
McCormick, David A., assignor of one-half to L. Mann, Detroit, Mich. Electrical annunciator	284,878	Sept. 11	882	247	24	1061
McCormick, George. (See Caviness and McCormick.)						
McCormick Harvesting Machine Company. (See Baker, William R., assignor.)						
McCormick Harvesting Machine Company. (See Baker and Eridmore, assignors.)						
McCormick Harvesting Machine Company. (See Jenkins, Edward W., assignor.)						
McCormick Harvesting Machine Company. (See Eridmore, Henry E., assignor.)						
McCormick Harvesting Machine Company. (See Tibbets, John F., assignor.)						
McCormick, James S., Kansas City, Mo. Combined can soldering and bottoming machine	270,452	Jan. 9	760	223	23	157
McCosh, Thompson, Burlington, Iowa. Machine for attaching wire barbs to fence-wire	290,595	Dec. 18	1546	426 427	25	1174
McCourtie, William H., <i>et al.</i> (See Wolfe, Horace S., assignor.)						
McCoy, Davenport C., Jacksonville, Ill. Bridge-bit attachment	278,576	May 29	2559	698	23	2096
McCoy, Elijah, assignor to H. C. and C. C. Hodges, Detroit, Mich. Lubricator	270,238	Jan. 9	489	144	23	106
McCoy, George, New Dungeness, Wash. Ter. Sawing-machine	284,038	Aug. 28	1920	537	24	870
McCoy, George B., Stamper's Creek, Ind. Double-action pump	276,614	May 1	85	23	23	1642
McCoy, John A., Fall River, Mass. System of electric lighting	287,400	Oct. 23	1596	439	25	308
McCoy, John A., Fall River, assignor to C. W. Clifford, trustee, New Bedford, Mass. Telephone-circuit	278,351	May 29	2292	626 627	23	2048
McCoy, Nathan, Manchester, N. H. Composition for roofing, &c.	275,507	Apr. 10	842		23	1378
McCracken, George B., Willimantic, Conn. Steam-trap	277,045	May 8	671	175	23	1747
McCracken, George B., and S. Hamer, Willimantic, Conn. Spindle-bearing for spinning-frames	277,312	May 8	998	268	23	1804
McCrary, Ben, Hot Springs, Ark. Station-indicator	274,355	Mar. 20	1430	392	23	1096
McCray, Benjamin F., assignor to himself and A. Nitsche, Hamlin, Kans. Sulky-plow	282,207	July 31	2376	654	24	434
McCready, Andrew, and C. S. Alshouse, Banksville, Pa. Clothes-pounder	289,292	Nov. 27	1866	518	25	860
McCready, William H. (See Temple, Henry, assignor.)						
McCreary, Abram M., Brooklyn, N. Y. Apparatus for steaming petroleum-oil	283,005	Aug. 14	635	179	24	619
McCreary, Albertus. (See Swett and McCreary.)						
McCreary, John. (See Smith and McCreary.)						
McCreary, John, Cohoes, and D. R. Smith, Troy, assignors of one-half to G. H. Billings and E. W. Carter, Cohoes, N. Y. Machine for radial crimping	284,749	Sept. 11	729	204	24	1034
McCreary, John, Cohoes, and D. R. Smith, Troy, assignors of one-half to G. H. Billings and E. W. Carter, Cohoes, N. Y. Machine for radial crimping	285,424	Sept. 25	1554	437 438	24	1192
McCreedy, George D., Amsterdam, N. Y. Sewing-machine attachment	287,948	Nov. 6	201	58	25	542



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McCreery, James W., <i>et al.</i> (See De Witt, James M., assignor.)						
McCreery, Samuel F., <i>et al.</i> (See De Witt, James M., assignor.)						
McCreight, Alexander, Tranquility, Ohio. Scroll-sawing machine	272,070	Feb. 13	604	164	23	556
McCrillis, J. Wilson, Providence, R. I. Furniture-nail	270,239	Jan. 9	490	145	23	106
McCue, Henry, St. Louis, Mo. Kiln for burning brick, tiles, &c	258,466	Nov. 13	861	233	25	665
McCue, James J., Nashville, Tenn. Bridle	273,927	Apr. 17	1376	379	23	1478
McCulloch, John, and W. Cook, assignors to W. Cook & Sons, Glasgow, county of Lanark, Scotland. Railway-wagon	272,967	Feb. 27	1758	491	23	769
McCulloch, Wellington. (See Schureman and McCulloch.)						
McCullough, William, New York, N. Y. Gage	270,091	Jan. 2	303	90	23	62
McCully, John. (See Miles, Hollon F., assignor.)						
McCully, John, assignor to himself and H. F. Miles, Chicago, Ill. Ornamental mantel, ceiling, &c	280,492	July 3	196	52	24	36
McCully, Robert, Philadelphia, Pa. Grinding-mill	274,209	Mar. 20	1243	342	23	1063
McCully, Robert, Philadelphia, Pa. Grinding-mill	274,210	Mar. 20	1244	342 343 416 417	23	1063
McCully, Robert, Philadelphia, Pa. Ore crusher and pulverizer	277,763	May 15	1532	416 417	23	1903
McCurly, Robert, Philadelphia, Pa., assignor of one-fourth to Gunsight Consolidated Silver Mining Company of Arizona. Ore crusher and pulverizer	274,956	Apr. 3	95	26, 27	23	1241
McCurly, William, <i>et al.</i> (See Lattimer, Francis, assignor.)						
McCurdy, David, Ottawa, Ohio. Purifying water, aging and purifying vinous and spirituous liquors, and purifying the unfermented juices of fruits	285,825	Oct. 2	54	17	25	11
McCurdy, David, assignor to Ottawa Gate Manufacturing Company, Ottawa, Ohio. Hinge	282,004	July 24	2094	574	24	383
McCurdy, James C., San Francisco, Cal. Dry-ore separator	278,160	May 22	2010	553	23	1992
McCurdy, Robert, Kenton, Ohio. Tablet and tablet-cover	283,006	Aug. 14	636	180	24	619
McCurdy, Thomas B., Lancaster, Tex. Door-check	280,055	June 26	1784	500	23	2450
McCurdy, Thomas B., Lancaster, Tex. Weather-strip	282,208	July 31	2377	654	24	434
McCurry, Jefferson A., Whitesville, Ga. Leveling-instrument	280,203	June 26	1946	547	23	2479
McDaniel, John F., Letart, W. Va. Singletree	279,410	June 12	1009	220	23	2303
McDaniel, Joseph, Jackson Centre, Ohio. Corn-planter	272,291	Feb. 13	873	244	23	604
McDaniel, Robert M., Lafayette, Ind. Boring-machine	290,339	Dec. 18	1202	337	25	1114
McDaniel, William H., and U. Perrine, Wichita, Kans. Vehicle-spring	279,783	June 19	1440	403	23	2384
McDaniel, William H., U. Perrine, and F. S. Peck, Wichita, Kans. Vehicle-spring	280,204	June 26	1946	547	23	2479
McDermott, Charles J., Sandy Hook, Conn. Pantaloen-protector	271,591	Feb. 6	367	101	23	505
McDermott, James H. (See Gleason, John M., assignor.)						
McDermott, James H. (See Ward, John H., assignor.)						
McDermott, John, assignor to G. E. Harpham, San Francisco, Cal. Shell-extractor	290,255	Dec. 18	1090	304	25	1095
McDermott, Joseph A., assignor of three-eighths to J. H. Caswell, Lynn, Mass. Station-indicator	281,383	July 17	1300	360	24	243
McDermott, Patrick, Memphis, Tenn. Cotton-seed huller	281,902	July 24	1978	542	24	363
McDonald, Alexander, Cambridge, Mass., assignor to McDonald Stone Cutting Machine Company, Nashua, N. H. Machinery for supporting and revolving a disk-shaped cutter	276,260	Apr. 24	1782	495	23	1556
McDonald, Alexander, Cambridge, Mass., assignor to McDonald Stone Cutting Machine Company, Nashua, N. H. Machine for dressing stone	277,914	May 22	1709	467	23	1940
McDonald, Alexander, Cambridge, Mass., assignor to McDonald Stone Cutting Machine Company, Nashua, N. H. Cutter-holder for stone-dressing machines	278,352	May 29	2293	627 459 460	23	2049
McDonald, Alexander E., assignor to W. P. Johnston, Brooklyn, N. Y. Infant's seat	289,115	Nov. 27	1656	460	25	820
McDonald, Augustin T., Shelton, Conn. Saw-guard	287,949	Nov. 6	202	58	25	542
McDonald, Dennis, Niagara Falls, N. Y. Wash-boiler	273,866	Mar. 13	814	220	23	981
McDonald, Fred C., St. Louis, Mo. Station-indicator	285,289	Sept. 18	1382	391	24	1157
McDonald, Gilbert, assignor to himself and J. A. Lucas, Georgetown, N. Mex. Ter. Compound metal-working machine	288,827	Nov. 20	1306	358	25	750
McDonald, Hugh, assignor to Williams Manufacturing Company, Plattsburg, N. Y. Sewing-machine	270,192	Jan. 2	428	124	23	87
McDonald, Hugh, Plattsburg, N. Y., assignor of one-half to D. Graham, Montreal, Canada. Caster	282,099	July 31	2223	611	24	410
McDonald, John. (See Wilton, Benjamin A., assignor.)						
McDonald, John D., Woburn, Mass. Machine for treating leather	270,964	Jan. 23	1412	406	23	292
McDonald, John D., and W. Beggs, Woburn, Mass. Leather-splitting machine	279,659	June 19	1504	363	23	2360
McDonald, Joseph H., New York, N. Y. Machine for mixing and working olcomargarine	270,454	Jan. 9	761	223	23	158
McDonald, M. Charles, Minersville, Pa. Device for increasing the speed of ships, &c	280,646	July 3	370	103	24	65
McDonald, Michael E., Scranton, Pa. Car-coupling	286,622	Oct. 16	1063	286	25	209
McDonald, Peter, Yonkers, N. Y. Cutter and holder for fruits and flowers	289,116	Nov. 27	1658	460	25	620
McDonald, Ranald T., Fort Wayne, Ind. Overalls	280,056	June 26	1785	501	23	2450
McDonald, Samuel, Braddock, Pa. Manufacturing Bessemer steel	287,842	Nov. 6	62		25	518
McDonald Stone Cutting Machine Company. (See McDonald, Alexander, assignor.)						
McDonald, Theodore A., New Albany, Ind. Gage for rip-saws	272,734	Feb. 20	1449	406	23	709
McDonald, Thomas A. (See Henderson and McDonald.)						
McDonel, Daniel A., assignor to himself and E. W. Porter, Detroit, Mich. Brush	273,867	Mar. 13	815	220	23	982
McDonnell, William C., and A. L. Anderson, Montello, Wis. Millstone-pick	280,647	July 3	371	103	24	65
McDonough, Thomas, Montclair, N. J. Hoist or elevator	278,445	May 29	2408	656	23	2069
McDonough, Thomas, Montclair, N. J. Hot-air engine	278,446	May 29	2408	656 657	23	2069
McDorman, John C., Gilbert's Mills, Ohio. Harrow	281,005	July 10	928	259	24	171
McDougald, Dougald, near Fayetteville, N. C. Rein-holder for vehicles	287,556	Oct. 30	2246	609	25	437
McDougall, Harry C. (See Baldwin, James S., assignor.)						
McDougall, Hugh, New York, N. Y. Manufacture of thimbles	274,356	Mar. 20	1430	392	23	1096
McDougall, James, New York, N. Y. Attachment for plows	280,493	July 3	197	52	24	36
McDougall, Samuel T., Brooklyn, N. Y. Oil-reservoir for oil-stoves, &c	287,557	Oct. 30	2247	610	25	437
McDougall, Samuel T., Brooklyn, N. Y. Apparatus for concentrating sulphuric acid	289,293	Nov. 27	1867	518	25	860
McDougall, Samuel T., Brooklyn, assignor of one-half to W. A. Barnes, New York, N. Y. Hollow corkscrew	285,143	Sept. 18	1222	343	24	1127
McDowell, Frank D., Clinton, Iowa. Carriage-seat	274,131	Mar. 20	1143	315	23	1045
McDowell, Frederick H., New York, N. Y. Ore-crusher	286,723	Oct. 16	1191	321	25	231
McDowell, Irvin. (See McDowell, Malcolm, assignor.)						
McDowell, James A. (See Mason, Smalley, and Schofield, assignors.)						
McDowell, Malcolm, Chicago, Ill. Blank for wheel-spokes, harrow-teeth, and similar articles	283,410	Aug. 21	1138	322	24	718
McDowell, Malcolm, Chicago, Ill., assignor of one-half to I. McDowell, San Francisco, Cal. Device for fastening the teeth of harrows and hay-rakes	286,213	Oct. 9	530	145	25	108

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McDowell, Samuel J., assignor of one-half to J. Knight, Boston, Mass. Portable oven.....	275,784	Apr. 10	1196	328	23	1438
McDowell, William L., Lower Merion, Pa. Ornament for stoves.....	280,205	June 26	1947	547	23	2479
McDowell, William L., Lower Merion, Pa. Stove plate and frame fastener.....	281,096	July 10	929	259	24	171
McElhane, Samuel, Polo, Ill. Buggy-bow spring.....	272,071	Feb. 13	606	164	23	557
McElheny, William C. (See Sutch and McElheny.)						
McElhose, Thomas S., Paterson, N. J. Stop-motion for machines for doubling silk and other fibers.....	289,117	Nov. 27	1659	460	25	890
McElroy, James H., Middletown, N. Y. Fire-escape.....	271,498	Jan. 30	2084	599	23	416
McElroy, Patrick J., East Cambridge, Mass. Syringe.....	288,828	Nov. 20	1308	358	25	750
McElroy, William, Brooklyn, N. Y. Feed-water injector.....	275,063	Apr. 3	237	65, 66	23	1266
McElroy, William J., Pittsburg, Pa. Electric switch-board.....	278,353	May 29	2294	627	23	2049
McElroy, William J., Pittsburg, Pa., assignor to Standard Cable Company, of New Jersey. Testing lead-covered cables.....	284,137	Aug. 28	2046	568 } 569 }	24	892
McElroy, William J., Pittsburg, Pa., assignor to Standard Cable Company, of New Jersey. Testing electric cables.....	284,138	Aug. 28	2049	569	24	892
McElroy, William J., Pittsburg, Pa., assignor to Standard Cable Company, of New Jersey. Testing-box for underground electric cables.....	284,139	Aug. 28	2051	569	24	892
McElvain, James W. (See Trott and McElvain.)						
McEven, Joseph C., Lochloosa, Fla. Weather-board gage.....	280,494	July 3	198	52	24	36
McFadden, Patrick, Philadelphia, Pa. Harness-terret.....	282,743	Aug. 7	328	93	24	557
McFadden, Patrick, Philadelphia, Pa. Harness-saddle.....	284,039	Aug. 28	1921	537	24	871
McFarland, Andrew, <i>et al.</i> (See Wöhnlich, Louis J., assignor.)						
McFarland, Horace E., <i>et al.</i> (See House, Alfred B., assignor.)						
McFarland, James G., <i>et al.</i> (See Hanson, Freeman, assignor.)						
McFarland, Samuel G., assignor to J. L. Mott Iron Works, New York, N. Y. Water-closet.....	287,558	Oct. 30	2248	610	25	438
McFarland, William, <i>et al.</i> (See Wöhnlich, Louis J., assignor.)						
McFarlane, Hugh, Chicago, Ill. Hound-socket for vehicles.....	277,313	May 8	999	268	23	1804
McFarlen, William M., Garrison, Iowa. Washing-machine.....	272,292	Feb. 13	873	244	23	604
McGaffey, Henry H. (See Marshall, William S., assignor.)						
McGaffey, Ives W., Chicago, Ill. Hose-reel.....	286,046	Oct. 2	328	91	25	60
McGaffey, Ives W., assignor to E. B. Preston, Chicago, Ill. Railway-velocipede.....	286,023	Oct. 16	1064	286	25	209
McGahy, Alexander R., Brooklyn, N. Y. Machine for scouring and polishing stone.....	274,509	Mar. 27	1655	460	23	1141
McGann, Thomas F., Boston, Mass. Cash-carrier.....	283,007	Aug. 14	636	180	24	620
McGaughey, Samuel N., Minneapolis, Minn. Combined cane and camp-chair.....	280,843	July 10	631	177	24	117
McGhee, William T., assignor of one-half to F. P. Snyder, Chillicothe, Mo. Attachment for corn-planters.....	290,447	Dec. 18	1351	373	25	1140
McGill, George W., New York, N. Y. Staple-fastener.....	285,640	Sept. 25	1808	514	24	1240
McGill, George W., New York, N. Y. Pin and stud.....	285,641	Sept. 25	1808	515	24	1240
McGill, George W., New York, N. Y. Paper-fastener.....	286,143	Oct. 2	444	121	25	83
McGill, George W., New York, N. Y. Insulated electric conductor.....	287,766	Oct. 30	2544	684	25	493
McGinley, James, Chicago, Ill. Urinal.....	276,261	Apr. 24	1783	496	23	1556
McGinley, James, Chicago, Ill. Boiler-cleaner.....	286,724	Oct. 10	1192	321	25	231
McGinley, James, Chicago, Ill. Water-back and boiler-fitting for ranges.....	289,647	Dec. 11	599	166	25	998
McGinley, James, Chicago, Ill. Flushing-valve.....	290,256	Dec. 18	1091	304	25	1095
McGinnis, William T., New York, N. Y. Dumb-bell.....	272,144	Feb. 13	698	191	23	573
McGinnis, William T., New York, N. Y. Amalgamator.....	274,211	Mar. 20	1247	343	23	1064
McGinnis, William T., New York, N. Y. Electrical exercising apparatus.....	281,097	July 10	929	259	24	171
McGirr, Hugh G., Auburn, N. Y. Axle-hox.....	272,293	Feb. 13	874	245	23	604
McGladery, David, Havilandville, Ky. Rein-holder.....	279,411	June 12	1010	280	23	2303
McGough, Frank. (See Sheridan, Cornelius A., assignor.)						
McGovern, Bernard, Bridgeport, assignor of one-half to E. S. Smith, Waterbury, Conn. Thill-coupling.....	290,782	Dec. 25	1797	496	25	1225
McGovern, Bernard, Bridgeport, assignor of one-half to E. S. Smith, Waterbury, Conn. Thill-coupling.....	290,783	Dec. 25	1798	496	25	1225
McGowan, Frank L. (See Wood, John H., assignor.)						
McGowan, Guy. (See Brown and McGowan.)						
McGrann, Bernard. (See Solis, John H., assignor.)						
McGraw, John S., Richmond, Ind. Car-coupling.....	272,294	Feb. 13	875	245	23	605
McGregor, Rob Roy, assignor of three-fourths to L. Hill, Jr., J. Townsend, and C. B. Simonton, Covington, Tenn. Faucet.....	270,550	Jan. 9	890	258	23	184
McGregor, William, administrator. (See Flenniken, Theodore M.)						
McGrory, Thomas, assignor of one-half to H. Banes, Philadelphia, Pa. Apparatus for ventilating, heating, and cooling buildings.....	284,140	Aug. 28	2053	569	24	892
McGuigan, Anthony, Delavan, Minn. Implement for handling coils of wire.....	288,467	Nov. 13	862	233	25	605
McGuinness, John P., Providence, R. I. Saddle for top-rolls of spinning-machines.....	284,040	Aug. 28	1922	538	24	871
McGuire, John, Milwaukee, Wis. Water-closet valve.....	274,628	Mar. 27	1795	499	23	1166
McGuire, Michael, Baldwinsville, N. Y. Stove-pipe thimble.....	281,710	July 24	1726	469	24	319
McGuire, Patrick W., South Bend, Ind. Felly-plate.....	285,290	Sept. 18	1384	391	24	1158
McHale, Edward, <i>et al.</i> (See Dougherty, Michael J., assignor.)						
McHugh, Samuel S. (See Rigby and McHugh.)						
McHugh, Timothy, Cambridge, assignor to himself and Ward & Curley, Boston, Mass. Water-closet valve.....	280,648	July 3	372	104	24	66
McIlhenny, George A., Washington, D. C. Hydraulic main for gas-works.....	282,345	July 31	2548	698 } 699 }	24	465
McIlhenny, George A., Washington, D. C. Gas-retort furnace.....	284,458	Sept. 4	363	100 } 101 }	24	965
McIlravy, Alexander, Martin's Ferry, Ohio. Churn-motor.....	285,291	Sept. 18	1385	391	24	1158
McIlroy, Thomas, Brooklyn, N. Y. Printing-press.....	285,826	Oct. 2	55	17	25	12
McIlvain & Spiegel. (See Spiegel, William, assignor.)						
McIlwain, Henry C., Null's Mills, Ind. Clothes-washer.....	284,459	Sept. 4	366	101	24	966
McIntire, Charles. (See Lockwood and McIntire.)						
McIntire, Charles, Newark, N. J. Electric wire.....	278,811	June 5	180	52	23	2153
McIntire, John T., Purdy, Tenn. Cultivator.....	278,577	May 29	2559	698	23	2096
McIntosh, Charles, Jersey City, N. J. Fire-mask.....	276,699	May 1	209	54	23	1660
McIntosh, Hugh, assignor of one-half to M. McIntosh, Decorah, Iowa. Wire-stretcher.....	284,969	Sept. 11	990	279	24	1081
McIntosh, James D., Milwaukee, Wis. Cloth-steep for copying-presses.....	284,460	Sept. 4	366	102	24	966
McIntosh, Lyman D., Chicago, Ill. Galvanic battery.....	273,751	Mar. 13	660	177	23	955
McIntosh, Lyman D., Chicago, Ill. Microscope.....	273,752	Mar. 13	661	177	23	955
McIntosh, Monroe. (See McIntosh, Hugh, assignor.)						
McIntyre, Augustin W., assignor, by mesne assignments, to American Car Wheel Grinding Company, Chicago, Ill. Machine for grinding car-wheels.....	288,717	Nov. 20	1167	320 } 321 }	25	725
McIntyre, Augustin W., assignor, by mesne assignments, to American Car Wheel Grinding Company, Chicago, Ill. Grinding-machine.....	288,718	Nov. 20	1172	321 } 322 }	25	725



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McIntyre, Ezra B., Flint, Mich. Tobacco-pail cover.....	280,844	July 10	632	178	24	117
McIntyre, James, Boston, Mass. Folding shipping crate or box .....	276,850	May 1	405	107	23	1697
McIntyre, James, Boston, Mass. Skylight .....	283,913	Aug. 28	1742	492		
McIntyre, James, Boston, assignor of one-half to H. Loring, South Boston, Mass. Hatch-cover .....	282,100	July 31	2224	611	24	411
McIntyre, John M. (See Cook, George W., assignor.)						
McIntyre, John T., and J. G. Parsons, Oshkosh, Wis. Vehicle-spring .....	276,700	May 1	210	54	23	1660
McIntyre, William. (See McLeod, Norman M., assignor.)						
McIver, James, Houston, Tex. Baling-press.....	276,615	May 1	85	23, 24	23	1642
McKay, Alexander, Louisville, Ala. Cotton-press .....	290,696	Dec. 25	1681	463	25	1203
McKay & Copeland Lasting Machine Company. (See Brock, Matthias, assignor.)						
McKay, Gordon. (See Hoadley, John C., assignor.)						
McKay, Gordon, <i>et al.</i> , trustees. (See Goddu, Louis, assignor.)						
McKay, Gordon, <i>et al.</i> , trustees. (See Hopkins, William P., assignor.)						
McKay, Gordon, Newport, R. I., and J. C. Hoadley, Boston, Mass.; said Hoadley assignor to said McKay. Sole-sewing machine .....	272,735	Feb. 20	1450	407	23	709
McKay, Jasper N., Grand Junction, Mich. Gate .....	289,433	Dec. 4	73	21	25	899
McKay, John L., Franklin, Tenn. Harrow .....	271,499	Jan. 30	2085	600	23	416
McKay Metallic Fastening Association. (See Goddu, Louis, assignor.)						
McKean, John, New York, N. Y. Drawers.....	289,679	Dec. 4	381	109	25	954
McKee, Frank L., Plymouth, Pa. Rack for graduated glass measures, &c.....	278,161	May 22	2012	554	23	1992
McKee, Joseph A., <i>et al.</i> (See Gates, George W., assignor.)						
McKee, Leander H. (See Todd and McKee.)						
McKee, Robert M., Greeneville, Tenn. Vibrating propeller .....	282,656	Aug. 7	217	63, 64	24	537
McKeen, William N. (See Morlan and McKeen.)						
McKeen, H. Clay, <i>et al.</i> (See Gunkel, Winfield O., assignor.)						
McKevoy, William L., Youngstown, Ohio. Sash-fastener .....	277,591	May 15	1331	357	23	1866
McKenna, Dolly A., <i>et al.</i> (See McKenna, Robert, assignor.)						
McKenna, James T., Reading, Pa. Apparatus for washing out locomotive-boilers.....	273,753	Mar. 13	662	177	23	955
McKenna, Mand B., <i>et al.</i> (See McKenna, Robert, assignor.)				178		
McKenna, Robert, assignor to D. A. McKenna, White's Station, Tenn., and M. B. McKenna, Louisville, Ky. Packing for pistons .....	277,764	May 15	1535	417	23	1903
McKenna, Thomas. (See Page and Carley, assignors.)						
McKenna, William S., Pittsburg, Pa. Device for cooling furnace-fronts.....	281,098	July 10	930	260	24	171
McKenna, William S., assignor to Harbison & Walker, Pittsburg, Pa. Fire-brick .....	274,357	Mar. 20	1431	392	23	1096
McKenney, Almeron, Chicago, Ill. Tubular railway-rail .....	277,765	May 15	1536	418	23	1903
McKenney, Almeron, Chicago, Ill. Railway-rail .....	277,766	May 15	1538	418	23	1903
McKenzie & Harris, T. B., <i>et al.</i> (See Atkinson, Henry C., assignor.)						
McKenzie, James, Brooklyn, N. Y. Stylographic pen .....	281,903	July 24	1980	542	24	363
McKenzie, James W., Dooly County, and J. F. Powell, Macon County, Ga. Combined seed-planter and fertilizer-distributor .....	286,047	Oct. 2	330	92	25	61
McKenzie, John H., and J. Keller, Versailles, Ky. Two-wheeled vehicle .....	278,720	June 5	60	13	23	2135
McKeown, John H., Salem, Ohio. Shaking-grate .....	280,680	Dec. 4	381	109	25	954
McKevit, Anna, Chicago, Ill. Button-fastener .....	269,570	Jan. 2	56	18	23	13
McKevit, Anna, Chicago, Ill. Button and button-fastener .....	272,736	Feb. 20	1452	407	23	709
McKevit, Anna, Chicago, Ill. Separable button .....	272,968	Feb. 27	1759	492	23	769
McKibbin, John, Lima, Ohio. Neck-yoke coupling .....	290,357	Dec. 18	1092	304	25	1096
McKillen, Benjamin, Verona Mills, Mich. Bolt-header .....	290,985	Dec. 11	884	251	25	1050
McKim, George W., Martin's Ferry, assignor of one-half to C. W. Thorngate, Freeport, Ohio. Stave-cutter .....	276,262	Apr. 24	1784	496	23	1556
McKimm, Edgar N., assignor to himself and T. V. Whippell, Lathrop, Mo. Churn .....	279,100	June 5	606	165	23	2227
McKinley, Andrew, St. Louis, Mo. Stone pavement .....	278,031	May 22	1855	506	23	1964
McKinney, Walter S., Binghamton, N. Y. Machine for boring brush-blocks .....	276,188	Apr. 24	1693	468	23	1540
McKinney, Walter S., Binghamton, N. Y. Heater and purifier for feed-water .....	281,775	July 24	1817	496	24	335
McKinniss, Lewis. (See Litterer and McKinniss.)						
McKinniss, Lewis, and F. Litterer, Decatur, Ill. Check-rower for corn-planters.....	287,454	Oct. 30	2118	575	25	411
McKinnon, Daniel, Lowell, Mass. Pedestal for chairs .....	283,131	Aug. 14	782	220	24	646
McKinnon, James D., Portland, Oreg. Combined harrow, roller, &c.....	289,118	Nov. 27	1661	460	25	821
McKinnon, James W., New York, N. Y. Carpet-stretcher .....	272,295	Feb. 13	876	245		
McKinnon, Lachlan E., St. Catharines, Ontario, Canada. Dash-board .....	279,412	June 12	1010	280	23	2303
McKittrick, David L., Sr. (See Odell and McKittrick.)						
McKnight, John W., Washington, D. C. Cement and concrete pavement.....	271,582	Jan. 30	2181	627	23	432
McLachlan, John, Chicago, Ill. Car-truck .....	280,386	July 3	57	15, 16	24	13
McLain, Robert B., Wheeling, W. Va. Rotary gas scrubber and exhauster .....	282,346	July 31	2551	699	24	465
McLane, Samuel B., <i>et al.</i> (See Hall, Thomas G., assignor.)						
McLane, Samuel B., assignor to himself and I. N. Cook, Yonkers, N. Y. Tool for grasping and holding .....	275,341	Apr. 3	604	163	23	1328
McLaren, Henry. (See McLaren, John and H.)						
McLaren, John and H., Leeds, county of York, England. Traction-engine .....	289,294	Nov. 27	1868	519	25	860
McLaughlin, James, Ovid, Mich. Running-gear for vehicles .....	275,400	Apr. 10	706	188	23	1356
McLaughlin, James C., Cincinnati, Ohio. Bath-room .....	275,837	Apr. 17	1271	349	23	1458
McLaughlin, James C., Cincinnati, Ohio. Water-closet .....	275,838	Apr. 17	1272	350	23	1458
McLaughlin, James E., <i>et al.</i> (See Bedbury, George W., assignor.)						
McLaughlin, John, Brooklyn, N. Y. Emery-wheel .....	278,578	May 29	2560	699	23	2096
McLaughlin, John, San Rafael, Cal. Thill-coupling .....	284,750	Sept. 11	731	204	24	1035
McLaughlin, Sheldon & Co. (See Ames, David J., assignor.)						
McLean, Christopher W., Newberne, N. C. Electrical switch-board.....	276,263	Apr. 24	1785	496	23	1556
McLean, Donald M., Boston, Mass. Bailed hollow ware .....	273,119	Feb. 27	1943	545	23	802
McLean, James H. (See Coloney, Myron, assignor.)						
McLean, James H. (See Smallwood, George T., Jr., assignor.)						
McLean, James H., Lawrenceburg, Ind. Lock for rocking-chairs, cribs, &c.....	278,162	May 22	2013	554	23	1992
McLean, James H., St. Louis, Mo. Cartridge.....	282,550	Aug. 7	91	27	24	516
McLean, James H., St. Louis, Mo. Machine-gun .....	282,551	Aug. 7	92	27, 28	24	516
McLean, James H., St. Louis, Mo. Magazine-gun .....	282,552	Aug. 7	94	28	24	516
McLean, James H., St. Louis, Mo. Machine-gun .....	282,553	Aug. 7	97	28, 29	24	517
McLean, James H., St. Louis, Mo. Magazine-gun .....	282,554	Aug. 7	99	30	24	517
McLean, James H., St. Louis, Mo. Breech-loading fire-arm .....	290,905	Dec. 25	1948	538	25	1251
McLean, James H., St. Louis, Mo., and M. Coloney, New Haven, Conn.; said Coloney assignor to said McLean. Breech-loading composite gun .....	282,548	Aug. 7	87	24	24	515
McLean, James H., St. Louis, Mo., and M. Coloney, New Haven, Conn.; said Coloney assignor to said McLean. Machine-gun .....	282,549	Aug. 7	88	26, 27		

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McLean, Samuel M., Modesto, Cal. Construction of jails, &c.	272,296	Feb. 13	877	245	23	605
McLean, William, Los Angeles, Cal. Laying pavements	289,295	Nov. 27	1870	519	25	861
McLean, William J., Jackson, La. Car-coupling	277,915	May 22	1711	467	23	1940
McLean, William J., Indianapolis, Ind. Steam-actuated valve	285,827	Oct. 2	56	17	25	12
McLellan, Angus, Portland, Oreg. Screw-driver	280,845	July 10	633	178	24	118
McLellan, William W., Newcastle, New Brunswick, Canada. Telegraph and semaphore signal	274,212	Mar. 20	1248	344	23	1064
McLellan, William W., Newcastle, New Brunswick, Canada. Apparatus for operating semaphore-signals	285,497	Sept. 25	1635	460	24	1207
McLendon, Elijah W., Martin's Station, Ala. Whiffletree-iron	271,093	Jan. 23	1567	451	23	317
McLennan, Kenneth, Berkeley, Cal. Grafting-tool	285,910	Oct. 2	167	48	25	33
McLeod Air Railroad Signal Company. (See McLeod, John S., assignor.)						
McLeod, John K., London, Ontario, Canada. Car-coupling	289,681	Dec. 4	382	110	25	954
McLeod, John S., assignor to McLeod Air Railroad Signal Company, Boston, Mass. Automatic railway-signal	275,064	Apr. 3	239	67	23	1267
McLeod, Norman M., assignor of one-half to W. McIntyre, Cambridge, Mass. Vise	277,592	May 15	1332	357	23	1866
McLeran, James B., Oshkosh, Wis. Cord-knotter for grain-binders	270,324	Jan. 9	591	174	23	125
McLewee, William S., New York, N. Y. Lamp	290,340	Dec. 18	1203	337	25	1115
McLewee, William S., New York, N. Y. Hanging lamp	290,341	Dec. 18	1204	337	25	1115
McLewee, William S., New York, assignor to J. J. Nichols, Brooklyn, N. Y. Clock	272,737	Feb. 20	1453	407	23	710
McLewee, William S., New York, assignor to J. J. Nichols, Brooklyn, N. Y. Cigar-lighter	273,868	Mar. 13	816	221	23	982
McLoon, Patrick, Glencoe, Mo. Lime-kiln	285,911	Oct. 2	168	48	25	33
McLoughlin, Edmund, <i>et al.</i> (See Campbell, Andrew, assignor.)						
McLoughlin, Edmund, <i>et al.</i> (See Sweeney, Morgan J., assignor.)						
McLoughlin, John, <i>et al.</i> (See Campbell, Andrew, assignor.)						
McLoughlin, John, <i>et al.</i> (See Sweeney, Morgan J., assignor.)						
McMahon, John M., Jersey City, N. J. Dynamo and magnet electric machine	281,904	July 24	1981	542	24	364
McMahon, Michael F. (See Carver, Thomas F., assignor.) (Reissue.)						
McMahon, Patrick J. (See Monteath, Alexander, assignor.)						
McMahon, Timothy G. (See McMahon, William and T. G.)						
McMahon, William, Rahway, N. J. Manufacture of articles from paper	277,593	May 15	1333	358	23	1866
McMahon, William, Rahway, N. J. Manufacture of paper articles	277,594	May 15	1335	358	23	1866
McMahon, William and T. G., Charlestown, N. H., assignors, by mesne assignments, to Underground Electric Cable Company, of New Hampshire. Underground cable	273,869	Mar. 13	816	221	23	982
McMakin, James W., <i>et al.</i> (See Hey, James H., assignor.)						
McManus, Henry and R., New York, N. Y., assignors to said Henry McManus, trustee. Ammonia ice-machine and refrigerating apparatus	282,101	July 31	2225	{ 611 612 }	{ 24 24 }	{ 411 411 }
McManus, Henry, assignor to himself, R. McManus, and W. W. Eastman, Brooklyn, N. Y. Bleaching oil	290,784	Dec. 25	1799	497	25	1225
McManus, Robert. (See McManus, Henry and R.)						
McManus, Robert, <i>et al.</i> (See McManus, Henry, assignor.)						
McManus, Terrence. (See Hitt, Adrian, assignor.)						
McMaster, Theodore, Sloansville, N. Y. Hanger for eaves-troughs	285,292	Sept. 18	1386	392	24	1158
McMellon, Frederic. (See Simonds, Nathaniel G., assignor.)						
McMellon, Frederic, Boston, assignor of one-third to R. G. Parker, Mansfield, Mass. Steam and air engine	273,376	Mar. 6	182	49	23	865
McMillan, Carrie M., <i>et al.</i> (See Simmons, Thomas A., assignor.) (Reissue.)						
McMillan, Duncan, assignor of one-half to W. A. Underwood, Wooster, Ohio. Pad-plate for harness-pads	271,500	Jan. 30	2086	600	23	416
McMillan, James, and W. A. Robertson, Glasgow, county of Lanark, Scotland. Apparatus for feeding fuel to furnaces	289,354	Nov. 27	1942	{ 539 540 540 }	{ 25 25 25 }	{ 874 874 874 }
McMillan, John L., Cambridge, N. Y. Machine for folding the edges of fabrics	278,163	May 22	2014	554	23	1992
McMillen, Carey, New Guilford, Ohio. Farm and other gates	281,544	July 17	1503	413	24	277
McMillen, Charles W., New Castle, Pa. Car-coupling	273,574	Mar. 6	435	117	23	909
McMinn, Theodore J., St. Louis, Mo. Spark-arrester for locomotives	280,206	June 26	1948	547	23	2479
McMullen, John. (See Clothier, Grogan, and McMullen.)						
McMullin, Joseph, Casey, Iowa. Plow for unloading cars	287,698	Oct. 30	2449	{ 659 660 233 234 }	{ 25 25 25 25 }	{ 475 475 665 665 }
McMurray, John, Brooklyn, N. Y. Loom for weaving wire	288,468	Nov. 13	863	233	25	665
McMurray, Robert K., and E. M. Carey, North Sandy, Pa. Mirror	272,297	Feb. 13	878	246	23	605
McMurtrey, James E., I. Williams, and F. E. Okie, Burksville, Ky. Car-coupling	287,455	Oct. 30	2119	575	25	411
McMurry, George G., Allegheny city, Pa. Punch for nut-machines	274,957	Apr. 3	98	27	23	1242
McMurry, John, Lexington, Ky. Railway-rail chair	285,642	Sept. 25	1809	515	24	1240
McMurry, John, and C. M. Johnson, Lexington, Ky. Barrel-rack for storing and aging whisky	271,892	Feb. 6	368	102	23	506
McNab & Harlin Manufacturing Company. (See Yule, John, assignor.)						
McNamara, Timothy E. (See Hauss, McNamara, and Zerbe.)						
McNeal, Jehu, <i>et al.</i> (See Gilbert, Frank, assignor.)						
McNeely, David, and J. A. Drake, Princeton, Ind. Railway-gate	287,147	Oct. 23	1729	473	25	334
McNeely, John W., Pittsburg, Pa. Traction-wheel	279,963	June 26	1668	469	23	2429
McNeill, Murdoch, East Cambridge, assignor of one-fourth to R. S. Smith, Boston, Mass. Steam-pressure gate	278,164	May 22	2016	555	23	1993
McNeill, William, Chicago, Ill. Waterproofing fabrics	272,569	Feb. 20	1250		23	673
McNeill, Hector. (See Webb, Samuel D., assignor.)						
McOmber, Otis H. (See McOmber, Pliny and O. H.)						
McOmber, Pliny and O. H., Maple Grove, Mich. Fence-post	286,461	Oct. 9	851	231	25	165
McOmber, William G., Rockford, Ill. Mitten and knitting the same	276,444	Apr. 24	2021	560	23	1597
McPeck, John, New York, N. Y. Spring bed-bottom	275,928	Apr. 17	1376	379	23	1478
McPhail, James H., assignor to National Tube Works Company, Boston, Mass. Injector	285,498	Sept. 25	1636	460	24	1207
McPherson, Daniel, Caledonia, N. Y. Grain-binder	279,101	June 5	607	{ 165 166 }	{ 23 23 }	{ 2227 2227 }
McPherson, Henry, Troy, assignor to J. A. McPherson, Brunswick, N. Y. Torch	270,600	Jan. 16	957	277	23	204
McPherson, James A. (See McPherson, Henry, assignor.)						
McPherson, John G., Mattoon, Ill. Sand-drier	276,445	Apr. 24	2022	561	23	1597
McPherson, John R., Seabright, N. J. Unloading and handling coal	282,555	Aug. 7	101	30	24	517
McPherson, Walter Y., Owensborough, Ky. Horse-detacher	282,347	July 31	2552	699	24	465
McSherry, Daniel E., and A. G. Myers, said Myers assignor to E. Breneman, Dayton, Ohio. Seeding-machine	280,387	July 3	60	16	24	13
McTammany, Alexander. (See McTammany, John, Jr., assignor.)						
McTammany, John, Jr., Worcester, Mass. Mechanical musical instrument	284,315	Sept. 4	193	{ 545 545 546 }	{ 24 24 23 }	{ 937 937 802 }
McTammany, John, Jr., assignor to A. McTammany, Worcester, Mass. Mechanical musical instrument	273,120	Feb. 27	1944	{ 545 546 546 }	{ 23 23 23 }	{ 802 802 982 }
McTammany, John, Jr., assignor to A. McTammany, Worcester, Mass. Mechanical musical instrument	273,870	Mar. 13	818	{ 221 222 222 }	{ 23 23 23 }	{ 982 982 982 }



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McTammany, John, Jr., Boston, Mass., assignor to A. McTammany, Akron, Ohio. Automatic musical instrument.....	290,697	Dec. 25	1682	{ 463 464 }	25	1203
McTammany Organette Company. (See Bailey, Jefferson, assignor.)						
McTighe, James J. and T. J., Pittsburg, Pa. Dynamo-electric machine.....	270,325	Jan. 9	594	175	23	125
McTighe, Thomas J. (See McTighe, James J. and T. J.)						
McTighe, Thomas J., Pittsburg, Pa. Telephone-switch.....	270,326	Jan. 9	594	175	23	126
McTighe, Thomas J., Pittsburg, Pa. Dynamo-electric machine.....	288,829	Nov. 20	1308	{ 358 359 }	25	750
McTighe, Thomas J., and J. T. McConnell, Pittsburg, Pa. Commutator for dynamo-electric machines.....	288,830	Nov. 20	1309	359	25	750
McTighe, Thomas J., and J. T. McConnell, Pittsburg, Pa. Electric-arc lamp.....	288,831	Nov. 20	1310	359	25	750
McTighe, William J., Pittsburg, Pa. Nut-lock.....	282,348	July 31	2555	699	24	465
McVane, James, Boston, Mass. Stock-rest.....	286,462	Oct. 9	852	231	25	166
McVaugh, Justice H. (See Highfield, William E., assignor.)						
McVaw, Daniel, Louisville, Ky. Vehicle-spring.....	284,649	Sept. 11	598	{ 168 169 }	24	1011
McVay, James H., South Chicago, Ill. Window-screen.....	272,145	Feb. 13	699	191	23	573
McVay, Jason, <i>et al.</i> (See Anderson, Charles G., assignor.)						
McVey, Owen, and G. W. Albin, Neoga, Ill. Cultivator attachment.....	274,132	Mar. 20	1144	315	23	1045
McVicker, Emery M., Ripon, Wis. Cheek-row attachment for corn-planters.....	285,203	Sept. 18	1386	392	24	1158
McVoe, Edmund C., Easton, Pa. Automatic moistening device.....	274,804	Mar. 27	2000	556	23	1203
McWilliams, John, Prairie City, Iowa. Pruning implement.....	279,413	June 12	1011	251	23	2303
McWilliams, John, New Lebanon, N. Y. Can-opener.....	280,495	July 3	199	52	24	36
Meacham, Milford O., Randolph, Ohio. Recleaning attachment for clover-hullers.....	276,851	May 1	407	108	23	1697
Mead, Avis, <i>et al.</i> , executors. (See Sterns, George N.)						
Mead, Charles H., Jr., San Francisco, Cal. Tail-piece and rein-protector for harness.....	272,895	Feb. 27	1621	470	23	756
Mead, Edwin D., Shortsville, N. Y. Hoe for grain-drills.....	280,496	July 3	200	53	24	36
Mead, Edwin D., Shortsville, N. Y. Seeding-machine.....	289,296	Nov. 27	1871	519	25	861
Mead, Henry B., Stonington, Conn. Type-writing ruler.....	283,504	Aug. 21	1257	352	24	739
Mead, Henry W. (See Konetes, John H., assignor.)						
Mead, John T., Cleveland, Ohio. Feed-water purifier.....	276,189	Apr. 24	1696	468	23	1541
Meader, George, Fowler, Ind. Ditching-machine.....	281,099	July 10	931	260	24	172
Mealy, Albert C., East Somerville, assignor to Crosby Steam Gage and Valve Company, Boston, Mass. Safety-valve.....	274,133	Mar. 20	1144	315	23	1045
Meagher, Edmund D., assignor to Economist Plow Company, South Bend, Ind. Plow.....	271,893	Feb. 6	369	102	23	506
Meagher, Edmund D., assignor to Economist Plow Company, South Bend, Ind. Plow.....	275,683	Apr. 10	1066	299	23	1416
Meagher, Edmund D., assignor to Economist Plow Company, South Bend, Ind. Plow.....	277,314	May 8	1000	268	23	1804
Meagher, Edmund D., assignor to Economist Plow Company, South Bend, Ind. Plow.....	277,315	May 8	1001	269	23	1805
Meagher, Michelangelo W., New York, N. Y., and J. C. Anderson, Winnipeg, Manitoba, Canada. Nut-lock.....	278,032	May 22	1856	507	23	1965
Meagley, Ira J. (See Allen, Charles E., assignor.)						
Meaher, Dennis A., <i>et al.</i> (See Hanson, Freeman, assignor.)						
Meaker, John W., Philadelphia, Pa. Fastening for bags, pocket-books, &c.....	276,852	May 1	409	109	23	1698
Means, Charles J., Boston, Mass. Electric railway-signal.....	273,737	Mar. 6	183	50	23	805
Mears, Henry B., Philadelphia, Pa. Car-window deflector.....	272,738	Feb. 20	1453	408	23	710
Mears, Nathan. (See Gage, James L., assignor.)						
Mears, William, Philadelphia, Pa. Stereotyping.....	285,643	Sept. 25	1810	.....	24	1240
Meason, Charles W., assignor of one-half to J. M. Goff, Walnut, Kans. Nut-lock.....	273,871	Mar. 13	821	222	23	922
Meatyard, Edward B., Lake Geneva, Wis. Ingot-press.....	290,448	Dec. 18	1351	374	25	1140
Meatyard, Edward B., Lake Geneva, Wis. Steam-hammer.....	290,449	Dec. 18	1354	{ 374 375 }	25	1140
Meatyard, Edward B., Geneva, Wis. Car-truck. (Reissue).....	10,289	Feb. 20	1066	449	23	737
Meatyard, Edward B., Geneva, Wis. Railway-car.....	274,805	Mar. 27	2001	{ 556 557 }	23	1203
Meatyard, Edward B., and J. Whyte, Geneva, Wis. Car-wheel.....	283,631	Aug. 21	1395	391	24	765
Mechem, Oliver H., assignor of one-half to J. E. Sampsel, Connellsville, Pa. Hydraulic jack.....	273,872	Mar. 13	821	222	23	922
Meckel, Sebastian C., Plymouth, Pa. Carriage-curtain fastener.....	278,989	June 5	456	125	23	2201
Meckley, Levi D., Glenville, Pa. Gate.....	272,739	Feb. 20	1455	408	23	710
Medart, Frederick, St. Louis, Mo. Target.....	271,647	Feb. 6	76	21	23	453
Medart, Martin, Belleville, Ill., assignor of one-third to P. and W. Medart, St. Louis, Mo. Vehicle-spring.....	278,033	May 22	1857	507	23	1965
Medart, Martin, Belleville, Ill., assignor of one-half to M. V. Medart, St. Louis, Mo. Curtain-fixture.....	286,624	Oct. 16	1065	286	25	209
Medart, Martin V. (See Medart, Martin, assignor.)						
Medart, Philip, <i>et al.</i> (See Medart, Martin, assignor.)						
Medart, Philip, assignor of one-half to W. Medart, St. Louis, Mo. Pulley.....	287,843	Nov. 6	63	19	25	518
Medart, William. (See Medart, Philip, assignor.)						
Medart, William, <i>et al.</i> (See Medart, Martin, assignor.)						
Medden, Edwin, assignor to Silsby Manufacturing Company, Seneca Falls, N. Y. Packing for journals.....	276,060	Apr. 17	1534	421	23	1505
Medden, Edwin, assignor to Silsby Manufacturing Company, Seneca Falls, N. Y. Safety-valve.....	290,450	Dec. 18	1360	375	25	1141
Meddick, Sanford C., Ovid, N. Y. Fertilizer-distributing attachment for rollers.....	284,461	Sept. 4	367	102	24	966
Meder, Joseph, Louisville, Ky. School-slate.....	283,267	Aug. 14	956	266	24	678
Medgarden, Ole N., New Richland, Minn. Blind for skylights.....	274,013	Mar. 13	986	270	23	1011
Medley, Granville E., Hopkinsville, Ky. Car-coupling.....	275,839	Apr. 17	1274	350	23	1459
Mee, Gilbert, assignor of one-half to A. Rodgers, Muskegon, Mich. Log-canter.....	279,660	June 19	1305	363	23	2360
Meech, Harrison B., Chatham, N. Y. Amalgamator.....	277,316	May 8	1002	269	23	1805
Meehan, Daniel, New Bedford, Mass. Device for grinding and clearing drills.....	282,209	July 31	2377	654	24	434
Meehan, David C., <i>et al.</i> (See Pederson, Ole, assignor.)						
Meehan, David C., <i>et al.</i> (See Pederson, Ole, assignor.) (Reissue.)						
Meehan, David C., Columbus, Ohio. Furniture-caster.....	285,912	Oct. 2	169	48	25	33
Meehan, Thomas, Brooklyn, N. Y. Car-axle.....	284,462	Sept. 4	368	102	24	966
Meeker, Bolivar. (See Shreve, Victor, assignor.)						
Meeker, Elliott E. (See Stevens and Meeker.)						
Meeker, Frederick W., New York, N. Y., assignor to Fire Proof Building Company of New Jersey. Manufacture of brick.....	287,699	Oct. 30	2450	660	25	476
Meeker, George E., Meriden, Conn. Die-press.....	285,294	Sept. 18	1389	392	24	1158
Meeker, George E., Meriden, Conn. Die-press.....	287,767	Oct. 30	2545	685	25	493
Meeker, Melvin C., Occidental, Cal. Head-block gear for saw-mills.....	281,100	July 10	933	261	24	172
Meenan, John D., Ridgway, Pa. Automatic car-brake.....	288,719	Nov. 20	1182	323	25	726
Meetze, Henry M., Charlotte, N. C. Cotton and hay press.....	279,174	June 12	710	{ 193 194 }	23	2254
Mefford, David M., Toledo, Ohio. Dynamite-shell.....	279,964	June 26	1670	469	23	2430

## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. E.	Vol.	Page.
Mefford, David M., Toledo, Ohio. Pneumatic cannon .....	279,965	June 26	1671	469	23	2430
Megee, Andrew J., assignor to Miller Bible and Publishing House, (limited,) Philadelphia, Pa. Book-binding .....	281,101	July 10	934	261	24	173
Megee, Andrew J., assignor to Miller Bible and Publishing House, (limited,) Philadelphia, Pa. Album .....	281,102	July 10	935	261	24	173
Megill, Edward L., Brooklyn, N. Y. Gage-pin for printing-presses .....	277,500	May 15	1221	328	23	1849
Megill, Edward L., Brooklyn, N. Y. Feed-gage for printing-presses .....	289,014	Nov. 27	1531	423	25	798
Megow, Charles, San Francisco, Cal. Picture-bracket .....	280,057	June 26	1766	501	23	2450
Megow, Charles, assignor of one-half to J. L. Markel, San Francisco, Cal. Feathering paddle-wheel .....	269,948	Jan. 2	151	44	23	31
Mehaffey, James A., Parnassus, Pa. Conduit for electric wires .....	276,190	Apr. 24	1696	469	23	1541
Mehaffey, Oliver R., Richburg, N. Y. Coupling for pump-rods .....	275,065	Apr. 3	244	67	23	1268
Mehary, William J., Philadelphia, Pa. Device for removing snow from sidewalks, &c .....	275,684	Apr. 10	1067	291	23	1417
Mehew, Stephen D., Peabody, Kans. Anchoring-socket for fence-posts .....	284,219	Sept. 4	81	23	24	918
Mehring, George, <i>et al.</i> (See Ritchie, John, assignor.) .....						
Mehring, George, Chicago, Ill. Fuel-magazine for steam-generators .....	285,828	Oct. 2	57	17	25	12
Meibers, John B., <i>et al.</i> (See Corbin, Elijah, H., assignor.) .....						
Meier, Henry J. (See Wenzel, George, assignor.) .....						
Meier, Joseph, Plainfield, N. J. Spark-arrester .....	288,832	Nov. 20	1312	360	25	751
Meier, Louis. (See Pilger and Knight, assignors.) .....						
Meiere, Josephine M., <i>et al.</i> (See Townsend, William H., assignor.) .....						
Meigs, George W. (See Willson and Meigs.) .....						
Meikle & Co., Thomas. (See Meikle, Thomas, assignor.) .....						
Meikle, Thomas, assignor to T. Meikle & Co., Louisville, Ky. Combined plow and cultivator .....	269,871	Jan. 2	57	18	23	14
Melly, George W., <i>et al.</i> (See Harper, John, assignor.) .....						
Meincke, Alfred M., Brooklyn, N. Y. Dyeing compound .....	276,061	Apr. 17	1535		23	1505
Meincke, Ferdinand, Milwaukee, Wis. Folding sleigh .....	278,990	June 5	457	125	23	2201
Meincke & Son, A. (See Trieller, Peter J., assignor.) .....						
Meinesz, Simon, Brussels, Belgium. Dredging apparatus .....	281,905	July 24	1982	543	24	364
Meisenbach, Albert H., St. Louis, Mo. Napkin-holder .....	280,058	June 26	1766	501	23	2450
Meissner, Robert F., Chicago, Ill. Wardrobe-bedstead .....	270,327	Jan. 9	595	175	23	126
Meissner, Robert F., Chicago, Ill. Folding bedstead .....	277,046	May 8	672	175	23	1747
Meister, William. (See Rubelin, Joseph, assignor.) .....						
Mekel, Thomas U., Cold Spring, N. Y. Handsaw .....	280,497	July 3	201	53	24	36
Mekenney, Alendo, Middleborough, Mass. Plow .....	277,047	May 8	673	176	23	1747
Mekenney, Alendo, Middleborough, Mass. Seeding-machine .....	280,059	June 26	1767	501	23	2450
Melcher, John C., O'Quinn, Tex. Insect-destroyer .....	288,833	Nov. 20	1313	360	25	751
Melchior, Edward, <i>et al.</i> (See Lindner, Ferdinand, assignor.) .....						
Melchior, Friedrich, New York, N. Y. Fire-escape .....	278,034	May 22	1858	507	23	1965
Melde, Henry, San Francisco, Cal. Motor for operating pumps .....	287,950	Nov. 6	203	59	25	543
Melhuish, William H., Williamsport, Pa. Breech-loading ordnance .....	280,207	June 26	1949	548	23	2480
Melick, James H., Albany, N. Y. Thrashing-machine .....	277,595	May 15	1335	358	23	1866
Melick, James H., and M. J. Colbert, assignors to Wheeler & Melick Company, Albany, N. Y. Tread and railway power .....	274,510	Mar. 27	1657	461	23	1141
Mellen, Albert H., <i>et al.</i> (See Prickett, Joshua, assignor.) .....						
Mellenny, Ormand E., Parsons, Kans. Manufacture of shoes or gaiters .....	272,452	Feb. 20	1093	308	23	646
Melletto, John, Winamac, Ind. Ribbon-holder .....	275,685	Apr. 10	1068	291	23	1417
Melletto, John, Winamac, Ind. Ribbon-roll .....	282,744	Aug. 7	329	94	24	557
Melletto, John, Winamac, Ind. Ribbon-holder .....	282,745	Aug. 7	329	94	24	557
Melling, Roger, Washington, D. C. Halter .....	275,686	Apr. 10	1069	291	23	1417
Melone, Thomas L., Chillicothe, Ohio. Roller-skate .....	272,298	Feb. 13	878	246	23	605
Melony, Edward F., Minneapolis, Minn. Pneumatic railway .....	273,297	Mar. 6	70	20	23	846
Melot, William B., Fleetwood, Pa. Game-ball .....	269,297	Nov. 27	1872	520	25	861
Melrose, Thomas, San Francisco, Cal. Station-indicator .....	285,499	Sept. 25	1637	460	24	1208
Meltzer, David. (See Meltzer and Baker.) .....						
Meltzer, John H. and D., and J. J. Baker, Metzger, assignors of one-half to J. W., C. E., and E. A. Trees, Rush County, Ind. Straw-stacker .....	262,210	July 31	2378	654	24	435
Melville, James J., New York, N. Y. Land-marker .....	270,823	Jan. 16	1232	356	23	256
Melville, James J., New York, N. Y. Dirt-loading machine .....	273,121	Feb. 27	1045	546	23	802
Melvin, David M., Lincolntonville, N. Y. Compound steam-engine .....	270,552	Jan. 9	892	258	23	184
Melvin, David N., Lincolntonville, N. Y. Packing for steam-joints .....	277,048	May 8	675	176	23	1747
Melvin, Reuben, Cincinnati, Ohio. Twine-holder .....	280,060	June 26	1768	502	23	2450
Menahan, John, New York, N. Y. Spring hinge-joint fastening for pocket-books .....	271,094	Jan. 23	1567	451	23	317
Menahan, John, New York, N. Y. Spring-ball fastener for pocket-books .....	290,906	Dec. 25	1951	538	25	1251
Menard, Charles J. F. R. de J., Biarritz, and H. J. E. Hennebute, Anglet, assignors to Société Anonyme des Produits Chimiques du Sud-Ouest, Paris, France. Manufacture of fertilizers .....	280,320	June 26	2096		23	2506
Mendenhall, Clarkson, Mendenhall, Pa. Road-scraper .....	278,991	June 5	458	126	23	2201
Mendenhall, Clarkson, Mendenhall, Pa. Stock-feeder .....	280,208	June 26	1951	548	23	2480
Mendenhall, Stephen C., Richmond, Ind. Tongue and easter attachment for agricultural implements .....	280,209	June 26	1952	548	23	2480
Mendenhall, Stephen C., Richmond, Ind. Cleaner attachment for seeding-machines .....	280,210	June 26	1954	550	23	2481
Mendum, Ernest, Melrose, and S. G. Swett, Boston, Mass. Programme-card for dances .....	276,191	Apr. 24	1698	469	23	1541
Mendum, Willis B., <i>et al.</i> (See Ormsby, William, assignor.) .....						
Menge, Joseph, Chicago, Ill. Swinging frame for dredging-machines .....	269,949	Jan. 2	152	44	23	32
Menge, Joseph, Point Michel, La. Dredging-bucket .....	274,358	Mar. 20	1432	392	23	1096
Menge, Joseph, New Orleans, La. Dredging-machine .....	288,091	Nov. 6	372	103	25	571
Menge, Joseph, New Orleans, La. Dredging-machine .....	288,092	Nov. 6	375	104	25	572
Menge, Joseph, New Orleans, La. Dredging-machine .....	288,093	Nov. 6	376	105	25	572
Menge, Joseph, New Orleans, La. Dredging-machine .....	288,094	Nov. 6	379	107	25	573
Mengel, Charles J., New York, N. Y. Spring bed-bottom .....	282,746	Aug. 7	330	94	24	558
Mentz, Edward and W. C., Philadelphia, Pa. Apparatus for draining and ventilating stores, &c. ....	272,570	Feb. 20	1250	349	23	674
Mentz, William C. (See Mentz, Edward and W. C.) .....						
Menez, Vincent A., Michigan City, Ind. Folding bedstead .....	277,501	May 15	1222	328	23	1849
Menez, Vincent A., Michigan City, Ind. Folding table .....	281,281	July 17	1174	324	24	221
Menez, Vincent A., Michigan City, Ind. Folding table .....	281,282	July 17	1175	325	24	221



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Menze, Friedrich W., assignor of one-half to K. G. A. Kusch, West Bay City, Mich. Snow-remover	275,401	Apr. 10	707	189	23	1356
Menzies, James, Fernandina, Fla. Seal-lock	280,649	July 3	373	104	24	66
Menzies, William J., St. Helen's, county of Lancaster, England. Manufacture of medicated and antiseptic soaps	286,048	Oct. 2	331	-----	25	61
Menzies, William J., St. Helen's, county of Lancaster, England. Manufacture and preparation of potash soap	286,049	Oct. 2	332	-----	25	61
Menzing, George. (See Merz, Franz J., assignor.)						
Mercer, John T., Richmond, Ind., assignor to himself, E. F. Preston, Bismarck, Mich., and S. C. Richardson, Terre Haute, Ind. Compound for tempering steel	278,250	May 22	2127	-----	23	2012
Mercer, Lemmon E. (See Pife and Mercer.)						
Mercer, William H., Mercer, S. C. Cotton-chopper	279,966	June 26	1673	470	23	2430
Mercer, William H., Mercer, S. C. Cotton-scraper	281,103	July 10	935	262	24	173
Mercer, William H., Mercer, S. C. Machine for mixing and grinding fertilizers	286,463	Oct. 9	853	232	25	166
Merchant, George, Jr., Gloucester, Mass. Purse-block for seines	288,650	Nov. 20	1088	298	25	712
Merchant, Judson N., Bloomingdale, Mich. Wheat-grader and cockle-separator	269,872	Jan. 2	58	18	23	14
Meredith, Veniah T., Hagerstown, Md. Railing for cemetery-plats	278,579	May 29	2560	699	23	2096
Mereness, Erwin D., <i>et al.</i> (See Haskin, Chauncey C., assignor.)						
Meriam, J. B. (See Frasch, Herman, assignor.)						
Meriam, Joseph B. (See Dean, Richard, assignor.)						
Merichenski, Moska, London, county of Middlesex, England. Automatic check-valve and apparatus connected therewith	273,575	Mar. 6	436	17	23	909
Merichenski, Moska, London, county of Middlesex, England. Apparatus for raising and lowering gasoliers and chandeliers	273,576	Mar. 6	438	117	23	909
Meriden Britannia Company. (See Smith, William M., assignor.)						
Meriden Britannia Company. (See Spencer, Thomas, assignor.)						
Meriden Malleable Iron Company. (See Beach, Henry B., assignor.)						
Meriden Patent Novelty Company. (See Rust, Solon R., assignor.)						
Meriden Patent Novelty Company. (See Rust, Solon R. and A. E., assignors.)						
Merrihew, Phineas E., Fairhaven, Mass. Car-coupling	274,511	Mar. 27	1658	461	23	1141
Merino Shoe Company. (See Davis and Hawley, assignors.)						
Merk, Johann B., Berlin, Germany. Vibrating propeller	270,455	Jan. 9	762	223	23	158
Merriam, Charles R., assignor of one-half to F. S. Isett, Philadelphia, Pa. Can-capping machine	278,251	May 22	2128	586	23	2012
Merriam & Co., Foster. (See Fenn, William B., assignor.)						
Merriam, George A., Sharon, Wis. Hay-fork	284,041	Aug. 28	1923	538	24	871
Merriam, Joseph B., Meriden, Conn. Fifth-wheel	286,464	Oct. 9	854	232	25	166
Merriam, Lyman W., assignor of one-half to J. Hancock, Winchendon, Mass. Shutter-hinge	288,834	Nov. 20	1314	360	25	751
Merriam, Matthew H., Lexington, Mass. Piping	270,965	Jan. 23	1414	407	23	292
Merriam, Matthew H., Lexington, Mass. Skiving-machine	270,966	Jan. 23	1415	407	23	292
Merriam, Matthew H., Lexington, Mass. Notching device for piping	270,967	Jan. 23	1416	407	23	293
Merriam, Matthew H., Lexington, Mass. Leather-sorting machine	270,968	Jan. 23	1417	407 408	23	293
Merrick, Daniel E., and G. Q. Adams, Quincy, Ill. Fence-loom	270,456	Jan. 9	763	224	23	158
Merrick, Isaac J., Conotton, Ohio. Car-coupling	285,913	Oct. 2	170	48	25	33
Merrick, J. Vaughan, Philadelphia, Pa. Apparatus for utilizing the waste heat of gas-engines	290,451	Dec. 18	1361	376	25	1141
Merrick, Timothy. (See Bancroft, George D., assignor.)						
Merrifield, Charles E. (See Perkinson and Merrifield.)						
Merrifield, Charles E., Indianapolis, Ind. Spoke-socket	272,571	Feb. 20	1251	349	23	674
Merrifield, Charles E., Indianapolis, Ind. Straw-stacker	272,572	Feb. 20	1252	349	23	674
Merrifield, Charles E., Indianapolis, Ind. Straw-stacking machine	274,134	Mar. 20	1145	316	23	1045
Merrifield, Charles E., Indianapolis, Ind. Straw-stacking machine	287,844	Nov. 6	63	19	25	518
Merrihew, Joseph R., Lynn, Mass. Coffee-separator	277,317	May 8	1003	269	23	1805
Merrihew, Phineas E., Fairhaven, Mass. Car-wheel	288,469	Nov. 13	867	234	25	666
Merrihew, Phineas E., Fairhaven, M. C. and E. F. Poland, Boston, Mass.; said Poland and Poland assignors to said Merrihew. Car-coupling	290,086	Dec. 11	885	251	25	1050
Merrill, Alfred P., and J. Eastwood, Socorro, N. Mex. Ter. Dentifrice	284,751	Sept. 11	732	-----	24	1035
Merrill, Benjamin F., Boston, Mass., assignor to Palace Marine Berth Company, Portland, Me. Self-leveling berth	284,779	Sept. 11	882	248	24	1061
Merrill, Calvin J., Des Moines, Iowa. Tile-machine	281,711	July 24	1272	469	24	319
Merrill, Charles L., Indianapolis, Ind. Journal-bearing and dog for chain-pumps	278,992	June 5	460	126	23	2202
Merrill, Edward W., Brooklyn, N. Y. Manufacture of turn-buckles	282,102	July 31	2227	612	24	411
Merrill, Freeman C., South Paris, Me. Plow	289,848	Dec. 11	600	167	25	899
Merrill, George and W. H. Riverside, Mich. Car-coupling	272,299	Feb. 13	880	246	23	605
Merrill, George P. (See Wickersham, Eli, assignor.)						
Merrill, George P., <i>et al.</i> (See Houlehan, James, assignor.)						
Merrill, George P., Toledo, Ohio. Device for unloading platform-cars	279,578	June 19	1210	335	23	2343
Merrill, George P., Toledo, assignor of one-half to T. L. Branan, Bellevue, Ohio. Fifth-wheel	290,907	Dec. 25	1952	538	25	1252
Merrill, George W., East Saginaw, Mich. Sawing-machine	279,967	June 26	1674	470	23	2430
Merrill, George W., assignor to himself and W. G. Merrill, Brooklyn, N. Y. Rotator for ships logs	272,146	Feb. 13	700	192	23	573
Merrill, Henry D., Springfield, Ill. Flood-fence	289,682	Dec. 4	383	110	25	954
Merrill, Hiram, <i>et al.</i> (See Huntress, John H., assignor.)						
Merrill, Ira P. (See Taylor and Merrill.)						
Merrill, John A., Pottstown, Pa., assignor to E. & T. Fairbanks & Co., St. Johnsbury, Vt. Railway-track	283,632	Aug. 21	1396	391	24	765
Merrill, John H., Washington, D. C. Sewing-machine	273,754	Mar. 13	664	178	23	956
Merrill, John L., Pottstown, Pa. Railway-scale	286,465	Oct. 9	855	232	25	166
Merrill, Joshua. (See Woodbury, Merrill, Patten, and Woodbury.)						
Merrill, Marcellus H., New Lebanon Centre, N. Y. Car-coupling	290,452	Dec. 18	1361	376	25	1142
Merrill, Mary A., San Francisco, Cal. Sketcher's easel	274,629	Mar. 27	1706	499	23	1166
Merrill, Peter H. (See Diefendorf and Merrill.)						
Merrill, Rufus S. (See Johnson, Daniel A., assignor.)						
Merrill, Rufus S. (See Turner, Charles, assignor.)						
Merrill, Rufus S., assignor of one-half to D. A. Johnson, Boston, Mass. Shaft or pole iron for vehicles	289,015	Nov. 27	1532	423	25	798
Merrill, William G. (See Merrill, George W., assignor.)						
Merrill, William H. (See Merrill, George and W. H.)						
Merriman, Alanson H., Meriden, Conn. Power-press	286,839	Oct. 16	1335	364 365	25	257
Merriman, George E., Terryville, Conn. Die-press	282,747	Aug. 7	331	94	24	558

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Merriman, Julius E., assignor to Foster, Merriam & Co., Meriden, Conn. Handle.....	271,095	Jan. 23	1568	451	23	317
Merriman, Lewis, assignor of one-half to J. H. Reigart, Beloit, Wis. Grate.....	285,435	Sept. 25	1556	438	24	1192
Merritt, Charles T., Hyde Park, Ill. Fire-escape ladder.....	283,008	Aug. 14	637	180	24	620
Merritt, Daniel. (See Coe and Merritt.)						
Merritt, Daniel H., Marquette, Mich. External friction brake-band for hoisting machinery, &c.....	282,349	July 31	2555	700	24	465
Merritt, Edward, Brockton, Mass. Nail-driving machine.....	278,252	May 22	2130	587	23	2012
Merritt, Edward, Brockton, Mass. Nail-driving machine.....	279,579	June 19	1312	335	23	2343
Merritt, Henry W., Somerville, assignor to W. K. Gillis, Boston, Mass. Churn.....	281,906	July 24	1983	543	24	364
Merritt, Samuel F., Springfield, Mass. Blanket-pin.....	277,318	May 8	1004	269	23	1805
Merritt, Washington, Weymouth, Mass. Last.....	270,240	Jan. 9	492	145	23	106
Merritt, Wiley, assignor to himself and J. C. Camp, Covington, Ga. Rib for cotton-gins.....	280,496	July 3	302	53	24	37
Merry, Charles H., New Orleans, La. Cotton-gin.....	285,144	Sept. 18	1222	343	24	1127
Merryman, Edward C., New Freedom, Pa. Bit-brace.....	273,122	Feb. 27	1947	546	23	802
Merryman, Franklin W., Baltimore, Md. Lamp.....	273,577	Mar. 6	439	118	23	909
Mersereau & Co., William T. (See Nugent, Daniel D., assignor.)						
Mersereau, Frank D., Orange, N. J. Cornice curtain pole.....	278,721	June 5	61	19	23	2135
Merslowsky, August E., Myersdale, Pa., assignor of one-half to N. Diedrich, Bloomington, Ill. Railway-chair.....	290,189	Dec. 11	1001	282	25	1071
Mershon, A. H. (See Omensetter, Elhanan, assignor.)						
Mershon, Frank A., Philadelphia, Pa. Bench-plane.....	277,767	May 15	1540	418	23	1903
Mershon, George B., Philadelphia, Pa. Grate.....	276,616	May 1	86	24	23	1643
Mershon, George B., Philadelphia, Pa. Grate.....	281,384	July 17	1301	360	24	243
Mershon, John F., Indianapolis, Ind. Screw-cutting indicator lathe attachment.....	281,283	July 17	1176	325	24	221
Merssmann, Barney F., Macomb, Ill. Winding-indicator for time-pieces.....	267,559	Oct. 30	2249	610	25	438
Mertsheimer, Fredrick, Denver, Colo. Draft-pipe for steam-boiler furnaces.....	286,625	Oct. 16	1065	287	25	209
Mervesp, John J., New York, N. Y. Horseshoe.....	283,132	Aug. 14	783	220	24	646
Merz, Franz J., Newark, assignor to G. Menzing, Elizabeth, N. J. Water-closet.....	285,829	Oct. 2	58	18	25	12
Messer, Fred, Beloit, Wis. Machine for dressing rollers for grinding-mills.....	286,466	Oct. 9	855	232	25	166
Messer, George E. (See Triggs, Frank J., assignor.)						
Messer, John P., Cedar Rapids, Mich. Draft attachment for street-cars.....	279,784	June 19	1441	404	23	2384
Messinger, G. Frank, Stockertown, Pa. Ball-pitman.....	278,512	June 5	181	53	23	2153
Messinger, G. Frank, Stockertown, Pa. Thrashing-machine.....	290,647	Dec. 18	1613	444	25	1185
Messinger, Joseph. (See Johnson, Charles C., assignor.)						
Messinger, William T., Cambridge, Mass. Injector.....	281,385	July 17	1303	361	24	243
Metcalf, George A., Maiden, Mass. Concentrator.....	286,050	Oct. 2	332	92	25	61
Metcalf, George A., Woonsocket, R. I., and N. Hicks, Attleborough, Mass. Mechanical movement.....	276,264	Apr. 24	1786	496	23	1556
Metcalf, John S., Indianapolis, Ind. Grain-shovel mechanism.....	278,993	June 5	460	{ 126 127 }	23	2202
Metcalf, Paul & Co. (See Armstrong, Harry W., assignor.)						
Metcalf, Gilson W., and M. F. Haber, Baltimore, Md. Torpedo-signal placer.....	284,463	Sept. 4	369	102	24	966
Méthot, Ebens, Boston, Mass. Stocking-supporter.....	280,646	July 10	634	178	24	118
Mets, Elisha, Rochester, N. Y. Table-leaf support.....	282,350	Nov. 31	2557	701	24	466
Mettam, Charles, New York, N. Y. Hoisting apparatus.....	288,586	Nov. 13	1002	276	25	691
Mette, Clemens, Hancock, Mich. Sleigh.....	280,499	July 3	202	53	24	37
Metz, Adam, Burlington, Iowa. Meat-cutter.....	281,545	July 17	1504	413	24	277
Metz, Benjamin F., assignor to himself and J. Kauffmann, Medway, Ohio. Car-coupling.....	271,501	Jan. 30	2087	600	23	416
Metz, Charles E., Utica, N. Y. Hand-rest for books.....	286,051	Oct. 2	333	92	25	61
Metz, John, et al. (See Shedd, William B., assignor.)						
Metzger, John, New York, N. Y. Fire-escape.....	289,119	Nov. 27	1663	461	25	821
Metzger, Joseph, East Cambridge, Mass. Mechanical musical instrument.....	270,686	Jan. 16	1068	306	23	224
Metzler, Christian E., and J. H. Burrell, Jr., assignors of one-third to J. Colhoun, Philadelphia, Pa. Signal-lantern.....	283,633	Aug. 21	1398	391	24	765
Metzler, Johann J., Milwaukee, Wis. Process of and apparatus for brewing beer.....	276,617	May 1	88	24	23	1643
Meucci, Antonio, Stapleton, and T. Dendi, New York, N. Y. Plastic paste.....	279,492	June 12	1102		23	2318
Meyer, Anton. (See Sobinski, Charles O., assignor.)						
Meyer, August. (See Fittell, William W., assignor.)						
Meyer, August B., et al. (See Gilliland, James F., assignor.)						
Meyer, Christian, St. Paul, Minn. Fire-escape.....	279,175	June 12	711	194	23	2254
Meyer & Co., Henry C. (See Sutcliffe, Henry and W., assignors.)						
Meyer, Edward, Hallettsville, Tex. Bee-hive.....	289,683	Dec. 4	385	{ 110 111 }	25	954
Meyer, Edward W., New York, N. Y. Cast-lead service-box.....	281,712	July 24	1728	469	24	319
Meyer, Edward W. A., Boston, Mass. Marble-playing board.....	284,680	Sept. 11	884	248	24	1062
Meyer, Ernest F., assignor to H. H. Schindler, Lake Charles, La. Draw-bridge alarm.....	288,470	Nov. 13	868	235	25	666
Meyer, Frederick, Chicago, Ill. Folding baby-carriage.....	276,853	May 1	410	109	23	1698
Meyer, Gaspard, Paris, France. Rendering manuscripts, &c., incombustible.....	280,500	July 3	203		24	37
Meyer, George, New York, N. Y. Wood-bending machine.....	281,104	July 10	936	262	24	173
Meyer, George, New York, N. Y. Reaming-saw.....	281,105	July 10	938	262	24	173
Meyer, Gottfried, New York, N. Y. Inhaler.....	280,321	June 26	2097	589	23	2506
Meyer, Henry C. F., Cincinnati, Nebr. Medical compound.....	271,894	Feb. 6	370		23	506
Meyer, Henry J., Fort Wayne, Ind. Spoon.....	283,634	Aug. 21	1399	392	24	766
Meyer, Henry K. (See Liebmann, Herman F. W., assignor.)						
Meyer, Henry R., Liverpool, county of Lancaster, England. Underground conduit for electrical conductors.....	274,213	Mar. 20	1249	344	23	1064
Meyer, Herman H., Denver, Col. Cut-off-valve gear.....	285,500	Sept. 25	1639	461	24	1208
Meyer, Johann A. H., Dresden, Saxony, Germany. Cutter for paper, cloth, &c.....	276,265	Apr. 24	1787	497	23	1557
Meyer, Johannes E., Copenhagen, Denmark. Centrifugal machine.....	273,578	Mar. 6	439	118	23	909
Meyer, Johannes E., Copenhagen, Denmark. Friction-clutch.....	283,009	Aug. 14	638	181	24	620
Meyer, John H. F., Philadelphia, Pa. Davit and chair for life-boats.....	276,446	Apr. 24	2024	561	23	1597
Meyer, John W. (See Shepherd and Meyer.)						
Meyer, Sniffin & Co. (See Scott, William, assignor.)						
Meyer, William H., et al. (See Eger, John, assignor.)						
Meyers, Francis I., Healdsburg, Cal. Vehicle-brake.....	270,328	Jan. 9	596	176	23	126
Meyers, John G., Washington, D. C. Burial-vault.....	285,914	Oct. 2	172	49, 50	25	33
Meyensburg, Edward A., assignor to Mascotte Stove Company, St. Louis, Mo. Oil and gas stove.....	269,950	Jan. 2	153	45	23	32
Mica Anti-Sunstroke Company. (See Conch, Albert C., assignor.)						
Mica Tip and Lining Company. (See Conch, Albert C., assignor.)						
Michael, Abel, Darke, Ohio. Harrow.....	285,501	Sept. 25	1640	461	24	1208
Michael, Charles H., La Porte, Ind. Display-rack.....	290,453	Dec. 18	1363	376	25	1142
Michael, Henry W., Denver, Colo. Heating-furnace.....	269,873	Jan. 2	59	18	23	14
Michaelis, Ernest R., Sycamore, Ohio. Hasp-lock.....	289,849	Dec. 11	601	167	25	999



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Michaelis, Hugo. (See Liebreich and Michaelis.)						
Michaelis, Hugo, Berlin, assignor to Gebr. Stollwerck, Cologne-on-the-Rhine, Prussia, Germany. Manufacture of effervescent sugar.	284,464	Sept. 4	370	.....	24	966
Michaelis, Martin S., Beuton, La. Cotton-chopper	270,824	Jan. 16	1233	356	23	256
Michaelis, Otho E. (See Carr, Joseph E., assignor.)						
Michaelis, Otho E., Philadelphia, Pa. Bottle-stopper	270,601	Jan. 16	958	278	23	204
Michaelis, Otho E., U. S. Army, assignor of one-half to S. C. Lyford, Philadelphia, Pa. Adjustable powder-charger	272,072	Feb. 13	606	164	23	557
Michel, Philip, Stapleton, N. Y. Window-shade	290,698	Dec. 25	1626	464	25	1204
Michells, John, Denver, Colo. Medical compound	274,014	Mar. 13	986	.....	23	1011
Michelson, Albert, Chicago, Ill. Mechanism for laying railway-tracks	267,952	Nov. 6	204	59	25	543
Michelson, Sigismund M., Milwaukee, Wis. Trunk-tray	278,580	May 29	2561	699	23	2096
Michelson, Sigismund M., Milwaukee, Wis. Trunk-tray	278,994	June 5	462	127	23	2202
Michelson, Sigismund M., Milwaukee, Wis. Trunk-caster	280,061	June 26	1789	502	23	2451
Michelson, Sigismund M., Milwaukee, Wis. Trunk-top support	289,548	Dec. 4	222	62	25	925
Michelson, Sigismund M., Milwaukee, Wis. Trunk-stay	289,549	Dec. 4	223	62	25	925
Micheuer, James B., and T. L. Varns, Kokomo, Ind.; said Varns assignor to said Micheuer. Saw-mill dog	289,016	Nov. 27	1533	424	25	798
Micheuer, William R., Oswego, N. Y. Straw-burning steam-boiler	272,453	Feb. 20	1094	399	23	646
Mickel, Charles H. (See Cain, Harry, assignor.)						
Mickey, Samuel T., Salem, N. C. Fire-escape	277,049	May 8	676	{ 176 177 }	23	1748
Mickle, Henry G., New Palestine, Ind. Two-wheeled vehicle	279,968	June 26	1674	470	23	2430
Mickle, John, et al. (See Leake, Lewis C., assignor.)						
Middleton, Allen (See Paige, William H., assignor.)						
Middleton, James H., et al. (See Martin, James, assignor.)						
Middleton, Simeon A., et al. (See Armistead, Thomas J., assignor.)						
Middleton, William R., Cleveland, Ohio. Steam-cock	276,618	May 1	90	25	23	1643
Middletown Plate Company. (See Bullard, Henry, assignor.)						
Midgley, Thomas, Worcester, Mass. Apparatus for annealing, cleaning, and galvanizing, or plating wire, wire rods, &c.	279,580	June 19	1213	{ 336 337 }	23	2344
Miffin, Joseph, Jr. (See Wode and Miffin.)						
Migasi, Phillip A. (See Baldwin and Migasi.)						
Mighell, Montraville P., and A. J. Hull, Sterling, Ill.; said Hull assignor to said Mighell. Riding-barrow	272,454	Feb. 20	1095	309	23	646
Mignault, Eusebe, New York, N. Y. Universal angular knuckle-joint	289,120	Nov. 27	1664	462	25	821
Mihau, Patrick, Chelsea, assignor, by mesne assignments, to himself and J. E. Moreland, Quincy Point, Mass. Gas burner and pipe pliers	272,573	Feb. 20	1253	349	23	674
Milbank, George, Chillicothe, Mo. Adjusting and supporting millstones, &c.	275,929	Apr. 17	1377	379	23	1478
Milbank, William E. (See Schoonmaker, James W., assignor.)						
Milbourne, John P., Manchester, county of Lancaster, England. Automatic stock-feeder	285,295	Sept. 18	1329	392	24	1158
Milburn Gin and Machine Company (See Milburn and Latting, assignors.)						
Milburn, John D., Memphis, Tenn. Cotton-gin	274,806	Mar. 27	2003	{ 557 558 }	23	1203
Milburn, John D., Memphis, Tenn. Cotton-gin	276,447	Apr. 24	2026	561	23	1598
Milburn, John D., and R. G. Latting, Jr., assignors to Milburn Gin and Machine Company, Memphis, Tenn. Mat for hydraulic oil-presses	279,414	June 12	1012	281	23	2303
Mileham, Joseph N., Jersey City, N. J. Cyclone-refuge	288,354	Nov. 13	708	194	25	639
Miles, Alexander, Duluth, Minn. Hair-tonic	289,922	Dec. 11	689	.....	25	1014
Miles, Don D., Aurora, Ill. Grain-car door	272,455	Feb. 20	1096	309	23	646
Miles, Frederick B., Philadelphia, Pa. Metal-planing machine	273,873	Mar. 13	823	223	23	953
Miles, Frederick B., Philadelphia, Pa. Metal-planing machine	275,242	Apr. 3	459	128	23	1305
Miles, Frederick B., Philadelphia, Pa. Lathe	280,211	June 26	1956	{ 550 551 }	23	2481
Miles, Frederick B., Philadelphia, Pa. Steam-hammer	288,840	Nov. 20	1320	362	25	752
Miles, George, Wellesley Hills, Mass. Mechanism for cutting paper	289,923	Dec. 11	689	193	25	1014
Miles, Harmon A., Concord, N. H. Machine for turning carriage-seat spindles	272,073	Feb. 13	608	165	23	557
Miles, Hollon F. (See McCully, John, assignor.)						
Miles, Hollon F., assignor to himself and J. McCully, Chicago, Ill. Manufacture of decorative glass products	287,768	Oct. 30	2546	685	25	493
Miles, John E., Mooresville, Tex. Post-anger	283,010	Aug. 14	640	181	24	620
Miles, Lucius E., et al. (See Strickler, Frank B., assignor.)						
Miles, Purches, Brooklyn, N. Y. Barbed wire for fences	277,916	May 22	1711	468	23	1940
Miles, Purches, Brooklyn, N. Y. Combined wires for wire fences	277,917	May 22	1712	468	23	1940
Miles, Purches, Brooklyn, N. Y. Clothes-hook	280,062	June 26	1790	502	23	2451
Miles, Purches, Brooklyn, N. Y. Hook	280,388	July 3	62	16	24	13
Miles, Purches, Brooklyn, N. Y. Hook	280,389	July 3	62	17	24	14
Miles, William A., Copake Iron Works, N. Y. Condenser for steam-pumps	271,096	Jan. 23	1569	452	23	318
Miles, William A., Copake Iron Works, N. Y. Condenser for steam-pumps	271,097	Jan. 23	1570	452	23	318
Miles, William A., Copake Iron Works, N. Y. Condenser for steam-pumps	272,456	Feb. 20	1097	309	23	647
Miles, William A., Copake Iron Works, N. Y. Condenser for steam-pumps	272,457	Feb. 20	1098	310	23	647
Miles, William A., Copake Iron Works, N. Y. Condenser for pumping-engines	272,458	Feb. 20	1098	310	23	647
Miles, William A., Copake Iron Works, N. Y. Screw-joint for metal pipe-fittings	272,574	Feb. 20	1253	350	23	674
Miles, William A., Copake Iron Works, N. Y. Condenser for steam-pumps	280,212	June 26	1958	551	23	2481
Miles, William A., Copake Iron Works, N. Y. Condenser for steam-engines	280,213	June 26	1959	{ 551 552 }	23	2482
Miles, William H., Jr., Brooklyn, N. Y. Toilet implement	289,550	Dec. 4	224	63	25	925
Miles, William T., Worcester, Mass. Child's dining-chair	275,508	Apr. 10	842	228	23	1378
Milford, William F. (See Malcom, Robert, assignor.)						
Millar, Adam, Glasgow, Scotland. Magneto-electric machine	270,457	Jan. 9	766	225	23	150
Millar, Adam, Glasgow, Scotland. Electric motor	271,502	Jan. 30	2088	{ 600 601 }	23	417
Millar, Charles. (See Jenks and Millar, assignors.)						
Millar, Henry W. (See Jenks and Millar.)						
Millar, Mary C. (See Gallaher, John S., assignor.)						
Millar, Maury O., Chicago, Ill. Horizontal knife grinder and sharpener	279,785	June 19	1442	404	23	2384
Millard, Albert M., Wausan, Wis. Swamp and grab hook	290,785	Dec. 25	1799	497	25	1226
Millen, George H., J. H. Manton, F. Labelle, Hull, Quebec, and T. A. Cook, Ottawa, Ontario, Canada. Apparatus for dipping matches	280,650	July 3	374	104	24	66
Millen, George H., Hull, Quebec, Canada, assignor to Diamond Match Company, Wilmington, Del. Machine for transferring matches from the dipping-frame, &c.	281,776	July 24	1818	496	24	335
Millen, George H., Hull, Quebec, Canada, assignor to Diamond Match Company, Wilmington, Del. Frame for dipping matches	281,777	July 24	1819	496	24	335

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Millen, George H., Hull, Quebec, Canada, assignor to Diamond Match Company, Wilmington, Del. Match-splint machine.....	281,778	July 24	1820	497	24	335
Millen, Thomas. (See Hewett and Millen.)						
Millener, Charles A., Deseronto, Ontario, Canada. Car-brake.....	275,930	Apr. 17	1379	379	23	1478
Miller, Abind G., Leyden, N. Y. Mechanical telephone.....	288,835	Nov. 20	1315	360	25	751
Miller, Abraham, Gridley, Cal. Header.....	269,951	Jan. 2	154	45	23	32
Miller, Abraham, assignor to Newark Machine Company, Newark, Ohio. Seeding-machine.....	288,471	Nov. 13	869	235	25	667
Miller, Albert C., Ann Arbor, Mich. Fire-kindler.....	271,648	Feb. 6	76	21	23	454
Miller, Albert F., Chicago, assignor to S. S. Burr, Winetka, Ill. Bed-bottom.....	290,087	Dec. 11	886	{ 251 } 252	25	1050
Miller, Andrew C., Anburn, N. Y., assignor to D. M. Osborne & Co., New York. Clutch.....	288,951	Nov. 20	1454	401	25	778
Miller, Benedick, Paola, Kans. Carriage-painter's adjustable horse or jack.....	276,854	May 1	411	109	23	1698
Miller, Benjamin G., Streator, Ill. Nut-lock.....	287,041	Oct. 23	1598	440	25	308
Miller Bible and Publishing House. (See McGee, Andrew J., assignor.)						
Miller & Bingham. (See Thompson, David W., assignor.)						
Miller, Charles. (See Waring, George H., assignor.)						
Miller, Charles, Ingersoll, Ontario, Canada. Paint.....	274,807	Mar. 27	2004	.....	23	1203
Miller, Charles, Anburn, N. Y. Dumping-wagon.....	278,253	May 22	2131	587	23	2013
Miller, Charles, Anburn, N. Y. Dumping-wagon.....	286,032	Oct. 2	334	92, 93	25	62
Miller, Charles C., Brooklyn, N. Y., assignor to E. & T. Fairbanks & Co., St. Johnsbury, Vt. Platform-scale.....	271,726	Feb. 6	165	46	23	469
Miller, Charles C., assignor of one-half to G. Hencken, New York, N. Y. Machine for cutting, granulating, and disintegrating blocks or cakes of sugar.....	273,875	Mar. 13	825	224	23	983
Miller, Charles C., New York, assignor to J. C. Barnes and T. Schloerb, Brooklyn, N. Y. Apparatus for mixing sugar or similar articles.....	277,319	May 8	1005	270	23	1805
Miller, Charles C., New York, assignor to J. C. Barnes and T. Schloerb, Brooklyn, N. Y. Machine for cutting blocks or cakes of solidified glucose, sugar, or similar articles.....	277,320	May 8	1007	270	23	1805
Miller, Charles F., Cresco, Iowa. Trace-carrier.....	287,456	Oct. 30	2120	576	25	411
Miller, Charles H., Erie, Pa. Attachment for pipe tongs or wrenches.....	273,874	Mar. 13	825	223	23	983
Miller, Charles H., Columbus, Ohio. Chain-pump iron.....	281,106	July 10	938	262	24	173
Miller, Charles H., and W. P. Harrison, Columbus, Ohio. Grappling-ring.....	278,165	May 22	2017	555	23	1993
Miller, Charles R., Lansingburg, N. Y. End-connecting device for rope traces.....	290,454	Dec. 18	1364	377	25	1142
Miller, Charles R., Lansingburg, N. Y. Rope-trace guide.....	290,455	Dec. 18	1365	377	25	1142
Miller & Co., Edward. (See Holbrook, Charles A., assignor.)						
Miller & Co., Edward. (See Hornberger, Louis, assignor.)						
Miller & Co., Edward. (See Langston, Thomas, assignor.)						
Miller & Co., Edward. (See Perkins, Orson N., assignor.)						
Miller & Co., Edward. (See Perkins, Russell B., assignor.)						
Miller & Co., Edward. (See Winslow, Henry O., assignor.)						
Miller, Daniel J. (See Findlay and Miller.)						
Miller, Daniel J., Chicago, Ill. Construction of railways.....	271,727	Feb. 6	168	46	23	469
Miller, Daniel J., and C. F. Findlay, Chicago, Ill. Traction-rope railway.....	281,284	July 17	1177	{ 325 } 326	24	221
Miller, Darwin V., Weedsport, N. Y. Wrench.....	283,801	Aug. 28	1614	454	24	817
Miller, David B. (See Porter, Benjamin S., assignor.)						
Miller, David K., assignor of one-half to J. W. Lacky, Rockbridge Baths, Va. Plow.....	287,148	Oct. 23	1730	473	25	334
Miller, David L., Madison, N. J., assignor to W. H. Ely, New York, N. Y. Sewing-machine motor.....	270,458	Jan. 9	768	225	23	159
Miller, David W., New York, N. Y., assignor of two-thirds to C. S. Davison, Newton, and O. B. Badgley, Westfield, N. J. Adjustable reclining-chair.....	287,769	Oct. 30	2547	685	25	493
Miller, Edgar G., Baltimore County, Md. Picture-frame.....	273,373	Mar. 6	185	50	23	865
Miller, Emily V. D., Vicksburg, Miss. Hand cotton-picker.....	280,651	July 3	376	105	24	66
Miller, Frank, Peoria, Ill. Check-rower.....	287,953	Nov. 6	205	59	25	543
Miller, Frank, Olema, assignor of one-fourth to U. M. Gordon and D. Nye, San Rafael, Cal. Car-coupling.....	281,779	July 24	1822	{ 497 } 498	24	336
Miller, Frank W. (See Taylor, Bruce, assignor.)						
Miller, Frank W., Wooster, Ohio. Hay-elevator track.....	275,840	Apr. 17	1275	350	23	1459
Miller, Franklin, assignor of one-half to W. Shick, Muncie, Ind. Grave-vault.....	278,354	May 29	2296	628	23	2049
Miller, Franklin P. (See Hodgkinson and Miller.)						
Miller, Frederick, et al. (See Groehl, H. William, assignor.)						
Miller, Fredrick C., Newport, Ky. Friezing-machine.....	276,855	May 1	411	110	23	1698
Miller, George, et al. (See Vincent, John Jr., assignor.)						
Miller, George B. (See Fisher, Edward D., assignor.)						
Miller, George M., and F. Riemer, Chicago, Ill.; said Riemer assignor to said Miller. Fire-escape.....	290,908	Dec. 25	1953	539	25	1252
Miller, George W., et al. (See Perkins, John C., assignor.)						
Miller, George W., et al. (See Randall, Francis W., assignor.)						
Miller, George W., Woonsocket, R. I. Bed for cloth-pressing machines.....	275,243	Apr. 3	460	128	23	1305
Miller, George W., Woonsocket, R. I. Machine for pressing textile fabrics.....	285,052	Sept. 18	1107	309	24	1108
Miller, George W., Kalamazoo, Mich. Railway-velocipede.....	259,017	Nov. 27	1533	424	25	798
Miller, H. P. (See Cade, George, assignor.)						
Miller, Harvey H., Canton, Ohio. Sled.....	287,700	Oct. 30	2451	660	25	476
Miller, Henry, Greeley, Colo. Lifting-jack.....	272,969	Feb. 27	1760	492	23	769
Miller, Henry, Greeley, Colo., assignor to Monitor Works, Beloit, Wis. Lifting-jack.....	283,635	Aug. 21	1400	392	24	766
Miller, Henry J., Goshen, N. Y. Spoke-tenoning and felly-boring machine.....	278,995	June 5	463	127	23	2202
Miller, Henry W., Jr., Philadelphia, Pa. Hair-felt covering.....	290,456	Dec. 18	1366	377	25	1142
Miller, J. Frank, Oakland, Cal. Postal scale.....	276,701	May 1	211	54, 55	23	1660
Miller, Jacob, et al. (See Mack, Alfred L., assignor.)						
Miller, Jacob, Canton, Ohio. Grain thrashing and separating machine.....	274,097	Mar. 13	1088	300	23	1028
Miller, Jacob, Canton, Ohio. Thrashing and cleaning machine.....	275,244	Apr. 3	460	128	23	1305
Miller, Jacob, Rockport, Ind. Weather-boarding gage.....	290,457	Dec. 18	1366	377	25	1142
Miller, Jacob, and D. Mager, Allentown, Pa. Radiating-drum for hot-air furnaces.....	287,149	Oct. 23	1730	474	25	334
Miller, Jacob D. (See Eyster, Edward G., assignor.)						
Miller, Jacob D., York, Pa. Car-coupling.....	274,808	Mar. 27	2005	558	23	1203
Miller, Jacob D., York, assignor to himself and J. Broadbeck, Jeffersonborough, Pa. Car-brake.....	282,748	Aug. 7	332	95	24	558
Miller, Jacob O. (See Barratt, Henry, assignor.)						
Miller, James, Oakland, Cal. Filter.....	271,098	Jan. 23	1572	452	23	318
Miller, James, assignor of one-half to C. H. Delamater and G. H. Robinson, New York, N. Y. Drilling-machine.....	292,750	Aug. 7	333	95	24	558
Miller, James B., Kent, Ohio. Balance-valve.....	281,907	July 24	1984	543	24	364
Miller, James F., Spring Station, Ind. Finger-bar for mowing and reaping machines.....	282,749	Aug. 7	333	95	24	558
Miller, James K., New York, N. Y. Shoe-cover.....	282,915	Aug. 7	521	146	24	596



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. G.	Vol.	Page.
Miller, James W., Newark, N. J. Sleeve or other button .....	280,214	June 26	1960	552	23	2482
Miller, Jesse, Southport, Ind. Combined harrow and crusher .....	272,074	Feb. 13	610	165	23	557
Miller, Joel, Philadelphia, Pa. Horse-boot .....	288,836	Nov. 20	1316	361	25	751
Miller, John, Will's Point, Tex. Combined clod-crusher and sod and stalk cutter .....	273,123	Feb. 27	1947	546	23	892
Miller, John, Cambridgeport, Mass. Screw-threading device .....	274,630	Mar. 27	1797	500	23	1167
Miller, John, Cambridgeport, Mass. Pipe-cutter .....	274,631	Mar. 27	1798	500	23	1167
Miller, John, Milton, Oreg. Machine for dampening or wetting grain .....	278,996	June 5	466	128	23	2203
Miller, John, Racine, Wis. Creamery attachment for refrigerators .....	280,940	July 10	752	209	24	138
Miller, John A., Paducah, Ky. Car-signal .....	271,348	Jan. 30	1859	547	23	381
Miller, John A., assignor to Greene Stove Company, Newark, N. J. Fire-pot for stoves .....	277,050	May 8	679	177	23	1748
Miller, John C., and A. H. Jones, assignors to Foster Hardware Company, Meriden, Conn. Drawer-pull .....	288,837	Nov. 20	1316	361	25	752
Miller, John H., Rising Sun, Ohio. Hoisting apparatus .....	285,915	Oct. 2	175	50	25	34
Miller, John J., Chicago, Ill. Oil-burner .....	281,107	July 10	939	263	24	173
Miller, John S., assignor of one-half to G. Frey, St. Louis, Mo. Trace-fastener .....	275,245	Apr. 3	461	128	23	1305
Miller, John S., assignor of one-third to G. Frey, St. Louis, Mo. Stamp case and attacher .....	279,786	June 19	1443	404	23	2385
Miller, John T., Iowa Falls, Iowa. Ditching-plow .....	284,465	Sept. 4	371	103	24	967
Miller, Jonathan, Concord, N. H. Recovering metallic particles from water .....	288,838	Nov. 20	1317	361	25	752
Miller, Jonathan, Concord, N. H. Ore-concentrator .....	289,018	Nov. 27	1534	424	25	799
Miller, Jonathan, Concord, N. H. Apparatus for collecting and saving metallic particles .....	290,238	Dec. 18	1093	305	25	1096
Miller, Jonathan, Concord, N. H. Recovering metals .....	290,458	Dec. 18	1367	378	25	1143
Miller, Josef, New York, N. Y. Method of and apparatus for bleaching ivory .....	281,780	July 24	1823	496	24	336
Miller, Joseph, and D. Howarth, assignors of one-half to M. W. Barse, Olean, N. Y. Steam-generator .....	273,579	Mar. 6	441	118	23	910
Miller, Joseph A., trustee. (See Breckenridge, Henry W., assignor.)						
Miller, Joseph A. (See Ford, Franklin D., assignor.)						
Miller, Joseph A., New York, N. Y. Fire-escape .....	287,560	Oct. 30	2249	610	25	438
Miller, Joseph H., Moline, Ill. Pillow-sham holder .....	278,581	May 29	2562	699	23	2096
Miller, Joseph P., Philadelphia, Pa. Brick-press .....	283,802	Aug. 28	1615	454	24	817
Miller, Justus. (See Thompson, David W., assignor.)						
Miller, Justus. (See Tracy, William H. H., assignor.)						
Miller, Lebbeus B., Elizabeth, N. J. Mechanism for converting motion .....	274,094	Mar. 13	1086	299	23	1028
Miller, Lebbeus B., and P. Diehl, Elizabeth, N. J. Shuttle-holder for sewing-machines .....	283,636	Aug. 21	1401	392	24	766
Miller, Lebbeus B., and P. Diehl, Elizabeth, N. J., assignors to Singer Manufacturing Company of New Jersey. Ruffling attachment for sewing-machines .....	272,300	Feb. 13	881	247	23	604
Miller, Lebbeus B., and P. Diehl, Elizabeth, N. J., assignors to Singer Manufacturing Company of New Jersey. Sewing-machine .....	274,359	Mar. 20	1433	393	23	1096
Miller, Lebbeus B., and P. Diehl, Elizabeth, N. J., assignors to Singer Manufacturing Company of New Jersey. Sewing-machine .....	275,402	Apr. 10	708	189	23	1356
Miller, Levi K., Collamer, Pa. Tire-upsetter .....	273,580	Mar. 6	441	119	23	910
Miller, Levi L., et al. (See Mack, Alfred L., assignor.)						
Miller, Lewis, Akron, Ohio. Harvester-binder .....	271,253	Jan. 30	1755	508 } 509 }	23	357
Miller, Lewis, Akron, Ohio. Harvester-binder .....	271,254	Jan. 30	1759	510 }	23	358
Miller, Lewis, Akron, Ohio. Grain-binding harvester .....	276,448	Apr. 24	2027	562 } 563 }	23	1598
Miller, Lewis, Akron, Ohio. Harvester .....	276,449	Apr. 24	2031	563 } 564 }	23	1598
Miller, Lewis, Akron, Ohio. Grain-binding harvester .....	290,459	Dec. 18	1368	378 } 379 }	25	1143
Miller, Lewis, and A. E. Ellinwood, Akron, Ohio. Wheel for harvesters .....	276,450	Apr. 24	2032	564 }	23	1598
Miller, Luke H., Baltimore, Md. Fire proof lining for boxes, safes, doors, shutters, vaults, &c. ....	283,133	Aug. 14	784	.....	24	646
Miller, Matilda S. (See Smith, William, assignor.)						
Miller, Max, Brooklyn, N. Y. Toy kitchen .....	289,121	Nov. 27	1665	462	25	821
Miller, Michael, Glenwood, Iowa. Trestle .....	288,651	Nov. 20	1089	299	25	712
Miller, Morgan B. (See Stanwood and Miller.)						
Miller, Richard, assignor of one-half to J. G. Kanouse, Appleton, Wis. Hay-carrier .....	288,839	Nov. 20	1318	361 } 362 }	25	752
Miller, Richard W., assignor of one-third to J. Totham, New Haven, Conn. Device for preventing hammer in water-pipes .....	273,379	Mar. 6	186	50	23	866
Miller, Robert, et al. (See Cowell, Edward R. E., assignor.)						
Miller, Rodolphus, Lansing, N. Y. Form for making crates .....	285,053	Sept. 18	1109	309	24	1108
Miller, Samuel, Moweaqua, Ill. Combined harrow and clod-crusher .....	285,644	Sept. 25	1810	515	24	1240
Miller, Samuel J., Cambridge City, Ind. Sliding gate .....	281,908	July 24	1985	544	24	365
Miller, Samuel Y., Union County, Ind. Corn-harrow .....	270,241	Jan. 9	492	145	23	107
Miller, Tedor T., Hico, Tex. Seeding-machine .....	273,755	Mar. 13	666	178	23	956
Miller, Theodore C., Canton, Ohio. Support for ironing-boards .....	271,895	Feb. 6	370	102	23	506
Miller, Theodore E., Houston, Tex. Combination implement for sealing packages and railway-cars .....	270,092	Jan. 2	304	90	23	62
Miller, Thomas, Jr., Springborough, Ohio. Wagon-jack .....	275,931	Apr. 17	1380	380	23	1478
Miller, Thomas L., Pearsall, Tex. Veterinary medicine .....	287,701	Oct. 30	2452	.....	25	476
Miller, Warren P., Brooklyn, N. Y. Chair-seat spring .....	270,093	Jan. 2	306	91	23	62
Miller, Warren P., Brooklyn, N. Y. Sewing-machine guide .....	271,728	Feb. 6	170	46	23	470
Miller, Warren P., Brooklyn, N. Y. Carpet-cleaner .....	288,720	Nov. 20	1182	323	25	726
Miller, Washington J., Alameda, Cal. Combined thimble and thread-cutter .....	273,350	Mar. 6	187	50	23	866
Miller, William, Boston, Mass. Twine-cutter .....	286,467	Oct. 9	857	233	25	166
Miller, William, Boston, Mass. Life-preserving mattress .....	289,122	Nov. 27	1666	462	25	822
Miller, William H. (See Cooper, John W., assignor.)						
Miller, William H., Worcester, Mass. Peg-float .....	275,687	Apr. 10	1070	292	23	1417
Miller, William H., South Bend, Ind. Fifth-wheel .....	275,688	Apr. 10	1071	292	23	1417
Miller, William K., Canton, Ohio. Universal joint .....	279,415	June 12	1013	281	23	2304
Miller, William K., Canton, Ohio. Steam-actuated valve .....	287,845	Nov. 6	15	20	25	519
Miller, William R., Baltimore, Md. Paper box .....	282,637	Aug. 7	220	64	24	538
Miller, William T. (See Westerman and Miller.)						
Miller, Wilson B., Indianapolis, Ind. Farm-gate .....	286,053	Oct. 2	336	93	25	62
Millerstedt, George, Philadelphia, Pa. Railway-switch .....	280,215	June 26	1962	552	23	2482
Milliholland, Henry, Philadelphia, Pa. Spark-arrester .....	271,255	Jan. 30	1761	510	23	358
Milliholland, Henry, assignor of nine-twentieths to R. W. Lesley and C. V. Grant, Philadelphia, Pa. Car-axle box .....	270,908	Jan. 23	1339	386	23	281
Milliholland, Henry, assignor of one-half to R. W. Lesley, Philadelphia, Pa. Blast-concentrator for locomotives .....	282,103	July 31	2227	612 } 613 }	24	411
Milliholland, Henry, assignor of one-half to R. W. Lesley, Philadelphia, Pa. Deflecting-plate for locomotives .....	282,104	July 31	2229	613	24	412

*Alphabetical list of patentees—Continued.*

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Millholland, James A., Cumberland, Md. Coal-car	282,751	Aug. 7	335	95, 96	24	559
Milligan, Charles A., Somerville, and M. J. Killion, Needham, assignors of one-third to W. Killion, Boston, Mass. Self-leveling berth	273,581	Mar. 6	442	119	23	910
Milligan, Henry C., South Orange, N. J., assignor to Iron Clad Manufacturing Company, New York, N. Y. Stove-board	273,582	Mar. 6	444	119	23	911
Milligan, John C., Brooklyn, assignor to Lalance & Grosjean Manufacturing Company, New York, N. Y. Portable toilet-stand	270,459	Jan. 9	770	225	23	159
Milligan, John C., Brooklyn, and J. Chaumont, Woodhaven, assignors to Lalance & Grosjean Manufacturing Company, New York, N. Y. Enameled iron wash-basin	285,645	Sept. 25	1811	515	24	1241
Milligan, Sylvester H., near McCluney, Ohio. Car-coupling	271,896	Feb. 6	371	103	23	506
Milligan, William T., Boston, Mass., assignor to Brunswick Ship's Berth Company, of Connecticut. Automatic ship's berth	277,321	May 8	1008	{ 270 271 }	{ 23 23 }	{ 1806 1806 }
Milliken, A. C. (See Gibb, Walter, assignor.)						
Milliken, George, Oneco, Ill. Adjustable elevator	287,042	Oct. 23	1599	440	25	309
Milliken, John A. (See Barton and Milliken.)						
Milliken, William H., San Francisco, Cal. Hydraulic elevator	281,781	July 24	1824	498	24	336
Millon, Hyppolite. (See Gavard and Millon.)						
Mills, Andrew B., Pittsburg, Pa. Glass crock	287,846	Nov. 6	68	20	25	519
Mills & Bro., Thos. (See Mills, Thomas, assignor.)						
Mills, Charles L., Brooklyn, N. Y. Bed-bottom spring	277,322	May 8	1011	271	23	1806
Mills, Charles L., Brooklyn, N. Y. Folding spring bed-bottom	277,323	May 8	1012	271	23	1806
Mills, Charles W., assignor of one-half to W. Hallowell, Philadelphia, Pa. Fire-escape	282,351	July 31	2558	701	24	466
Mills, Chauncey W., Rochester, N. Y. Metallic packing for piston-rods	284,042	Aug. 28	1923	538	24	871
Mills & Co., J. R. (See Schwemlein, George, assignor.)						
Mills, Daniel, Philadelphia, Pa. Sewing-machine	272,740	Feb. 20	1455	{ 408 409 }	{ 23 23 }	{ 710 710 }
Mills, Daniel, Philadelphia, Pa. Friction-clutch	286,214	Oct. 9	531	145	25	108
Mills, Daniel, Philadelphia, Pa. Mechanical motion	286,215	Oct. 9	532	146	25	108
Mills, Frank A., and T. A. Mossop, Philadelphia, Pa. Compensating pendulum	279,176	June 12	712	194	23	2255
Mills, Frederick, and C. H. Knight, Boston, Mass. Book	289,434	Dec. 4	74	21	25	900
Mills, Henry H. (See Gibbons, David, assignor.)						
Mills, Isaac N., Dover, assignor of two-thirds to W. Huston and H. N. Wickersham, Wilmington, Del. Heating, cooling, and ventilating apparatus	283,637	Aug. 21	1402	392	24	766
Mills, Jonathan, Chicago, Ill. Sprocket for rope and similar belts	276,619	May 1	91	25	23	1643
Mills, Joseph. (See Schmitz and Mills.)						
Mills, Lucius F., Ionia, Mich. Carburetor	281,108	July 10	940	{ 263 264 }	{ 24 24 }	{ 174 174 }
Mills, Merrill B. (See Gardner and Mills.)						
Mills, Patrick. (See Rees and Mills.)						
Mills, Thomas, assignor to Thos. Mills & Bro., Philadelphia, Pa. Ice-cream dasher	278,997	June 5	467	128	23	2203
Mills, Thomas B., et al. (See Welles, Richard J., assignor.)						
Mills, William, et al. (See Welles, Richard J., assignor.)						
Mills, William N., assignor of one-half to A. C. Van Meter, Truro, Nova Scotia, Canada. Knob attachment	283,134	Aug. 14	785	220	24	646
Millsbaugh, Rolla L., Winfield, Kans. Wheel for sulky-plows	286,468	Oct. 9	858	233	25	166
Milne, George, and W. H. Gants, assignors of one-third to P. B. Quinlan, San Francisco, Cal. Water-closet. (Reissue.)	10,377	Aug. 28	2080	578	24	898
Milsted, William N., et al. (See Burton, Joseph, assignor.)						
Miltimore, Alonzo E., U. S. Army, and A. J. Wolff, New York, N. Y. Wheel	280,063	June 26	1792	{ 502 503 504 }	{ 23 23 23 }	{ 2451 2451 2451 }
Milton, John, Hamilton, Va. Knob-latch	281,109	July 10	946	265	24	174
Milton, Samuel A., Clinton, Mo. Shoe-fastening	273,124	Feb. 27	1948	547	23	803
Minard, Orlando W., Johnsville, Pa. Grinding the bases of glass tumblers	280,941	July 10	752	209	24	138
Minchener, Joseph, Troy, Ala. Cotton-planter	283,135	Aug. 14	786	220	24	646
Minck, George. (See Asher and Minck.)						
Miner, Ebenezer P. (See Magee, Daniel W., assignor.)						
Miner, Henry M., assignor to Granite Roofing Company, (limited,) Pittsburg, Pa. Apparatus for making roofing fabric	275,841	Apr. 17	1276	350	23	1459
Miner, Henry M., assignor to Granite Roofing Company, (limited,) Pittsburg, Pa. Machine for making roofing fabric	276,856	May 1	413	110	23	1699
Miner, Henry M., assignor to Granite Roofing Company, (limited,) Pittsburg, Pa. Roofing fabric	278,722	June 5	62	19	23	2135
Miner, Theodore F. (See Baer, Miner, and Taylor.)						
Miner, William W., Boston, Mass. Finishing horseshoe-nail blanks	287,150	Oct. 23	1732	474	25	334
Mingus, William T., Newark, N. J. Lock for sliding doors	275,066	Apr. 3	245	67	23	1268
Minich, Jacob K., North Hampton, Ohio. Try-square and bevel	287,847	Nov. 6	69	21	25	519
Minister, Robert H., Baltimore, Md. Grinding and decorticating mill	284,466	Sept. 4	372	103	24	967
Minneapolis Harvester Works. (See Appleby, John F., assignor.)						
Minneley, William E., Wellsville, N. Y. Harness-buckle	284,467	Sept. 4	373	104	24	967
Minnich, John G., Jr., Bedford, Pa. Necktie and collar stay	287,043	Oct. 23	1600	440	25	309
Minnick, Lorenzo D. (See Smith, Joseph D., assignor.)						
Minor, A. N., et al. (See Graham, Andrew, assignor.)						
Minor, Lyman D., assignor of one-half to J. P. Lindsay, New York, N. Y. Garment-clasp	272,075	Feb. 13	610	165	23	558
Minor, W. T. (See Passenger, John S., assignor.)						
Minot, Chester, et al. (See Minot, Hiram P., assignor.)						
Minot, Hiram P., assignor to C. Minot, Columbus, Ohio, and S. Watson, Cambridge City, Ind. Ore-separator	273,583	Mar. 6	445	120	23	911
Mitchell, Ackber O. (See Ackerman, Mitchell, and Underwood.)						
Mitchell, Albert S. (See Mulligan, George, assignor.)						
Mitchell, Alexander, Wilkes-Barré, Pa. Spark-arrester	280,064	June 26	1794	504	23	2451
Mitchell, Ardon M., assignor of one-half to A. Ebbes, Fort Lee, N. J. Sleigh	278,447	May 29	2410	657	23	2070
Mitchell, C. H. (See Grace, William, assignor.)						
Mitchell, Charles, Poughkeepsie, N. Y. Machinery for cutting and mitering printers' rules	271,349	Jan. 30	1890	547	23	381
Mitchell, Charles, Shenandoah, Iowa. Seed-planter	276,266	Apr. 24	1788	497	23	1537
Mitchell, George E., Brooklyn, N. Y. Pad or pillow for the use of travelers	270,242	Jan. 9	493	145	23	107
Mitchell, Gove, Langhorn, Pa. Elevator	272,970	Feb. 27	1761	492	23	769
Mitchell, Isabel M., Philadelphia, Pa. Preserving food	277,768	May 15	1541	418	23	1904
Mitchell, J. Henry, Philadelphia, Pa. Icing-machine for confectionery	271,897	Feb. 6	372	103	23	506
Mitchell, J. Henry, Philadelphia, Pa. Machinery for ornamenting cakes, &c.	271,898	Feb. 6	374	{ 103 104 105 }	{ 23 23 23 }	{ 507 507 507 }
Mitchell, J. Henry, Philadelphia, Pa. Machinery for the manufacture of matches	284,650	Sept. 11	599	{ 169 170 }	{ 24 24 }	{ 1012 1012 }
Mitchell, J. Henry, Philadelphia, Pa. Manufacture of friction-matches	284,651	Sept. 11	602	170	24	1012



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Mitchell, Jacob, Reading, Mass. Tea-pot.....	275,246	Apr. 3	462	129	23	1305
Mitchell, James, Bill, Ga. Turpentine-scraper.....	281,110	July 10	947	265	24	174
Mitchell, James B., Los Angeles, Cal. Fountain-pen.....	284,318	Sept. 4	196	55	24	938
Mitchell, James C., assignor of two-thirds to J. A. Smith and A. R. Tinkham, Lancaster, N. H. Car-coupling.....	285,145	Sept. 18	1223	344	24	1127
Mitchell, John E., Winfield, Kans. Washing-machine.....	281,111	July 10	948	265	24	175
Mitchell, John E., Fowler, assignor of one-half to A. D. Raub, Earl Park, Ind. Shovel for cultivators.....	272,301	Feb. 13	882	247	23	606
Mitchell, John S., Newark, N. J. Hame.....	287,954	Nov. 6	206	60	25	543
Mitchell, Lewis T., Galt, Cal. Portable stacking-derrick.....	275,689	Apr. 10	1072	292	23	1417
Mitchell, N. Chapman, Philadelphia, Pa. Rubber compound.....	290,909	Dec. 25	1953	539	25	1252
Mitchell, Obed H., Springfield, Mo. Lever-derrick.....	291,639	July 17	1623	444	24	296
Mitchell, Obed H., Springfield, Mo. Lever-derrick.....	290,786	Dec. 25	1800	497 498	25	1226
Mitchell, Oscar C. (See Mitchell, Wray and O. C.).....						
Mitchell, Otis M., Marathon, N. Y. Blackboard.....	281,112	July 10	949	266	24	175
Mitchell, Philipp. (See Mahar, Michael W., assignor.).....						
Mitchell, Tobias P., Haverhill, Mass. Boot or shoe.....	290,460	Dec. 18	1374	379	25	1144
Mitchell, William, New York, N. Y. Fishing-rod.....	270,460	Jan. 9	770	225	23	159
Mitchell, William F., Williams, assignor to himself and H. S. Darr, Leesville, Ind. Buckle.....	289,684	Dec. 4	387	111	25	955
Mitchell, William H., Boston, Mass. Dividers or compasses.....	290,330	July 3	63	17	24	14
Mitchell, William H., Boston, Mass. Calipers and dividers.....	286,469	Oct. 9	858	233	25	167
Mitchell, William S., Washington, D. C. Mechansim for propelling vehicles.....	271,899	Feb. 6	378	104 105	23	507
Mitchell, Wray and O. C., Rapids, N. Y. Unloading hay and grain in barns.....	274,010	Mar. 13	982	269	23	1010
Mitchelson, Edward J., Saybrook, Ohio. Sap-feeder.....	290,910	Dec. 25	1954	539	25	1252
Mitscherlich, Alexander, Münden, Prussia, Germany. Preparing cellulose from wood.....	284,319	Sept. 4	198	56	24	938
Mix, Eugene M. and J. E., Buffalo, N. Y. Latch.....	283,268	Aug. 14	957	266 267	24	678
Mix, Frank W. (See Spiegel, Henry L., assignor.) (Reissue).....						
Mix, Frank W., assignor to Corbin Cabinet Lock Company, New Britain, Conn. Lock.....	281,713	July 24	1729	469	24	319
Mix, Frank W., assignor to Corbin Cabinet Lock Company, New Britain, Conn. Trunk-lock.....	285,916	Oct. 2	176	50, 51	25	34
Mix, Frank W., assignor to Corbin Cabinet Lock Company, New Britain, Conn. Cabinet-lock.....	286,327	Oct. 9	697	186	25	137
Mix, Frederick J., Newark, N. J. Shoe-fastener.....	281,909	July 24	1986	544	24	365
Mix, James E. (See Mix, Eugene M. and J. E.).....						
Mixer, William M. (See De La Vergne and Mixer.).....						
Mixer, William M., New York, N. Y. Oil-saving contrivance.....	284,752	Sept. 11	732	205	24	1035
Mixer, William M., New York, N. Y. Ice-machine.....	290,911	Dec. 25	1955	539 540	25	1252
Mixer, Calvin S. (See Hiester, Charles E., assignor.).....						
Mize, Edward. (See Collins, Erasmus B., assignor.).....						
Mizenes, Samuel H. (See Simmons, Myron E., assignor.).....						
Mlinarich, Giuseppe I. P., Del Rio, Tex. Nut-lock.....	277,769	May 15	1542	419	23	1904
Mock, Eugene A. (See Kemp and Mock.).....						
Mock, Severin, Providence, R. I. Spinning-mule.....	288,841	Nov. 20	1321	362 363	25	752
Model Machine Company. (See Mullins, Joshua C., assignor.).....						
Model Machine Company. (See Osborn, Adelbert E., assignor.).....						
Modes & Brauer. (See Pannster, Gustav, assignor.).....						
Moebis, George, Detroit, Mich. Machine for bunching cigars.....	288,355	Nov. 13	709	194	25	639
Moehl, Daniel, V. Pansch, and L. Moehl, Columbus, Ohio. Wagon-seat.....	283,803	Aug. 28	1616	455	24	817
Moehl, Louis. (See Moehl, Pausch, and Moehl.).....						
Moeller, Carl W., and M. Schmid, Chicago, Ill.; said Moeller assignor to said Schmid. Machine for making picture-moldings.....	285,646	Sept. 25	1812	516 517	24	1241
Moeller, Henry F., Davenport, Iowa. Washing-machine.....	273,584	Mar. 6	447	120	23	911
Moeller, Jacob E., Centralia, Ill. Railway-rail joint.....	289,298	Nov. 27	1873	520	25	861
Moenke, Johann. (See Rohne and Moenke.).....						
Moeslein, Valentine, New York, N. Y. Hat-sewing machine.....	275,067	Apr. 3	246	68	23	1268
Moessinger, Philip. (See Oliver, John L., assignor.).....						
Moffatt, John A., Hamilton, Ontario, Canada. Potato-peeling machine.....	273,125	Feb. 27	1949	547	23	803
Moffatt, Richard R., Brooklyn, N. Y. Electric-arc lamp.....	286,144	Oct. 2	445	121	25	83
Moffet, John, New York, N. Y. Rotary steam-pump.....	276,857	May 1	414	110	23	1699
Moffet, John, New York, N. Y. Fire-escape.....	285,296	Sept. 18	1390	393	24	1159
Moffitt, Arthur L., et al. (See Thatcher and Johnson, assignors.).....						
Moffitt, John, Chicago, Ill. Medicine-spoon.....	285,054	Sept. 18	1110	309	24	1108
Moffitt, John A., Arlington, Mass. Carbon electrode for electric lights.....	281,285	July 17	1179	224	24	222
Mogren, Axel, Worcester, Mass. Annealing-furnace.....	285,426	Sept. 25	1556	438	24	1193
Mohr, Paul. (See Williams, William H., assignor.).....						
Moise, Lionel H., San Francisco, Cal. Type-holding attachment for hand-stamps.....	280,652	July 3	376	105	24	66
Moldenbauer, Fredrick W., Ashippun, Wis. Horseshoe attachment for marshy ground.....	280,216	June 26	1963	553	23	2483
Mole, Alfred B. (See Cadigon, Edward, assignor.).....						
Molecular Telephone Company. (See Bartlett and Waite, assignors.).....						
Molecular Telephone Company. (See Waite, Henry E., assignor.).....						
Molecular Telephone Company. (See Waite and Bartlett, assignors.).....						
Molendo, Hermann, New York, N. Y. Fire-extinguishing apparatus.....	285,146	Sept. 18	1224	344	24	1127
Molera, Ensebins J., and J. C. Cebrian, San Francisco, Cal. Speed-regulator and reversing device for electric motors.....	275,842	Apr. 17	1277	351	23	1459
Molera, Ensebins J., and J. C. Cebrian, San Francisco, Cal. Apparatus for making carbon plates.....	278,355	May 29	2297	628	23	2049
Molera, Ensebins J., assignor to J. C. Cebrian, San Francisco, Cal. Device for magnetizing the tires of drive-wheels of locomotives.....	288,356	Nov. 13	710	195	25	639
Moll, Gustav H., St. Louis, Mo. Umbrella.....	284,043	Aug. 28	1924	538	24	871
Moll, William. (See Scherer, Moll, and Marsh.).....						
Moller, William, Yonkers, N. Y. Amalgamator.....	272,741	Feb. 20	1460	410	23	710
Moller, William, Yonkers, N. Y. Amalgamator.....	272,742	Feb. 20	1461	410	23	711
Molloy, Bernard C., London, England. Method and apparatus employed in extracting gold and silver from their ores and in forming amalgams.....	290,259	Dec. 18	1094	305	25	1096
Moncur, James, Owen Sound, Ontario, Canada. Lantern.....	275,509	Apr. 10	843	228	23	1378
Moncur, James, Owen Sound, Ontario, Canada. Lantern.....	285,147	Sept. 18	1226	344	24	1127
Monell, Ira F., Crisman, Colo. Ore-sizing apparatus.....	270,825	Jan. 16	1234	356	23	256
Monfort, Edgar A., New York, N. Y. Cartridge.....	276,451	Apr. 24	2033	564	23	1599

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Menfort, Frank P., Oskaloosa, Iowa. Seat-lock.....	274,809	Mar. 27	2006	558	23	1203
Mong, Benjamin F., Miles Grove, Pa. Ironing-board.....	277,324	May 8	1013	272	23	1806
Monitor Works. (See Goss, Joseph, assignor.)						
Monitor Works. (See Miller, Henry, assignor.)						
Monitor Works. (See Smith, Wilson R., assignor.)						
Monjou, Jean, Paris, France. Device for measuring and fitting dresses. ....	253,638	Aug. 21	1402	393	24	766
Monk, Henry and W., Hadlow, assignors of one-sixth to J. A. S. Dunscomb, Quebec, Canada. Steam-engine.....	273,126	Feb. 27	1950	547	23	803
Monk, William. (See Monk, Henry and W.)						
Monnot, Charles D., Canton, Ohio. Traction-engine.....	272,743	Feb. 20	1462	411	23	711
Monroe, Edwin P., New York, N. Y., assignor to United States Metallic Packing Company, Philadelphia, Pa. Oil-cup.....	253,914	Aug. 28	1743	492	24	839
Monson, Charles, New Haven, Conn. Mechanical movement.....	273,876	Mar. 13	827	224	23	953
Montant, Alphonse, New York, N. Y. Supporting device for trunks, desks, &c.....	272,459	Feb. 20	1099	310	23	647
Montant, Alphonse, New York, N. Y. Door-lock.....	276,858	May 1	416	111	23	1699
Montant, Alphonse, New York, N. Y. Sash-fastener.....	281,714	July 24	1730	470	24	319
Monteath, Alexander, assignor of one-half to P. J. McMahon, Chicago, Ill. Sewer cap and joint.	278,723	June 5	62	19	23	2135
Montejo, Miguel A. (See Hechavarria and Montejo.)						
Montejo, Miguel A., assignor of one-half to B. Perozo, and B. C. Hechavarria, New York, N. Y. Combined parasol and fan.....	286,626	Oct. 16	1066	287	25	210
Montgelas, Ginet. (See Holbrook and Montgelas.)						
Montgomery, David C., St. Joseph, Mo. Rein-holder.....	276,062	Apr. 17	1535	422	23	1505
Montgomery, James M., Jr., Columbus, Ohio. Window-screen.....	272,302	Feb. 13	883	247	23	606
Montgomery, James M., Jr., Columbus, Ohio. Folding bedstead.....	276,859	May 1	417	111	23	1699
Montgomery, James M., Jr., assignor to Ohio Curtain Cornice Company, Columbus, Ohio. Cornice.....	289,299	Nov. 27	1874	520	25	862
Montgomery, John M. (See Duff, John T., assignor.)						
Montgomery, Joseph F. (See Cottier, William F., assignor.)						
Montgomery, Richardson H. (See Knight, John A., assignor.)						
Montgomery, Thomas J. (See Edmunds, Henry, Jr., assignor.)						
Montgomery, Thomas J. (See Sperry, Alfred W., assignor.)						
Montgomery, William H., Lowell, N. Y. Seed and corn planter.....	281,386	July 17	1305	361	24	244
Moody, Edward M. (See Moyer, Frank J., assignor.)						
Moody, Henry T., assignor of one-half to I. Besse, Newburyport, Mass. Door-hanger.....	281,546	July 17	1505	413	24	277
Moody, Nathan C., assignor of one-half to C. H. Richardson, Newburyport, Mass. Rein-guard for whiffletrees.....	286,145	Oct. 2	446	121	25	83
Moody, Ransom G., San José, Cal. Device for converting motion.....	287,307	Oct. 23	1935	529	25	370
Moore, Henry. (See Newhouse and Moore.)						
Moore, Henry, Toledo, Ohio. Car-brake.....	274,015	Mar. 13	987	271	23	1011
Moomy, Joseph G., assignor of one-half to J. S. Henry, Erie, Pa. Combined nut and pipe wrench.....	288,095	Nov. 6	381	108	25	573
Moon, Henry, Thomasville, N. C. Amalgamator.....	282,352	July 31	2559	702	24	466
Moon, Hermon, Grove City, Pa. Car-coupling.....	279,416	June 12	1014	282	23	2304
Moon, Hiram E., Richmond, Ind. Map and chart case.....	276,267	Apr. 24	1788	497	23	1557
Moon, James H., Fallsington, Pa. Pottery-lawn.....	282,752	Aug. 7	336	96	24	559
Mooney, John B., assignor to J. L. Haven, Cincinnati, Ohio. Steamboat-staging.....	290,342	Dec. 18	1205	338	25	1115
Moore, Albert M. (See Thompson and Moore.)						
Moore, Albert M., et al. (See Ladd, Austin S., assignor.)						
Moore, Albert M., et al. (See Thompson, Edward W., assignor.)						
Moore, Arthur G., Winton Place, and J. W. Rahn, Cincinnati, Ohio. Coal-burning furnace.	279,969	June 26	1675	470	23	2430
Moore, Cantuall J., Webster, Iowa. Gate.....	285,830	Oct. 2	59	18	25	12
Moore, Charles, Philadelphia, Pa. Air-compressor.....	285,297	Sept. 18	1391	393	24	1159
Moore, Charles, Philadelphia, Pa., assignor, by mesne assignments, to Hydro Pneumatic Pump Company, New York, N. Y. Air-pump. (Reissue).....	10,374	Aug. 28	2076	577	24	897
Moore, Charles, assignor of one-half to G. M. Elliott, Lowell, Mass. Hammock or bed.....	273,756	Mar. 13	667	178	23	956
Moore, Charles, assignor of one-half to G. M. Elliott, Lowell, Mass. Refrigerator.....	281,387	July 17	1306	361	24	244
Moore, Charles A. R., et al. (See Farra, Walter H., assignor.)						
Moore, Charles E. (See Moore, Hiram M. and C. E.)						
Moore, Charles E. (See Stevens and Moore.)						
Moore, Charles H., Yonkers, N. Y. Water-closet cistern.....	274,214	Mar. 20	1250	344	23	1064
Moore, Cortland E., assignor of two-thirds to H. C. Thurber, Marquette, Mich. Ore reducing and separating machine.....	281,782	July 24	1826	498	24	337
Moore, Edward J., Baltimore, Md. Closing boiler-tubes.....	278,998	June 5	468	128	23	2203
Moore, Edward J., Baltimore, Md. Sectional safety-boiler.....	284,468	Sept. 4	374	104	24	967
Moore, Edward J., Baltimore, Md. Sectional safety-boiler.....	289,850	Dec. 11	602	167	25	999
Moore, Edward Y., Chicago, Ill. Sliding car-door.....	286,470	Oct. 9	860	233	25	167
Moore, Ella J., Brimfield, Ill. Device for holding material to be sewed.....	287,044	Oct. 23	1601	440	25	309
Moore, Emery N., and T. N. Anderson, Boston, Mass. Spring foot-board.....	271,256	Jan. 30	1762	511	23	358
Moore, Francis A., and A. J. Heaberlin, Denton, Ky. Windlass.....	281,910	July 24	1987	544	24	365
Moore, Francis A., and A. J. Heaberlin, assignors of one-half to J. J. Calvin and J. F. Shute, Denton, Ky. Windlass.....	286,547	Oct. 9	956	257	25	184
Moore, Frank, Philadelphia, Pa. Electrical conductor.....	284,970	Sept. 11	991	279	24	1081
Moore, Frederick M. (See Moore, Thomas W., assignor.)						
Moore, Harry P., New Richmond, Ohio, assignor to F. Farrell, Ansonia, Conn. Apparatus for preparing mash for fermentation.....	275,247	Apr. 3	463	129	23	1306
Moore, Hiram M. and C. E., New York, N. Y. Combined burglar-alarm and door-securer.	280,501	July 3	206	54	24	37
Moore, Ila N., Battle Creek, Mich. Mitten.....	290,787	Dec. 25	1801	498	25	1226
Moore, Ira, assignor to T. C. Bach, New York, N. Y. Door-spring.....	271,649	Feb. 6	77	21	23	454
Moore, Ira W., assignor to T. C. Bach, New York, N. Y. Door-spring.....	271,650	Feb. 6	78	22	23	454
Moore, Jacob R., and H. Bovee, Clayton, Mich. Adjustable drying-rack.....	269,874	Jan. 2	60	19	23	14
Moore, James, Flat Rock, Ind. Saw-mill dog.....	287,308	Oct. 23	1937	529	25	370
Moore, James C. (See Wardin and Moore.)						
Moore, James C., Brookston, assignor of one-half to Turpie Brothers, Monon, Ind. Steam ditching apparatus.....	284,971	Sept. 11	992	279	24	1081
Moore, James D., Mount Ayr, assignor of one-half to J. M. Shuck and T. G. Orwig, Des Moines, Iowa. Shoe-brush.....	274,016	Mar. 13	988	271	23	1011
Moore, Jennie M., White Sulphur Springs, W. Va. Brush.....	275,932	Apr. 17	1380	380	23	1479
Moore, John, Syracuse, N. Y. Molding for picture-frames.....	284,316	Sept. 4	195	55	24	937
Moore, John, Providence, R. I. Button or stud.....	278,724	June 5	63	19	23	2135



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Moore, John, assignor to C. I. Richards, Brown & Co., Providence, R. I. Bracelet .....	273,241	Feb. 27	2097	588	23	828
Moore, John, and A. J. O'Leary, Chicago, Ill. Claw-bar .....	287,561	Oct. 30	2250	611	25	438
Moore, John A., Cambridgeport, Mass. Mastache-holder .....	278,999	June 5	468	128	23	2203
Moore, John M. (See Williamson, William A., assignor.)						
Moore, John R., assignor to J. Annu, Brooklyn, N. Y. Superheater .....	271,651	Feb. 6	80	22	23	454
Moore, Jonathan J., Thorntown, Ind. Straw-stacker. (Reissue) .....	10,315	Apr. 10	1222	334	23	1442
Moore, Jonathan J., assignor of one-half to J. A. Ball, Thorntown, Ind. Folding conveyer-chute for straw-stackers .....	274,632	Mar. 27	1799	500	23	1167
Moore, Jonathan J., assignor of one-half to J. A. Ball, Thorntown, Ind. Straw-stacker .....	284,317	Sept. 4	195	55	24	937
Moore, Joseph F., Paducah, Ky. Wagon-brake .....	274,017	Mar. 13	989	271	23	1011
Moore, Joseph V., assignor of one-half to H. C. Ensminger, Des Moines, Iowa. Reversing-gear for engines .....	282,753	Aug. 7	337	96	24	559
Moore, Lee E., Boston, Mass., assignor to National Waterproof Shoe Company, Portland, Me. Boot or shoe .....	275,248	Apr. 3	465	130	23	1306
Moore, Matthew R., assignor to himself and Atlas Engine Works, Indianapolis, Ind. Oscillating valve .....	271,729	Feb. 6	170	46	23	470
Moore, Morgan M., <i>et al.</i> (See Farra, Walter H., assignor.)						
Moore, Myron E., Woodford's, Me. Fire-escape .....	280,653	July 3	377	105	24	66
Moore, Myron E., Woodford's, assignor to B. F. Strickland, Portland, Me. Pump .....	279,581	June 19	1216	337	23	2344
Moore, Nelson. (See Norris and Moore.)						
Moore, Phillip, Portland, Oreg. Gang and sulky plow .....	278,725	June 5	64	20	23	2135
Moore, Samuel, Providence, R. I., assignor to Oakville Company, Waterbury, Conn. Die for forming the heads of pins for brooches .....	290,912	Dec. 25	1956	540	25	1252
Moore, Samuel and G. A. Hadley, Providence, R. I. Time-globe .....	270,329	Jan. 9	597	176	23	127
Moore, Silas D. (See Whitaker and Moore.)						
Moore, Solon E., Swanton, Vt. Bed-bottom .....	275,690	Apr. 10	1073	292	23	1418
Moore, Solon E., Swanton, Vt. Package and box cover fastener .....	279,417	June 12	1016	282	23	2304
Moore, Stillman, New Haven, Conn. Top-prop nut .....	277,596	May 15	1338	360	23	1866
Moore, Thomas J. (See Warren, Edmond A., assignor.)						
Moore, Thomas W., Plainfield, N. J., assignor to F. M. Moore, New York, N. Y. Furniture-drawer .....	287,386	Oct. 23	2029	551	25	387
Moore, V. Munford, Ravenswood, Ill. Door-lock .....	289,435	Dec. 4	75	21, 22	25	900
Moore, W. Henry. (See Moore, William T., assignor.)						
Moore, W. J. (See Kirk, W. Ranson, assignor.)						
Moore, William, Clear Spring, Ind. Brake-lever .....	271,099	Jan. 23	1572	452	23	318
Moore, William A., Sherman, Tex. Pressure device .....	284,044	Aug. 28	1925	539	24	871
Moore, William C., Springfield, Mo. Garden implement .....	270,243	Jan. 9	494	146	23	107
Moore, William J., Weatherford, Tex. Wire basket .....	286,952	Oct. 16	1478	406	25	281
Moore, William N., Joliet, Ill. Device for forming stove-lug molds .....	289,685	Dec. 4	388	111	25	955
Moore, William T. (See Geiger and Moore.)						
Moore, William T., Richview, assignor of one-half to W. H. Moore, Nashville, Ill. Combined sack-holder and scale .....	270,094	Jan. 2	307	91	23	63
Moore, William T., and G. R. Jackson, Richview, assignors to C. J. and C. B. Geiger, Ashley, Ill. Sawing-machine .....	286,548	Oct. 9	957	258	25	184
Moore, William T., and G. R. Jackson, Richview; said Jackson assignor to C. J. and C. B. Geiger, Ashley, Ill. Sawing-machine .....	287,951	Nov. 6	204	59	25	543
Moore, Willis E., Thorntown, Ind. Ventilator .....	281,286	July 17	1180	326	24	223
Moore, W. George, Lancaster, Ohio. Ear for pails .....	285,298	Sept. 18	1394	394	24	1159
Moored, Joel, Greenwood, assignor of one-half to W. A. Chalpent, Cambridge, Ohio. Nut-lock .....	272,971	Feb. 27	1762	493	23	769
Moorhead, Robert L. (See Cottier, Jean G. C., assignor.)						
Moorhead, Robert L. (See Richards, Levi, assignor.)						
Moran, Jeremiah H., London, Ontario, Canada. Vehicle-spring .....	277,770	May 15	1542	419	23	1904
Moran, John J., assignor of one-half to F. D. Voris, Neoga, Ill. Blast-regulator for grain-separators .....	289,436	Dec. 4	77	22	25	900
Moran, Michael, St. Louis, Mo. Nut-lock .....	279,000	June 5	469	129	23	2203
Moran, Patrick, Grafton, W. Va. Vehicle-hub .....	280,217	June 26	1964	553	23	2483
Moran, William, Williamsburg, N. Y. Gas-trap for sinks, urinals, &c. ....	270,602	Jan. 16	959	278	23	205
Moran, William J., Freeport, Ill. Shackle for vehicle-springs .....	281,547	July 17	1505	413	24	277
Moran, William J., assignor of one-half to J. H. Schlott, Freeport, Ill. Vehicle-spring .....	280,391	July 3	64	17	24	14
Morand, William J., assignor to I. S. Van Deusen & Son, Passaic, N. J. Machine for rolling buttons on whips .....	271,503	Jan. 30	2091	601	23	417
Morand, William J., assignor to himself and C. R. Van Densen, Passaic, N. J. Whip-connection .....	271,054	Jan. 30	2092	602	23	417
Morava, Wensel, Chicago, Ill. Dynamo-electric machine .....	276,063	Apr. 17	1536	422	23	1505
Morden, William J., Chicago, Ill. Spike for railway-rails .....	277,597	May 15	1339	360	23	1867
Morden, William J., Chicago, Ill. Frog .....	285,447	Sept. 25	1814	517	24	1241
Morden, William J., Chicago, Ill. Railway-frog .....	288,652	Nov. 20	1090	299	25	712
More, Zophar W., and M. H. Tarbox, assignors to Penfield Block Co., Lockport, N. Y. Snatch-block .....	288,252	Nov. 13	572	159	25	616
Moreau, Charles. (See De Redon, Constant F., assignor.)						
Moreau, Enguè, assignor to T. W. Sterling, San Francisco, Cal. Hand rock-drill .....	269,952	Jan. 2	155	45	23	33
Moreau John B., Jr., Freehold, N. J. Printer's chase .....	270,969	Jan. 23	1418	408	23	293
Morehead, John, Detroit, Mich. Steam-trap .....	282,353	July 31	2561	702	24	467
Morehouse, Henry W., <i>et al.</i> (See Paine, Henry M., assignor.)						
Morel, Alphonse, Paris, France. Automatic temperature-regulator .....	273,757	Mar. 13	669	179	23	957
Morel, Alphonse, Paris, France. Apparatus for heating vehicles .....	273,758	Mar. 13	670	179, 180	23	957
Moreland, John E. (See Mihan, Patrick, assignor.)						
Morell, James F. (See Crate and Morell.)						
Moret, Jules L., Paris, France. Composition for depilating hides .....	281,287	July 17	1181	.....	24	222
Morey, Franklin, Brooklyn, N. Y., assignor to O. W. Turner, Oak Park, Ill. Ore-crushing machine .....	274,215	Mar. 20	1252	345	23	1064
Morey, John. (See Kimball and Barrett, assignors.)						
Morey, Roswell E., San Francisco, Cal. Fruit-basket .....	277,148	May 8	809	213	23	1771
Morford, Abraham O., Port Chester, N. Y. Fire-escape cable .....	280,065	June 26	1795	504	23	2451
Morgan, Albert H., assignor of two-thirds to J. E. Boyels and W. F. Morgan, Creston, Iowa. Incubator .....	272,744	Feb. 20	1465	412	23	711
Morgan, Alice, <i>et al.</i> (See Morgan, Edgar H. and C., assignors.)						
Morgan, Alonzo R. (See Williams, Henry G., assignor.)						
Morgan, Amos W., Buffalo, N. Y. Gas and water box for streets .....	283,411	Aug. 21	1138	321	24	718
Morgan, Antonette, <i>et al.</i> (See Morgan, Edgar H. and C., assignors.)						
Morgan, Charles. (See Morgan, Edgar H. and C.)						
Morgan, Charlotte. (See Murray, George, Jr., assignor.)						
Morgan, Daniel W. (See Hallett, James, assignor.)						
Morgan, David J., Cardiff, county of Glamorgan, England. Tube-stopper .....	282,006	July 24	2096	574	24	383

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Morgan, Dayton S. (See Bordwell, Joseph, assignor.)						
Morgan, Dewitt C., and C. H. French, assignors of one-third to N. N. Kent, Lynn, Mass. Thread-delivery attachment for sewing-machines.	285,148	Sept. 18	1227	344	24	1128
Morgan, Edgar H. and C., Freeport, Ill. Thill-supporter	280,942	July 10	753	209	24	138
Morgan, Edgar H. and C., Freeport, Ill. Grinding-mill	281,911	July 24	1987	544	24	365
Morgan, Edgar H. and C., assignors to M. Lawver, A. and A. Morgan, Freeport, Ill. Feed-grinding mill	270,826	Jan. 16	1235	356	23	257
Morgan, Edgar H. and C., assignors to M. Lawver, A. and A. Morgan, Freeport, Ill. Thill-supporter	273,877	Mar. 13	829	224	23	984
Morgan Envelope Company. (See Slater, William D., assignor.)						
Morgan, George C., Chicago, Ill. Boiler	280,392	July 3	65	17	24	14
Morgan, George F. G., San Francisco, Cal. Sandal	288,653	Nov. 20	1091	299	25	712
Morgan, James E., Hickman County, Ky. Water-elevator.	278,582	May 29	2562	700	23	2097
Morgan, John H. (See Morgan, Hayden, and Morgan.)						
Morgan, John R., Alliance, Ohio. Car-wheel	278,726	June 5	66	20	23	2136
Morgan, John T., et al. (See Hayden, Henry F., assignor.)						
Morgan, John T., Selma, Ala., H. F. Hayden, and J. H. Morgan, Washington, D. C. Reducing and smelting metals and apparatus therefor	290,343	Dec. 18	1206	338	25	1115
Morgan, Joseph S., et al. (See Schreiber, Charles W., assignor.)						
Morgan, Lemuel. (See Sweeney, Peter, assignor.)						
Morgan, Lyman, Port Washington, Wis. Machine for cleaning flaxseed	282,211	July 31	2380	655	24	435
Morgan, Lyman, Port Washington, Wis. Snow-plow	283,011	Aug. 14	640	181	24	621
Morgan, Oliver P., Hazelton, Mich. Power-press	272,303	Feb. 13	883	247	23	606
Morgan, Richard J., Orlando, Fla. Fruit-picker	288,096	Nov. 6	382	108	25	574
Morgan, Richard P., Jr., Dwight, Ill. Railway-rail joint	280,654	July 3	378	106	24	67
Morgan, Robert, Stockton, Cal. Cork-extractor	270,095	Jan. 2	307	91	23	63
Morgan, Robert W., Lynchburg, Va. Charge retainer and concentrator for cartridges	287,151	Oct. 23	1734	475	25	335
Morgan, Samuel M., Kingsland, county of Middlesex, England. Dust-ring for watches	287,152	Oct. 23	1734	475	25	335
Morgan, Thomas R., Sr., Alliance, Ohio. Crane	290,260	Dec. 18	1096	305 306 307 308 309	25	1096
Morgan, Thomas R., Sr., Alliance, Ohio, assignor to W. D. Wood, Pittsburg, Pa. Machine for bending sheet-metal fence-posts	283,269	Aug. 14	958	267	24	678
Morgan, Thomas R., G. Ruf, and D. Davis, Jackson, Ohio. Car-coupling	286,054	Oct. 2	337	93	25	62
Morgan, William C. (See Worthen, Edgar C., assignor.)						
Morgan, William F., et al. (See Morgan, Albert H., assignor.)						
Morin, Charles D., Woodland, Cal. Combination ice-chest and reservoir	271,100	Jan. 23	1573	453	23	318
Moritz, Leopoldt, Newport, Ky., assignor to Mosler, Bahmann & Co., Cincinnati, Ohio. Coupling device for safe-spindles	269,953	Jan. 2	156	46	23	33
Morlan, Albert G., and W. N. McKeehen, assignors one-third to W. W. Wilkinson, Fremont, Ind. Washing-machine	279,877	June 19	1556	435	23	2404
Morley, Albert. (See Pardee and Morley.)						
Morley, James H., Holyoke, assignor to Morley Sewing Machine Company, Boston, Mass. Heavy-fabric sewing-machine	270,971	Jan. 23	1420	409 410 411	23	293
Morley Sewing Machine Company. (See Morley, James H., assignor.)						
Morrell, James A., New York, N. Y. Manufacturing sugar	280,943	July 10	754	24	138	
Morrell, James A., New York, N. Y., assignor to R. Rathbone. Evaporator	281,912	July 24	1989	545	24	365
Morrell, Robert, Montclair, N. J. Roller grinding-mill	283,639	Aug. 21	1403	393	24	767
Morrell, Robert, Summit, N. J. Fire-engine	285,055	Sept. 18	1111	310	24	1109
Morrill, Charles. (See Arnold and Morrill.)						
Morrill, Charles, New York, N. Y. Drill-chuck	274,135	Mar. 20	1146	316	23	1045
Morrill, Charles, New York, N. Y. Eyeletting-punch	279,493	June 12	1103	304	23	2318
Morrill, Charles, New York, N. Y. Joint for dividers and calipers	284,045	Aug. 28	1926	539	24	871
Morrill, Charles, New York, N. Y. Sash-fastener	284,046	Aug. 28	1927	539	24	872
Morrill, Charles E. (See Logue, Jones, and Morrill.)						
Morrill, George P., Canterbury, N. H. Ax and tool handle guard	279,582	June 19	1217	337	23	2344
Morrill, George P., Canterbury, N. H. Ax and tool handle guard	289,123	Nov. 27	1667	462	25	822
Morrill, Osgood, Salisbury, Mass. Jump-seat carriage	274,633	Mar. 27	1800	500	23	1167
Morrill, Osgood, Salisbury, Mass. Jump-seat carriage	278,553	May 29	2563	700	23	2097
Morrill, Silas H., Geneva, N. Y. Steam-radiator	287,770	Oct. 30	2549	686	25	493
Morris, A. Hamilton, and N. Finck, Elizabeth, N. J.; said Finck assignor to said Morris. Combined carpet-stretcher and tack-driver	287,562	Oct. 30	2251	611	25	438
Morris Augustus, Cincinnati, Ohio. Machine for cutting shoe-button-fly scallops	281,113	July 10	950	266	24	175
Morris, Augustus, Youngstown, N. Y. Plow-standard	289,437	Dec. 4	78	22	25	900
Morris, Benjamin W., and N. Weaver, Circleville, Ohio. Card table and counter combined	280,655	July 3	379	106	24	67
Morris, Benjamin W., and W. H. Rodgers, Circleville, Ohio. Whip-socket	288,721	Nov. 20	1184	323	25	727
Morris, Burrell, Newton Factory, Ga. Combined cotton planter and cultivator	271,101	Jan. 23	1574	453	23	319
Morris, Charles N., Cincinnati, Ohio. Grinding and graining device	279,001	June 5	470	129	23	2204
Morris, Charles W., Lowestoft, county of Suffolk, England. Rowlock	283,640	Aug. 21	1405	393	24	767
Morris County Machine and Iron Company. (See Bennett, Charles A., assignor.)						
Morris, Edward L., Boston, Mass. Toy savings-bank	275,068	Apr. 3	248	68	23	1268
Morris, Edward L., Boston, Mass. Vise	288,722	Nov. 20	1185	323	25	727
Morris, Edwin. (See Dean, Cyrus S., assignor.)						
Morris, Frederick, San Francisco, Cal. Amalgamator and settler	278,035	May 22	1859	507	23	1965
Morris, George M., Cohoes, assignor of one-half to W. I. Bleakley, Lansingburg, N. Y. Binder for sewing-machines	274,634	Mar. 27	1801	501	23	1167
Morris, George M., Cohoes, assignor of one-half to W. I. Bleakley, Lansingburg, N. Y. Trimming attachment for sewing-machines	276,860	May 1	419	112	23	1700
Morris, George M., Cohoes, assignor of one-half to W. I. Bleakley, Lansingburg, N. Y. Lifting and rotating presser-foot device	289,687	Dec. 4	391	112	25	955
Morris, George M., assignor of one-half to G. A. House, Cohoes, N. Y. Sewing-machine attachment for sewing on buttons	289,686	Dec. 4	389	111 112	25	955
Morris, James. (See Wilcox, Edward M., assignor.)						
Morris, James A., Boston, Mass. Nursing bottle and nipple	280,656	July 3	380	106	24	67
Morris, James M., Bradford, Ill. End-gate for wagons	274,018	Mar. 13	990	271	23	1012
Morris, John B. (See Morris, Robert E. and J. B.)						
Morris, John B., New York, N. Y. Fire-escape	289,924	Dec. 11	690	193	25	1014
Morris, John B., assignor of one-half to T. S. Ireland, Cincinnati, Ohio. Knob attachment	283,718	Aug. 21	1506	424	24	786
Morris, John H. and T. D., Seward, Nebr. Combination-lock	269,954	Jan. 2	157	46	23	33
Morris, John H. and T. D., Seward, Nebr. Animal-trap	288,182	Nov. 6	481	133	25	591
Morris, John H. and T. D., Seward, Nebr., assignors to F. F. Adams Company, Erie, Pa. Animal-trap	287,387	Oct. 23	2030	552	25	387



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Morris, Marion A. (See Goodyear and Morris.)						
Morris, Owen H., New Haven, Conn. Horse-collar fastening	279,177	June 12	713	194	23	2255
Morris, Presley W., Ritchie Court-House, W. Va. Attachment for car-seats	290,344	Dec. 18	1208	338	25	1116
Morris, Robert C., Olney, Ill. Journal-box cooler	284,568	Sept. 4	499	140	24	988
Morris, Robert E. and J. B., Wichita, Kans. Machinery for making fences	290,699	Dec. 25	1687	464 465	25	1204
Morris, Thomas D. (See Morris, John H. and T. D.)						
Morris, William B., San Francisco, Cal. Railway-crossing barrier or gate	271,102	Jan. 23	1575	453	23	319
Morris, William B., San Francisco, Cal. Railway safety-alarm	274,635	Mar. 27	1803	501	23	1168
Morris, William J., assignor to Union Hardware Company, Torrington, Conn. Roller-skate	283,915	Aug. 23	1744	492	24	840
Morris, Willis G., Council Bluffs, Iowa. Hub	286,471	Oct. 9	861	234	25	167
Morrison, Amanda, Wilmington, N. C. Market-truck	284,881	Sept. 11	884	249	24	1062
Morrison, Andrew B., Litchfield, Ill. Apparatus for lowering coffins	285,149	Sept. 18	1228	345	24	1128
Morrison, Andrew B., Litchfield, Ill. Hospital-crane	290,088	Dec. 11	887	252	25	1050
Morrison, Caroline W., assignor to F. E. Aldrich, Boston, Mass. Circular cloak	278,727	June 5	67	20	23	2136
Morrison, David S., River Styx, Ohio. Fence	271,730	Feb. 6	172	47	23	470
Morrison, Gardner L., Brooklyn, assignor to W. H. Jackson, New York, N. Y. Fire-place	275,933	Apr. 17	1381	350	23	1479
Morrison, Henry B., and G. Willett, Motley, Minn. Dry-pressing brick-machine	276,861	May 1	420	112	23	1700
Morrison, J. Frank. (See O'Sullivan, Michael J., assignor.)						
Morrison, James R., Oakdale, Ill. Box-fastener	288,097	Nov. 6	383	108	25	574
Morrison, John, Pittsburg, Pa. Chill for metallurgic furnaces	279,970	June 26	1676	471	23	2430
Morrison, John H., et al. (See Ring and Bradshaw, assignors.)						
Morrison, John W., Omaha, Nebr. Machine for wetting paper	289,688	Dec. 4	392	112	25	956
Morrison, Richard J., et al. (See Ryan, Patrick, assignor.)						
Morrison, Robert, St. Louis, Mo. Composition for self-lubricating packing	285,648	Sept. 25	1815	517	24	1241
Morrison, Robert T., Jr., Medina, Ohio. Car-coupling	287,702	Oct. 30	2453	600	25	476
Morrison, William A., Cambridge, Mass. Method of and device for preparing and packing bran, &c.	281,288	July 17	1182	326 327	24	223
Morrison, William J., Nashville, Tenn. Manufacturing lard	278,166	May 22	2018	555	23	1993
Morriss, S. J. (See Wright, William H., assignor.)						
Morrow, Jerry, Jackson, Ohio. Weighing and dumping machine	283,641	Aug. 21	1405	393 394	24	767
Morrow, W. H., et al. (See Rice, Joel F., assignor.)						
Mors, William H., and J. C. Cross, Brooklyn, N. Y. Wood-splitting machine	280,637	July 3	381	107	24	67
Morse, Dathan. (See Snyder and Morse.)						
Morse, E. Flut, Ithaca, N. Y., assignor of one-fourth to H. Fitch, Jr., Jersey City, N. J. Hay elevator and carrier	288,587	Nov. 13	1003	277	25	691
Morse, Edmund A. (See Shortleeve, David, assignor.)						
Morse, Francis E. (See Franklin, Benjamin, assignor.)						
Morse, Fred. H., assignor of one-half to J. Petrie, Mohawk, N. Y. Polishing-wheel	277,325	May 8	1013	272	23	1807
Morse, Harris, Tutletown, Cal. Combined cutting, punching, and tire-upsetting machine	274,216	Mar. 20	1253	345	23	1065
Morse, Henry T., Boston, Mass. Folding basket	288,654	Nov. 20	1091	299	25	712
Morse, James O., deceased, (J. O. Morse, Jr., administrator,) Englewood, N. J. Expand- ing-trap	284,220	Sept. 4	82	23	24	919
Morse, Levi, Litchfield, Pa. Umbrella	270,827	Jan. 16	1236	337	23	257
Morse, Nathan, Akron, Ohio. Jar-holder	276,064	Apr. 17	1537	423	23	1506
Morse, Oliver, Wellesley, Mass. Roll-bar for paper-pulp engines	286,216	Oct. 9	532	146	25	108
Morse, Otis B., Great Falls, N. H. Furnace and hollow grate-bar	284,652	Sept. 11	602	170	24	1012
Morse, Roswell C., Syracuse, N. Y. Two-wheeled vehicle	274,636	Mar. 27	1805	501	23	1168
Morse, Russell S., East Dixfield, Me. Staddle for drying beans	270,970	Jan. 23	1419	408 409	23	293
Morse, Samuel S. (See Cowley and Morse.)						
Morse, Stephen A., San Francisco, Cal. Inhaler	281,114	Apr. 10	951	266	24	175
Morse, Theodore W., assignor to W. D. Hall, Beloit, Wis. Harness and box-loop press	275,843	July 17	1280	351	23	1460
Morse, Thomas G., Erie, Pa. Water-heater and circulator-boiler	279,583	June 19	1218	338	23	2345
Morse Twist Drill and Machine Company. (See Morton, James A., assignor.)						
Morton, Alexander, Glasgow, county of Lanark, Scotland. Valve-gear for steam-engines	274,810	Mar. 27	2006	558 559	23	1203
Morton, Alexander, Glasgow, county of Lanark, Scotland. Valve-gear	281,548	July 17	1506	414 415	24	277
Morton, Benjamin, Toronto, Ontario, Canada. Hammock	285,299	Sept. 18	1395	394	24	1159
Morton, Benjamin, and A. Tilley, Toronto, Ontario, Canada. Securing slabs of veneering to buildings	283,012	Aug. 14	641	181	24	621
Morton, D. A. (See Ramsey, George W., assignor.)						
Morton, Edwin W., White Plains, N. Y. Stylographic fountain-pen	277,149	May 8	810	213	23	1771
Morton, Ephraim S., Plymouth, Mass. Surfacing tacks, &c., with copper	282,754	Aug. 7	338		24	559
Morton, James A., assignor to Morse Twist Drill and Machine Company, New Bedford, Mass. Apparatus for assorting straight and crooked wire	290,700	Dec. 25	1689	465	25	1205
Morton, Joshua B. (See Smith and Morton.)						
Morton, Walter S., St. Paul, Minn. Excavating-machine	287,563	Oct. 30	2253	611 612	25	439
Morton, William J., New York, N. Y. Fluid-motor	271,257	Jan. 30	1763	511	23	358
Mosby, William W. (See Garrett, Henry, assignor.)						
Moschcowitz, Schamu M., New York, N. Y. Adjustable dress-form	274,958	Apr. 3	99	27, 28	23	1242
Moschcowitz, Schamu M., New York, N. Y. Heel for boots or shoes	288,842	Nov. 20	1323	363	25	753
Moseley, William H., Derby, county of Derby, England. Check or valve	286,472	Oct. 9	862	234	25	167
Mosely, George W. (See Kidder, Jephther P., assignor.)						
Moser, Richard. (See Pflüger, Albert, assignor.)						
Moser, Richard, Berlin, Germany. Leaf for photograph albums	290,648	Dec. 18	1615	444	25	1185
Moses, Abraham R. B., New York, assignor to L. Moses, Brooklyn, N. Y. Hat or other head-covering	272,147	Feb. 13	700	192	23	573
Moses, Frank D., Indianapolis, Ind. Apparatus for the manufacture of illuminating or heating gas	274,637	Mar. 27	1805	502	23	1168
Moses, Joseph, Lapeer, Mich. Wagon	281,913	July 24	1990	545	24	365
Moses, Lionel. (See Moses, Abraham R. B., assignor.)						
Moses, Otto A., New York, N. Y. Voltaic-arc light	276,702	May 1	212	55	23	1660
Moses, Otto A., New York, N. Y. Voltaic-arc lamp	276,703	May 1	215	56	23	1661
Moses, Otto A., New York, N. Y. Voltaic-arc lamp	276,704	May 1	217	56	23	1661
Moses, Otto A., New York, N. Y. Voltaic-arc lamp	276,705	May 1	218	56	23	1662
Moses, Otto A., New York, N. Y. Voltaic-arc lamp	286,953	Oct. 16	1479	406	25	281
Mosher, George D., Birmingham, Conn. Rope-hitch	283,719	Aug. 21	1507	425	24	786
Mosher, George D., Birmingham, Conn. Snap-hook	283,720	Aug. 21	1507	425	24	786
Mosher, Nelson, East Venice, N. Y. Churn-motor	275,691	Apr. 10	1073	293	23	1418
Mosher, Samuel E., Chillicothe, Ohio. Knights-Templar cross	289,851	Dec. 11	603	168	25	999

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Mosher, William, Poughkeepsie, N. Y. Flour and meal bolt.....	285,761	Sept. 25	1963	556	24	1266
Mosler, Bahmann & Co. (See Moritz, Leopoldt, assignor.)						
Mosler, Moses, Cincinnati, Ohio. Fire-proof safe.....	273,585	Mar. 6	448	120	23	911
Mosler, Moses, Cincinnati, Ohio. Fire-proof safe.....	281,640	July 17	1624	444	24	296
Mosler, Moses, Cincinnati, Ohio. Bending angle-iron.....	283,136	Aug. 14	787	221	24	647
Mosler, Moses, Cincinnati, Ohio. Door for fire-proof safes.....	287,955	Nov. 6	207	60	25	544
Mosler, Moses, Cincinnati, Ohio. Safe-door.....	289,124	Nov. 27	1668	463	25	822
Mosler, Moses, and M. Hemler, assignors to Mosler Safe and Lock Company, Cincinnati, Ohio. Safe.....	284,047	Aug. 28	1929	539	24	872
Mosler Safe and Lock Company. (See Hemler, Michael, assignor.)						
Mosler Safe and Lock Company. (See Mosler and Hemler, assignors.)						
Mess, John C., Rosston, Tex. Hay-knife.....	278,584	May 29	2564	700	23	2097
Mess, John M., Patricroft, county of Lancaster, England. Transferring designs.....	272,575	Feb. 20	1254		23	674
Messgrove, Oliver P., Steubenville, Ohio. Car-coupling.....	280,502	July 3	206	54	24	37
Messop, Thomas A. (See Mills and Messop.)						
Moth, Morris J. (See Powers, Jay W., assignor.)						
Motiron, Pierre, Paris, France, assignor to Société Anonyme des Corderies Parisiennes. Capstan or drawing-off device for spinning and rope-making machinery.....	281,388	July 17	1307	362	24	244
Motley, Daudridge P., Roxburg, Va. Wheat-cleaner.....	281,115	July 10	952	266	24	175
Motley, Francis F., assignor to Reynolds & Co., New Haven, Conn. Screw-machine.....	289,125	Nov. 27	1669	463	25	822
Motley, George H., Oxford, Me. Belt-shifter.....	280,847	July 10	634	178	24	118
Motley, Thornton, et al. (See Wass, Dyson D., assignor.)						
Mott, Asher, Barclay, Kans. Washing-machine.....	281,116	July 10	953	267	24	175
Mott, Charles M. (See Howe, Peter K., assignor.)						
Mott, Edward H., Chicago, Ill. Railway-car ventilator.....	270,603	Jan. 16	960	278	23	205
Mott, George A., assignor to H. Brewster, J. W. and C. M. Britton, New York, N. Y. Vehicle-axle.....	289,689	Dec. 4	394	113	25	956
Mott Iron Works, J. L. (See Demarest, John, assignor.)						
Mott Iron Works, J. L. (See McFarland, Samuel G., assignor.)						
Mott Iron Works, J. L. (See Reid, John, assignor.)						
Mott, Jordan L., Jr., New York, N. Y. Cartridge-loading machine.....	283,804	Aug. 28	1616	455	24	817
Mott, Lorenzo D., Jr., Marshalltown, Iowa. Compound for preserving wood and metal....	284,653	Sept. 11	603		24	1012
Mott, Samuel D. (See Fiske and Mott.)						
Mott, Samuel D., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Incandescing electric lamp.....	283,270	Aug. 14	960	267	24	678
Motte, Ellis L., et al., trustees. (See Chase, Edward M., assignor.)						
Moulhot, Emile, Wood Haven, assignor to Lalance & Grosjean Manufacturing Company, New York, N. Y. Attachment of handles to sheet-metal vessels.....	282,007	July 24	2097	575	24	383
Mould, William, Saugerties, N. Y. Tombstone.....	274,638	Mar. 27	1807	502	23	1169
Moulder, Oliver L., et al. (See Ball, Wilber W., assignor.)						
Moulton, Edmund T., Providence, R. I. Depositor's bank-book.....	287,045	Oct. 23	1602	441	25	309
Moulton, Fordyce M., assignor to S. B. Ives, Vergennes, and H. Norton, Addison, Vt. Road-making machine.....	281,715	July 24	1731	470	24	319
Moulton, Hamilton L., assignor to J. Smith Woolen Machinery Company, Philadelphia, Pa. Clutching, unclutching, and locking gear.....	270,096	Jan. 2	308	91, 92	23	63
Moulton, Hamilton L., assignor to J. Smith Woolen Machinery Company, Philadelphia, Pa. Carding-cylinder.....	273,778	Mar. 13	829	225	23	985
Moulton, James H., Wenham, Mass. Fastener for upper-protectors.....	269,875	Jan. 2	61	19	23	15
Moulton, Luther V., Grand Rapids, Mich. Machine for steaming and drying grain.....	286,217	Oct. 9	533	146	25	108
Moulton, Luther V., Grand Rapids, Mich. Machine for drying grain.....	288,357	Nov. 13	711	195	25	639
Moulton, Newland, Merrimac, Mass. Making felt uppers for shoes or slippers.....	275,249	Apr. 3	466	130	23	1306
Moulton, Newland, Merrimac, Mass. Felt upper for shoes or slippers.....	275,250	Apr. 3	466	130	23	1306
Moulton, Newland, Baltimore, Md. Making seamless open-bottom uppers for shoes.....	278,305	May 22	2217	607	24	2027
Moulton, Susan P., Salem, Mass. Car-coupling.....	277,918	May 22	1713	468	23	1911
Mount, George E., and E. Bassett, assignors to G. T. Smith Middlings Purifier Company, Jackson, Mich. Conveyor for flour-bolts, &c.....	288,588	Nov. 13	1006	277	25	692
Mount, Jerome C., Three Mile Bay, assignor of one-half to C. H. Hamilton, Lyme, N. Y. Paint-brush.....	272,896	Feb. 27	1681	470	23	756
Mount, James H., Jamesburg, N. J. Cream-puff filler.....	288,543	Nov. 20	1324	363	25	751
Mount, William C. (See Butler, Mount, and Alexander.)						
Mountford, James V., and W. G. Kelsall, New Haven, Conn. Rifle-sight.....	282,658	Aug. 7	220	64	24	533
Mower, Edwin F., Boston, assignor by mesne assignments, to himself, O. W. and D. K. Alden, Sterling, Mass. Machinery for producing stitch-holes.....	270,909	Jan. 23	1340	387	23	281
Mower, Samuel E., Milford, assignor to H. G. Thompson, New Haven, Conn. Machine for making staples.....	200,994	Dec. 25	2076	{ 571 572 }	25	1271
Mowrey, Ephraim L., Milton, Tex. Cotton-chopper.....	273,586	Mar. 6	448	121	23	911
Mowry, Joseph B., Mansfield, Ohio. Brick-machine.....	288,253	Nov. 13	573	159	25	616
Mowry, William G., Greenwich, N. Y. Vehicle-spring.....	290,461	Dec. 18	1375	380	25	1144
Moxham, Arthur J., assignor to Johnson Steel Street Rail Company, Louisville, Ky. Rail for street-car tracks.....	289,355	Nov. 27	1944	540	25	874
Moyel, Edward, Gilman, Ill. Hair mat for oil-presses.....	280,393	July 3	66	18	24	14
Moyer, Casper P., Woodville, Pa. Ventilating-door for mines.....	286,549	Oct. 9	958	258	25	184
Moyer, Frank J., assignor of one-half to E. M. Moody, Lockport, N. Y. Flying target.....	290,788	Dec. 25	1801	498	25	1226
Moyer, Harvey A., Syracuse, N. Y. Hub-boring machine. (Reissue).....	10,360	July 31	2719	{ 748 749 }	24	494
Moyer, Joseph H. (See Grunder and Moyer.)						
Moynan, Joseph, Brooklyn, N. Y. Awning.....	284,882	Sept. 11	885	249	24	1062
Muckenhaupt, Anthony, Poughkeepsie, N. Y. Boot and shoe indicator.....	274,639	Mar. 27	1808	502	23	1169
Muckle, Edward A., Rockford, Ill. Magic watch-case.....	275,251	Apr. 3	467	{ 130 131 }	23	1306
Mudgett, George A. (See Mudgett, John, assignor.)						
Mudgett, Isaiah S., Princeton, Minn. Book-holder.....	279,787	June 19	1444	405	23	2385
Mudgett, John, assignor of one-half to G. A. Mudgett, South Tunbridge, Vt. Hay-tedder tooth.....	274,640	Mar. 27	1810	502	23	1169
Mueller, Henry A., New Haven, Conn., assignor to F. P., W. J., and M. Wiedersum, New York, N. Y. Red-bottom.....	272,076	Feb. 13	611	166	23	558
Mueller, Henry A., New Haven, Conn., assignor to W. J., F. P., and M. Wiedersum, New York, N. Y. Bedstead.....	272,077	Feb. 13	613	166	23	558
Mueller, Louis J., Milwaukee, Wis. Sheet-metal pipe.....	279,494	June 12	1105	304	23	2318
Mueller, Theodore, Philadelphia, Pa. Watch-case.....	280,394	July 3	66	18	24	14
Mueller, Theodore, assignor to T. B. Hagstoz and C. N. Thorpe, Philadelphia, Pa. Watch-case.....	273,759	Mar. 13	672	180	23	957
Muench, Henry, Brooklyn, N. Y. Filtering-bag.....	272,576	Feb. 20	1256	350	23	674
Muhrman, Charles H., Cincinnati, Ohio. Producing ornamental cards, pictures, and transparencies.....	271,505	Jan. 30	2092		23	417



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Muir, William K., <i>et al.</i> (See Payey, Samuel, assignor.)						
Muirhead, Alexander. (See Hopkinson and Muirhead.)						
Muirhead, Alexander, London, England. Duplex and quadruplex telegraphy .....	280,753	July 3	505	{ 143 144 }	24	90
Muirhead, Alexander, London, England. Quadruplex telegraph .....	281,117	July 10	953	267	24	176
Muirhead, Alexander, and G. K. Winter, London, England. Quadruplex telegraph .....	281,118	July 10	955	267	24	176
Muirhead, James, Olneyville, R. I. Water-closet .....	283,655	Nov. 20	1092	300	25	712
Mulford, Ichabod H., assignor of one-half to A. S. Sherwood, East Orange, N. J. Cushion for carriage-windows .....	271,900	Feb. 6	380	105	23	507
Mulford, John E. (See Goodfellow, James, assignor.)						
Mulford, John E., <i>et al.</i> (See Webster, Hanson S., assignor.)						
Mulheirn, Thomas, Providence, R. I. Locomotive-tender .....	270,330	Jan. 9	599	177	23	127
Mulholland, Richard, Dunkirk, N. Y. Vehicle-spring .....	289,438	Dec. 4	79	22, 23	25	900
Mull, Watson D., <i>et al.</i> (See Evans, Harry N., assignor.)						
Mullen, Henry, and J. Noble, Jr., Westfield, Mass. Loop-fastening for whips .....	274,641	Mar. 27	1811	503	23	1169
Muller, Antone, Mount Vernon, Ind., assignor of two-thirds to H. Bastnagel and H. Ritzert. Car-coupling .....	287,771	Oct. 30	2550	686	25	494
Müller, August. (See Schubert, Manrico, assignor.)						
Müller, Carl A., Brooklyn, N. Y. Chain for bracelets, &c .....	287,564	Oct. 30	2356	612	25	440
Müller, Christian, <i>et al.</i> (See Keller and Myers, assignors.)						
Müller, Christine F., Cologne, Germany. Window-ventilator .....	287,848	Nov. 6	69	21	25	519
Müller, Conrad, Columbus, Ohio. Tool-holder for lathes .....	272,304	Feb. 13	884	248	23	606
Müller, Henry L., Birmingham, England. Combined gas-engine and carbureting apparatus .....	288,952	Nov. 20	1456	{ 401 402 }	25	778
Müller, Jacob, New York, N. Y. Machine for separating hop-scales from their stems .....	285,150	Sept. 18	1229	345	24	1128
Muller, John D., New York, N. Y. Shield for sad-irons .....	279,971	June 26	1677	471	23	2430
Müller, Joseph, Nacogdoches County, Tex. Screw-cutting die .....	271,652	Feb. 6	80	22	23	454
Muller, Moritz, Jr. (See Globotschnig, Felix, assignor.)						
Müller, Teile H. (See Decastro and Müller.)						
Müller, Teile H., and J. W. Decastro, New York, N. Y. Apparatus for separating bodies of different specific gravities .....	273,127	Feb. 27	1952	{ 547 548 }	23	803
Müller, Teile H., and J. W. Decastro, New York, N. Y. Separating starch .....	273,128	Feb. 27	1954	{ 548 549 }	23	804
Müller, Teile H., and J. W. Decastro, New York, N. Y. Apparatus for separating bodies of different specific gravities .....	273,129	Feb. 27	1956	{ 549 550 }	23	804
Muller, William L., Muscoda, Wis. Grain thrasher and separator .....	280,066	June 26	1796	{ 504 505 }	23	2452
Mulligan, Charles V., assignor to Zinn & Messer, New York, N. Y. Clasp .....	289,690	Dec. 4	395	113	25	956
Mulligan, George, assignor of one-half to A. S. Mitchell, Taunton, Mass. Carpet-stretcher .....	273,130	Feb. 27	1958	550	23	805
Mullings, Thomas J., London, England. Wool-washing machine .....	285,831	Oct. 2	60	18	25	13
Mullings, Thomas J., London, England. Process of extracting oil and fat and oily and fatty matters from wool, &c., and the apparatus connected therewith and applicable thereto .....	287,786	Oct. 30	2567	690	25	497
Mullius, Joshua C., Whitney, assignor to Model Machine Company, Waco, Tex. Apparatus for trimming hoofs of animals .....	290,089	Dec. 11	888	252	25	1050
Mullins, Timothy, assignor to himself and G. A. Wales, Stoughton, Mass. Shoe-maker's bench .....	278,254	May 22	2132	587	23	2013
Mulloy, William, Great Falls, N. H. Carriage-harness .....	272,897	Feb. 27	1682	470	23	756
Mulvey, Daniel T., Chicago, Ill. Cartridge-box .....	280,067	June 26	1798	505	23	2452
Mumm, John F., Brooklyn, N. Y. Davit for boats .....	272,745	Feb. 20	1467	412	23	712
Mummler, Frederick W. (See Palmer, William A., assignor.)						
Muncester, Otho M., Washington, D. C. Landing-net .....	272,305	Feb. 13	885	248	23	607
Muncester, S. B., <i>et al.</i> (See Magruder, George C. W., assignor.)						
Muncie Washing Machine Company. (See Keys, Erasmus L., assignor.)						
Munder, Albert, Philadelphia, Pa. Detergent or compound for removing paint .....	271,901	Feb. 6	381	.....	23	508
Mundschenk, Friedrich P., <i>et al.</i> (See Keller, William, assignor.)						
Munger, George, East River, Conn., assignor to Baker, Pratt & Co., New York, N. Y. School-desk .....	277,326	May 8	1014	272	23	1807
Munger, Lyman F., Rochester, N. Y. Chronometer-escapement .....	289,551	Dec. 4	225	63	25	926
Munger, Theodore C., assignor of one-half to L. M. Rich, Cedar Rapids, Iowa. Pump-bucket .....	284,048	Aug. 28	1930	540	24	872
Munn, W. Garnett, <i>et al.</i> (See Wolfe, Harvey R., assignor.)						
Munro, Gordon, Troy, N. Y. Machine for lining straw and other board .....	278,448	May 29	2410	657	23	2070
Munro, Gordon, Troy, N. Y. Machine for cutting roll-paper .....	284,753	Sept. 11	733	205	24	1035
Munroe, William, Worcester, Mass. Organ-reed .....	274,642	Mar. 27	1812	503	23	1169
Munsch, Augustin, <i>et al.</i> (See Beck, John B., assignor.)						
Munson, A. M. (See Gunderson, Albert, assignor.)						
Munson, Albert L., New York, N. Y. Paper box .....	279,972	June 26	1678	471	23	2431
Munson, Anson L., Fresno, Cal. Paint .....	285,151	Sept. 18	1230	.....	24	1128
Munson, Anson L., Fresno, Cal. Bunching shingles .....	285,152	Sept. 18	1231	345	24	1128
Munson, Harvey S., New Haven, Conn. Paper box .....	288,254	Nov. 13	576	160	25	617
Munson, Harvey S., New Haven, Conn. Paper box .....	288,255	Nov. 13	578	160	25	617
Munson, Julius S., assignor, by mesne assignments, to K. C. Munson, Boston, Mass. Piano-stool .....	280,068	June 26	1799	506	23	2452
Munson, Katharine C. (See Munson, Julius S., assignor.)						
Munson, Louis R., Brainerd, Minn. Railway-signal .....	270,604	Jan. 16	963	279	23	205
Munson, Peter J., and G. H. Strand, Chicago, Ill. Windmill for boats .....	279,973	June 26	1680	471	23	2431
Munz, Wilhelm, St. Louis, Mo. Hat-shade .....	283,353	Aug. 14	1066	300	24	699
Munzner, Charles, Chicago, Ill. Clamp for billiard-cues .....	285,360	Sept. 18	1466	413	24	1171
Murch, Chauncey M., Cincinnati, Ohio. Two-wheeled vehicle .....	281,783	July 21	1828	499	24	337
Murch, Chauncey M., Cincinnati, Ohio. Vehicle-spring .....	286,725	Oct. 16	1193	321	25	331
Murchison, Isaac A., Manchester, N. C. Tongs .....	282,105	July 31	2231	613	24	412
Murdock, Charles, New Rochelle, N. Y. Fire-escape .....	282,212	July 31	2381	655	24	435
Murdock, George J., Binghamton, N. Y. Electric-lamp globe .....	274,959	Apr. 3	100	28	23	1242
Murdock, George J., Binghamton, N. Y. Electric-arc light .....	275,510	Apr. 10	844	229	23	1378
Murdock, George J., Binghamton, N. Y. Regulator for dynamo-electric machines .....	287,565	Oct. 30	2257	{ 612 613 }	25	440
Murdoch, Horace B., Detroit, Mich. Injector .....	281,389	July 17	1309	362	24	244
Murgatroyd, Frank, Cleveland, Ohio. Mechanism for hoisting and transmitting freight, coal, &c. ....	277,327	May 8	1016	{ 272 273 }	23	1807
Murgatroyd, Frank, Cleveland, Ohio. Coal and ore carrier and transmitter .....	279,264	June 12	803	224	23	2271
Murgatroyd, Frank, Cleveland, Ohio. Coal and ore carrier and transmitter .....	279,788	June 19	1445	405	23	2385
Murphey, Carrie S., Dayton, Ohio. Flexible urinal .....	285,056	Sept. 18	1112	310	21	1109
Murphey, Frank P. (See Murphey, George W. and F. P.)						
Murphey, George W. and F. P., Kenney, Ill. Reel for check-row wire .....	286,218	Oct. 9	535	146	25	109
Murphie, Joseph, assignor of one-half to A. B. Ritchman, Malaga, N. J. Fruit-jar .....	282,916	Aug. 7	522	146	21	593
Murphy, Albert L., assignor of one-half to S. P. M. Tasker, Philadelphia, Pa. Fagot for tubes .....	274,019	Mar. 13	990	272	23	1012

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Murphy, Daniel H., Hartford, assignor to G. J. Capewell, Cheshire, Conn. Toy cap-exploder.	273,879	Mar. 13	630	225	23	984
Murphy, Daniel H., Hartford, Conn., assignor of one-half to G. K. Clark, Monticello, Fla. Clothes-line.	290,995	Dec. 25	2079	572	25	1271
Murphy, Daniel R., Newark, assignor of one-half to G. B. Johnson, Granville, Ohio. Locomotive.	279,102	June 5	611	166	23	2227
Murphy, Edward, assignor to Kruse & Murphy Manufacturing Company, New York, N. Y. Automatic tension device for sewing-machines.	290,345	Dec. 18	1209	338	25	1116
Murphy, Edward E., Jr., Tottenville, N. Y. Liquefied anæsthetic.	275,511	Apr. 10	847	229	23	1379
Murphy, Edward T., assignor of one-fourth to W. J. Sheehan, East Hampton, Mass. Faucet and barrel-bung.	286,954	Oct. 16	1480	406	25	281
Murphy, Jeremiah, Brooklyn, N. Y. Balanced slide-valve.	277,388	Mar. 8	1017	273	23	1807
Murphy, John, Columbus, Ohio. Hydraulic cement.	270,097	Jan. 2	310	.....	23	63
Murphy, John, Brooklyn, N. Y. Belting.	264,221	Sept. 4	84	23	24	919
Murphy, John, assignor of one-half to C. N. Hall, Springfield, Mass. Combined mincing-knife and meat-tender.	281,200	July 10	1067	294	24	195
Murphy, John M., Gilmer, Ill. Windmill.	279,178	June 12	714	193	23	2255
Murphy, Joseph, San José, Cal. Railway-switch.	274,643	Mar. 27	1812	503	23	1169
Murphy, M. L., et al. (See Dutton, George W., assignor.)						
Murphy, Patrick, assignor to J. S. Foster, Merrimac, Mass. Spoke-throating machine.	284,972	Sept. 11	993	280	24	1082
Murphy, Thomas D. (See Howard, Albion P., assignor.)						
Murphy, William A. C. (See Powell, Joseph M., assignor.)						
Murphy, William A. C., and J. T. Johnston, Springfield, Mo. Shutter-worker.	278,585	May 29	2565	701	23	2097
Murphy, William H., Brenham, Tex. Shaker for mixed beverages.	271,350	Jan. 30	1892	548	23	381
Murphy, William L., Oxford, Ohio. Fire-escape.	285,892	Oct. 2	61	19	25	13
Murray, Andrew, Stamford, Conn. Wagon-brake.	279,974	June 26	1681	472	23	2431
Murray, Donald J., Wausau, Wis. Swinging bridge for saw-arbors.	288,569	Nov. 13	1008	277	25	692
Murray, Donald J., Wausau, Wis. Gang sawing-machine.	288,723	Nov. 20	1186	324	25	727
Murray, Edward L., Atlanta, Ga., assignor of one-half to G. T. Pringle, Charleston, S. C. Combined wheel cultivator and plow.	272,460	Feb. 20	1100	310 311	23	647
Murray, George, Jr., Cambridgeport, assignor of one-half to C. Morgan, Melrose, Mass. Gearing.	286,550	Oct. 9	959	258	25	185
Murray, George, Jr., Cambridgeport, assignor of one-half to C. Morgan, Melrose, Mass. Air-trap for water-engines.	286,551	Oct. 9	960	258	25	185
Murray, Gordon, and M. A. Gibbs, Negaunee, Mich. Apparatus for thawing giant powder and nitro-glycerine.	276,862	May 1	422	113	23	1700
Murray, Gordon, and M. A. Gibbs, Negaunee, Mich. Apparatus for thawing giant powder and nitro-glycerine.	276,863	May 1	423	113	23	1700
Murray, James W., Halifax, Nova Scotia, Canada, assignor to C. S. Crain and D. Dorchester, Jr., Newton, Mass. Machine for turning and boring spools.	280,755	July 3	512	144	24	91
Murray, John. (See Winterbottom and Murray.)						
Murray, John, New York, N. Y. Toy wagon.	272,461	Feb. 20	1102	312	23	648
Murray, Laura A. (See Clark, Charles W., assignor.)						
Murray, Maurice M., assignor of one-half to A. G. Black, Coulterville, Cal. Fountain.	277,598	May 15	1339	360	23	1867
Murray, Peter, Jr., assignor of one-half to T. J. Dennis, Newark, N. J. Differential pulley-block.	280,218	June 26	1964	553	23	2483
Murray, Robert A. (See Banning Cavina B., assignor.)						
Murray, Robert A., St. Louis, Mo. Piano sounding-board.	290,090	Dec. 11	889	252	25	1050
Murray, William A. (See Whittingham, Charles and J., assignors.)						
Murrell, Rene D., Social Circle, Ga. Combined hoe.	284,883	Sept. 11	886	249	24	1062
Murrill, James L. (See Painter, Murrill, and Keizer.)						
Murthfeldt, Will A., Cincinnati, Ohio. Roof for railway-cars.	284,141	Aug. 28	2053	570	24	893
Muse, Samuel D., Monticello, Miss. Gate.	280,754	July 3	510	144	24	90
Musil, Eduard, Vienna, Austria-Hungary. Manufacture of yellow-fibered paper for bank notes, checks, &c.	282,106	July 31	2231	.....	24	412
Musser, William R. (See Allen and Musser.)						
Mustard, James E. (See Hall and Mustard.)						
Mutter, Wilhelm, Syracuse, N. Y. Flux for welding metals.	282,464	July 31	2701	.....	24	491
Muttersbach, John P., Hicksville, Cal. Two-wheeled vehicle.	285,153	Sept. 18	1231	346	24	1128
Mutton, Samuel S. (See Lewin, John M., assignor.)						
Muybridge, Edward J., San Francisco, Cal. Method of and apparatus for photographing changing or moving objects.	279,878	June 19	1557	435 436	23	2404
Myer, Frank X., Jr., Logan, assignor to himself and C. O. Myers, Hocking County, Ohio. Wheel.	270,461	Jan. 9	771	226	23	160
Myer, Isaac, Philadelphia, Pa., and S. K. Bayley, Boston, Mass. Refrigerating chamber, car, and apparatus.	277,150	May 8	811	213 214	23	1771
Myers, Alvie, Melmore, Ohio. Saw-mill dog.	284,973	Sept. 11	995	280	24	1082
Myers, Andrew G. (See McSherry and Myers.)						
Myers, Andrew G., New York, N. Y. Water-closet.	274,644	Mar. 27	1814	503	23	1170
Myers, Benjamin F., Hunnewell, Ky. Combined can pump, and measure.	275,934	Apr. 17	1383	380	23	1479
Myers, Bruce M., and W. H. H. Williams, Postoria, Ohio. Form for bending wood.	283,412	Aug. 21	1139	392	24	718
Myers, Charles H., Clifton Springs, N. Y. Thill-adjuster.	278,449	May 29	2412	657	23	2070
Myers, Charles H., Phelps, N. Y. Window-bead fastener.	280,756	July 3	514	145	24	91
Myers, Charles H., Phelps, N. Y. Cutter-bar for mowers and reapers.	285,361	Sept. 18	1467	413	21	1171
Myers, Charles H., Phelps, N. Y. Wrench.	288,098	Nov. 6	384	108	25	574
Myers, Charles O. (See Myer, Frank X., Jr., assignor.)						
Myers, Christian W. (See Keller and Myers.)						
Myers, David E., Indianapolis, Ind. Mechanical movement.	280,757	July 3	515	145	24	91
Myers, Edward. (See Smith and Myers.)						
Myers, F. E., et al. (See Stentz, Michael, assignor.)						
Myers, Francis E. (See Myers, Philip A., assignor.)						
Myers, Frank, Aurora, Nebr. End-gate.	278,167	May 22	2019	555	23	1993
Myers, Frederick, New York, N. Y. Machine for trimming box material.	280,219	June 26	1966	553	23	2483
Myers, Henry S., New York, N. Y. Composition for copying.	287,457	Oct. 30	2121	576	25	412
Myers, John and J. E., Palestine, Tex. Cotton-harvester.	286,055	Oct. 2	338	94	25	62
Myers, John E. (See Myers, John and J. E.)						
Myers, John G. L., assignor of two-thirds to H. J. Wells, Osceola Mills, and S. Hoover, Fowler, Pa. Remedy for diphtheria.	271,506	Jan. 30	2093	.....	23	417
Myers, John J., Baltimore, Md. Gas-meter.	281,641	July 17	1626	444	24	296
Myers, L. B. (See Bower, Isaac G., assignor.)						
Myers, Leonard N., Middleburg, Pa. Washing-machine.	281,119	July 10	957	267	24	176
Myers, Lewis B. (See Bower and Myers.)						
Myers, Lewis J. (See Fowler, William R., assignor.)						
Myers, Lewis Y., Canton, Ohio. Hay-carrier.	276,864	May 1	424	113	23	1700
Myers, P. A., et al. (See Stentz, Michael, assignor.)						
Myers, Philip A., Ashland, Ohio. Pump.	276,865	May 1	426	114	23	1701



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Myers, Philip A., assignor to himself and F. E. Myers, Ashland, Ohio. Pump .....	282,755	Aug. 7	339	96	24	559
Myers, Theodore A., Wheeling, W. Va. Knife-grinder .....	288,099	Nov. 6	385	109	25	574
Myers, William H., Oregon, Wis. Harrow .....	288,100	Nov. 6	385	109	25	574
Myers, William J., Hartford, Conn. Bedstead .....	272,078	Feb. 13	615	167	23	558
Myrick, Elijah, Ayer, Mass. Carriage-jack .....	276,268	Apr. 24	1789	497	23	1557
Myrick, Nathan, <i>et al.</i> (See King, Josias R., assignor.) .....						
Nack, William, Sheboygan, Wis. Fire-escape .....	281,549	July 17	1508	415	24	277
Nack, William, Sheboygan, Wis. Shade-fastening spring .....	289,925	Dec. 11	691	193	25	1014
Nacke, Arnold, assignor to Ledig & Herrlein, Philadelphia, Pa. Screw-cutting tool .....	279,495	June 12	1106	305	23	2318
Nadelhoffer, John W., Naperville, Ill. Barbed fence .....	270,098	Jan. 2	311	92	23	63
Nadelhoffer, John W., assignor to A. Dillman and E. R. Knowlton, Joliet, Ill. Machine } for making barbed wire .....	281,120	July 10	958	{ 268 269 }	24	176
Nadermann, Henry, Newport, Ky. Miter-wheel guard and frame .....	281,289	July 17	1185	328	24	223
Nagant, Léon, Liège, Belgium. Breech-loading fire-arm .....	286,726	Oct. 16	1193	322	25	232
Nagele, Jacob, assignor of one-half to C. C. Martin, Philadelphia, Pa.; A. M. Martin ad- ministratrix of said Martin, deceased. Wall bracket .....	290,789	Dec. 25	1802	498	25	1226
Nagle, J. T., <i>et al.</i> (See Nicolaisen, Eberhardt, assignor.) .....						
Nance, Zachariah F., Eufula, Ala. Cotton-cleaner and gin-feeder .....	287,183	Oct. 23	1736	{ 475 476 }	25	335
Naramore, Truman C., Williston, Vt. Railway rail and tie elevator and lifting-jack .....	276,452	Apr. 24	2034	565	23	1599
Narracong, Arthur. (See Narracong, David and A.) .....						
Narracong, David and A., Reedsburg, Wis. Water-wheel governor .....	274,811	Mar. 27	2009	559	23	1204
Nash, Allen R., and J. Sadler, Lime Spring, Iowa. Agricultural boiler .....	284,884	Sept. 11	887	250	24	1062
Nash, Caleb P., assignor of one-half to J. E. Jacobs, Brattleborough, Vt. Chair .....	275,252	Apr. 3	469	131	23	1306
Nash, Caleb P., assignor of one-half to J. E. Jacobs, Brattleborough, Vt. Chair .....	277,329	May 8	1018	273	23	1807
Nash, Caleb P., assignor of one-half to J. E. Jacobs, Brattleborough, Vt. Combined trunk and table .....	278,036	May 22	1860	508	23	1665
Nash, Edmund L., Parkersburg, W. Va. Chicken-coop .....	290,346	Dec. 18	1211	339	25	1116
Nash, Edmund L., and B. R. Pennybacker, Jr., Parkersburg, W. Va. Harrow .....	288,472	Nov. 13	871	236	25	667
Nash, John M., Hudson, Wis. Wood-boring machine .....	274,020	Mar. 13	992	272	23	1012
Nash, Lewis H., Brooklyn, assignor to National Meter Company, New York, N. Y. Gas- engine .....	271,902	Feb. 6	381	105	23	508
Nash, Lewis H., Brooklyn, assignor to National Meter Company, New York, N. Y. Com- bined gas-engine and air-compressor .....	278,168	May 22	2020	556	23	1993
Nash, Lewis H., Brooklyn, assignor to National Meter Company, New York, N. Y. Gas- engine .....	278,255	May 22	2133	588	23	2013
Nash, Lewis H., Brooklyn, assignor to National Meter Company, New York, N. Y. Gas- engine .....	278,256	May 22	2142	589	23	2014
Nash, Lewis H., Brooklyn, assignor to National Meter Company, New York, N. Y. Hot- air and gas engine .....	278,257	May 22	2145	589	23	2014
Nash, Lewis H., Brooklyn, assignor to National Meter Company, New York, N. Y. Ro- tary water-meter .....	280,220	June 26	1968	554	23	2483
Nash, Lewis H., Brooklyn, assignor to National Meter Company, New York, N. Y. Wa- ter-meter .....	280,221	June 26	1970	554	23	2484
Nash, Lewis H., Brooklyn, assignor to National Meter Company, New York, N. Y. Wa- ter-meter .....	280,222	June 26	1972	{ 554 555 }	23	2484
Nash, Lewis H., Brooklyn, assignor to National Meter Company, New York, N. Y. Fluid- meter .....	280,322	June 26	2099	589	23	2506
Nash, Lewis H., Brooklyn, assignor to National Meter Company, New York, N. Y. Water- meter .....	281,390	July 17	1312	363	24	245
Nash, Lewis H., Brooklyn, assignor to National Meter Company, New York, N. Y. Gas- engine .....	289,019	Nov. 27	1537	425	25	799
Nash, Lewis H., Brooklyn, assignor to National Meter Company, New York, N. Y. Gas- engine .....	289,691	Dec. 4	396	{ 113 114 }	25	956
Nash, Lewis H., Brooklyn, assignor to National Meter Company, New York, N. Y. Gas- engine .....	289,692	Dec. 4	402	{ 114 115 }	25	957
Nash, Lewis H., Brooklyn, assignor to National Meter Company, New York, N. Y. Gas- engine .....	289,693	Dec. 4	408	{ 115 116 }	25	957
Nash, Samuel M. (See Heft, Nathan H., assignor.) .....						
Nashua Lock Company. (See Parker, Emery, assignor.) .....						
Nason, George W., Brunswick, Me. Fire-alarm .....	278,586	May 29	2566	701	23	2097
Natchez, J. Lee, Dayton, Ohio. Reservoir cooking-stove .....	285,502	Sept. 25	1641	{ 461 462 }	24	1208
Nath, Joseph, Lancaster, N. Y. Rolling-pin .....	278,258	May 22	2148	589	23	2015
Nathan & Dreyfus. (See Fenner, James W., assignor.) .....						
Nathan, Sinai. (See Loeb, Adolf, assignor.) .....						
National Anti-Sewer Gas Company. (See Collings, Edward Z., assignor.) .....						
National Anti-Sewer Gas Company. (See Pike, Charles F., assignor.) .....						
National Automatic Car Coupler Company. (See Ingram, Edwin, assignor.) .....						
National Automatic Piano and Organ Manufacturing Company. (See Durkee, Alonzo, assignor.) .....						
National Automatic Piano and Organ Manufacturing Company. (See Pain, Robert W., assignor.) .....						
National Cable Power Company. (See Haddock, Worcester, assignor.) .....						
National Chemical Machine and Manufacturing Company. (See Carlisle, Frederick, as- signor.) .....						
National Continuous Stone Conduit Company. (See Campbell, William M., assignor.) .....						
National Electric Railway Signal Company. (See Le Grande, William W., assignor.) .....						
National Feather Duster Company. (See Hoffman, Austin D., assignor.) .....						
National Interlocking Switch and Signal Company. (See Bonnell, James A., assignor.) .....						
National Machine Company. (See Hallenbeck, Joseph P., assignor.) .....						
National Meter Company. (See Nash, Lewis H., assignor.) .....						
National Needle Company. (See Berry, John, assignor.) .....						
National Saw-Guard Company. (See Kuhlmann, Henry F., assignor.) .....						
National Safety Car Bearing Company. (See Baker, Jackson R., assignor.) .....						
National Secret Telephone Company. (See Dean, Edward C., assignor.) .....						
National Shelf and File Company. (See Lang, John C., assignor.) (Reissue.) .....						
National Tube Works Company. (See McPhail, James H., assignor.) .....						
National Tube Works Company. (See Patterson, Peter, assignor.) .....						
National Waterproof Shoe Company. (See Cutten, James H., assignor.) .....						
National Waterproof Shoe Company. (See Moore, Lee E., assignor.) .....						
National Waterproof Shoe Company. (See Stetson, Charles T., assignor.) .....						
Nativel, Theodore C., Brooklyn, Cal. Combined refrigerator, filter, and water-cooler .....	277,330	May 8	1020	273	23	1808
Nauert, George V., Cincinnati, Ohio. File for letters .....	271,258	Jan. 30	1765	512	23	359

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Nauman, William L. (See Iske, Anthony, assignor.)						
Nautz, James S., Shelbyville, Ill. Flexible harrow.....	280,848	July 10	635	179	24	118
Naylor, John, and R. Thornton, Stawell, Victoria. Rock-drill.....	289,300	Nov. 27	1874	520 521	25	862
Naylor, Thomas A., Baltimore, Md. Lubricator for steam-cylinders.....	286,473	Oct. 9	863	234	25	167
Neacy, Thomas J., Milwaukee, Wis. Gang-edger.....	282,213	July 31	2382	655 656	24	435
Neander, Theodore H., Wataga, Ill. Middlings-purifier.....	288,844	Nov. 20	1325	363	25	753
Neary, Philip, Dryden, N. Y. Adding-machine.....	276,866	May 1	429	114	23	1701
Neave, John H., Macclesfield, county of Chester, England. Method of and apparatus for finishing felt.....	271,351	Jan. 30	1893	548	23	381
Neblett, Sidney S., Whittle's Mills, Va. Tobacco-planter.....	271,507	Jan. 30	2004	602	23	417
Neblett, Sidney S., Whittle's Mills, Va. Transplanter for tobacco and other plants.....	275,253	Apr. 3	470	131	23	1306
Needham, Charles A. (See Hewlett and Needham.)						
Needham, Charles A. (See Needham, Elias P., assignor.)						
Needham, Charles A., assignor to himself and E. P. Needham, New York, N. Y. Theater-stage.	273,880	Mar. 13	831	225	23	984
Needham, Elias P. (See Needham, Charles A., assignor.)						
Needham, Elias P., et al. (See Hewlett and Needham, assignors.)						
Needham, Elias P., et al. (See Needham, Orwell H., assignor.)						
Needham, Elias P., assignor to himself and C. A. Needham, New York, N. Y. Mechanism for transmitting motion.....	274,812	Mar. 27	2010	560	23	1204
Needham, Orwell H., assignor to E. P. and C. A. Needham, New York, N. Y. Sound-board for musical instruments.....	274,813	Mar. 27	2012	560	23	1204
Neff, Isidor, Grofsh, Baden, Germany. Bottle-stopper.....	277,847	May 15	1627	443	23	1919
Neely, William A., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Trimming attachment for sewing-machines.....	274,095	Mar. 13	1087	299	23	1028
Neely, William A., Lynn, Mass., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Trimming mechanism for sewing-machines.....	286,146	Oct. 2	447	121 122	25	83
Neerpasch, John, Rochester, N. Y. Tailor's pressing-board.....	272,746	Feb. 20	1467	412	23	712
Neff, Elijah, W. Enders, and J. B. Fieser; said Neff assignor of one-half to M. R. Smith, Rochester, Ind. Rotary double piston pump.....	275,844	Apr. 17	1281	352	23	1460
Neff, Harry M., Denver, Colo. Sleeping-car.....	275,935	Apr. 17	1383	381	23	1479
Neff, Joseph B., assignor to Burlington Plow Company, Burlington, Iowa. Cultivator-spring	287,703	Oct. 30	2454	661	25	476
Neff, William H., Cowan, Ind. Spring-motor.....	283,642	Aug. 21	1407	394	24	767
Nei, Daniel, St. Louis, Mich. Screw-driver.....	277,599	May 15	1340	361	23	1867
Neider, Fred A. (See Asbury, Neider, and Grossmann.)						
Neider, Fred A., Augusta, Ky. Loop for carriage-curtains.....	276,269	Apr. 24	1790	498	23	1557
Neider, Fred A., Augusta, Ky. Strap-fastening for carriage-curtains.....	282,354	July 31	2563	702	24	467
Neider, Fred A., Augusta, Ky. Carriage-curtain window.....	282,355	July 31	2564	702	24	467
Neider, Fred A., Augusta, Ky. Strap-buckle fastening.....	288,358	Nov. 13	714	195	25	640
Neidig, David A., Canton, Ohio. Handsaw.....	279,975	June 26	1682	472	23	2431
Neil, Michael. (See Young, Neil, and Wetzel.)						
Neilson, Alexander. (See Young and Neilson.)						
Neilson, George, Chelsea, Mass. Treating iron.....	281,784	July 24	1829	.....	24	337
Neilson, James A., Philadelphia, Pa. Friction-clutch.....	270,099	Jan. 2	311	92	23	63
Neimeyer, Jacob, Atlantic, Iowa. Compasses.....	275,403	Apr. 10	709	189	23	1356
Neimeyer, John, Trenton, Ohio. Saw-handle.....	277,502	May 15	1223	329	23	1849
Neitsch, Albert, Leipsic, Germany. Type-grinding machine.....	282,356	July 31	2565	703	24	467
Neitzel, Carl F. A., Concordia, Kans. Car-coupling.....	274,645	Mar. 27	1816	504	23	1170
Neitzel, Frank F., Winnebago Agency, Minn. Weighing apparatus for thrashing-machines.	270,331	Jan. 9	600	177	23	127
Nellessen, Hermann J., Pittsburg, Pa. Millstone-ventilator.....	282,357	July 31	2567	703	24	467
Nellis, Aaron J., Pittsburg, Pa. Road-scraper.....	277,771	May 15	1543	419	23	1904
Nellis, Aaron J., Pittsburg, Pa. Heating, tempering, and annealing furnace.....	288,101	Nov. 6	386	109	25	574
Nellis, Charles S., assignor of one-fourth to T. P. Hull, Chittenango, N. Y. Charcoal-kiln.	283,643	Aug. 21	1407	394 395	24	767
Nelson, Albert P., Portland, Oreg. Two-wheeled vehicle.....	288,256	Nov. 13	580	161	25	617
Nelson, Alonzo E., Brockton, Mass. Combination-tool.....	280,849	July 10	635	179	24	118
Nelson, Andrew, Moline, Ill. Revolving picture-exhibitor.....	281,914	July 24	1990	545	24	365
Nelson, August, Kent, Ohio. Bush-hammer.....	271,731	Feb. 6	172	47	23	470
Nelson, Charles, East New York, N. Y. Slate-frame.....	281,785	July 24	1829	499	24	337
Nelson, Charles, East New York, N. Y. Slate-frame.....	281,786	July 24	1830	500	24	337
Nelson, Charles, East New York, N. Y. Machine for forming muffling-strips for slate-frames.....	281,787	July 24	1831	500	24	338
Nelson & Co., N. O. (See Reid, William A., assignor.)						
Nelson, Edward, and A. Davis, St. Paul, Minn. Metallic shield for brakemen's boots.....	280,923	June 26	1975	555	23	2484
Nelson, Edward W., Chicago, Ill., and E. A. Cowles, Cleveland, Ohio. Amalgamator.....	280,069	June 26	1800	506	23	2452
Nelson, Frederick, St. Paul, Minn. Blind-slat operator.....	284,222	Sept. 4	85	24	24	919
Nelson, Frederick A., Westfield, Mass. Hammock.....	269,876	Jan. 2	62	19	23	15
Nelson, George W., et al. (See Hill, Frederick D., assignor.)						
Nelson, Henry W., Ord, Nebr. Bag-holder.....	277,772	May 15	1544	420	23	1904
Nelson, John B., Viola, Tex. Combined cotton, corn, and pea planter and fertilizer-distributer.....	289,694	Dec. 4	414	116	25	958
Nelson, John L. (See Barr and Nelson.)						
Nelson, Samuel, Brooklyn, N. Y. Base for gas-burners.....	271,653	Feb. 6	81	23	23	454
Nelson, Samuel L., Saltillo, Miss. Churn.....	274,360	Mar. 20	1436	394	23	1097
Nelson & Sons, Thomas. (See Pester, Adolph, assignor.)						
Nelson, William D., New York, N. Y. Street-car heater.....	270,553	Jan. 9	893	258	23	184
Nelsson, Magnus S., Allegheny, Pa. Propeller for steam-vessels.....	281,915	July 24	1991	545	24	366
Nemetz, Josef, Vienna, Austria-Hungary. Magazine-gun.....	273,131	Feb. 27	1959	551	23	805
Nerney, Martin J., Green Island, N. Y. Nut-lock.....	290,790	Dec. 25	1803	499	25	1326
Nesmith, John W. (See Havens and Nesmith.)						
Nester, Joseph, Wapakoneta, Ohio. Horseshoe.....	280,658	Dec. 3	382	107	24	68
Nester, Joseph, Wapakoneta, Ohio. Horseshoe.....	290,091	July 11	889	253	25	1051
Nethercut, George S., Geneva, Wis. Shee-last.....	285,649	Sept. 25	1815	517	24	1241
Nettleton, James, Daysville, Ill. Hay-carrier.....	275,254	Apr. 3	471	131 132	23	1307
Netzner, Augusta, New York, N. Y. Suspender-end.....	285,650	Sept. 25	1817	518	24	1242
Neuert, Charles A., Boston, Mass. Snow-guard for roofs.....	272,148	Feb. 13	701	192	23	573
Neuhäusen, August, Chicago, Ill. Manufacture of candies, &c.....	271,259	Jan. 30	1766	512	23	359
Neumann & Co., R. (See Flocke, Robert, assignor.)						
Neumüller, Franz. (See Perhacs and Neumüller.)						
Neustadter, David. (See Wittman, George, assignor.)						
Nevegold, Walter W., Bristol, Pa. Coupling-retainer.....	270,462	Jan. 9	771	226	23	160



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Nevinger, Michael, <i>et al.</i> (See Warren, Jabez T., assignor.)						
Nevins, Bartlett A. (See Ward and Lindsey, assignors.)						
Nevins, J. D., <i>et al.</i> (See Lash, John S., assignor.)						
Nevitt, Franklin, <i>et al.</i> (See Bennet, Karl W., assignor.)						
Nevins, Georgiana. (See Rockafellow and Nevius, assignors.)						
Nevius, Laird W., Toledo, Ohio. Dental jaw-brace	278,259	May 22	2148	590	23	2015
Nevius, Laird W., Toledo, Ohio. Inhaler	279,265	June 12	810	224	23	2272
Nevius, Laird W., Toledo, Ohio. Apparatus for administering nitrous-oxide gas	283,137	Aug. 14	788	221	24	647
Nevius, Peter T. B. (See Rockafellow and Nevius.)						
New, Albert L., assignor of two-thirds to J. W. Jones and W. F. Lindley, Greenfield, Ind. Single-tree attachment.	285,503	Sept. 25	1642	462	24	1209
New England Butt Company. (See McCahey, John, assignor.)						
New England Decorating Machine Company. (See Jamison, John P., assignor.)						
New England Dental Manufacturing Company. (See Cooke, William P., assignor.)						
New England Electric Manufacturing Company. (See Fisher, Israel, assignor.)						
New England Patent Fire Escape Company. (See Fairbanks, Harlan, assignor.)						
New England Patent Fire Escape Company. (See Griffin and Dixon, assignors.)						
New England Patent Fire Escape Company. (See Rowe, Edward T., assignor.)						
New Haven Clock Company. (See Camp, Hiram, assignor.)						
New Haven Clock Company. (See Rossiter, John H., assignor.)						
New Haven Copper Company. (See Halligan and Rugg, assignors.)						
New Home Sewing Machine Company. (See Huntington, Thomas S., assignor.)						
New Home Sewing Machine Company. (See Thomas, Eddy T., assignor.)						
New, Jacob. (See Van Hutton, William B., assignor.)						
New, Tobias, Brooklyn, N. Y. Preparing straw to be converted into paper-stock, &c.	290,913	Dec. 25	1957	.....	25	1253
New, William W., Perry, Ill. Combined hay rake and loader	272,747	Feb. 20	1468	413	23	712
New World Sewing Machine Company. (See Holden and Griswold, assignors.)						
New York Bung and Bushing Company. (See Thompson, Samuel R., assignor.) (Reissue.)						
New York Steam Company. (See Dufly, Thomas W., assignor.)						
Newall, George E., Flint, Mich. Presser-bar for planing-machines	273,587	Mar. 6	451	121	23	912
Newark Machine Company. (See Grube, Jefferson, assignor.)						
Newark Machine Company. (See Miller, Abraham, assignor.)						
Newberg, Gustave, Chicago, Ill. Door-knob	270,828	Jan. 16	1237	357	23	257
Newberry, Orson O., Vincennes, Iowa. Sully	283,916	Aug. 28	1746	493	24	840
Newbold, David M. (See Armstrong, William, assignor.)						
Newbold, William, East Cleveland, Ohio. Bolt-guard	270,972	Jan. 23	1425	411	23	294
Newburgh, Charles, Beloit, Wis. Pump-piston	277,919	May 22	1715	468	23	1941
Newburgh, Henry. (See Beuttel and Bräuch, assignors.)						
Newbury, Henry F., Brooklyn, N. Y. Safe-lock	270,829	Jan. 16	1238	357	23	257
Newbury, Henry F., Brooklyn, N. Y. Safe-lock	270,830	Jan. 16	1239	358	23	257
Newbury, Henry F., Brooklyn, N. Y. Safe-lock	271,103	Jan. 23	1576	454	23	319
Newbury, Henry F., Brooklyn, N. Y. Safe-lock	283,644	Aug. 21	1409	395	24	768
Newbury, Henry F., Brooklyn, N. Y. Time-lock	283,645	Aug. 21	1411	395	24	768
Newbury, Henry F., Brooklyn, N. Y. Mounting time-locks	284,049	Aug. 28	1931	540	24	872
Newbury, Henry F., Brooklyn, N. Y. Mounting time-locks	284,142	Aug. 28	2055	570	24	893
Newby, Albert S., Indianapolis, Ind. Adjustable leg for folding lounges	279,789	June 19	1448	405	23	2385
Newby, James. (See Atherton and Newby.)						
Newby, William H., Columbus, Ind., assignor of one-half to J. B. Shaw, Brooklyn, N. Y. Watch-dial	290,791	Dec. 25	1804	499	25	1226
Newcomb, Frederick J., Brooklyn, N. Y. Ornamenting moldings	288,473	Nov. 13	871	236	25	667
Newcomb, George L. (See Vaughn, Joseph W., assignor.)						
Newcomb, John. (See Hoover and Newcomb.)						
Newcomb, Marion W., Marysville, Kans. Photographic-plate holder	282,756	Aug. 7	341	97	24	560
Newcomb, William, Johnsonville, N. Y. Faucet-coupling	274,361	Mar. 20	1437	394	23	1097
Newcomb, William W., Bradfordsville, Ky. Car-coupling	274,960	Apr. 3	102	28	23	1242
Newell, Frederick G., Saginaw, Mich. Curtain-fixture	282,757	Aug. 7	342	97	24	560
Newell, George E., and L. G. Ladd, assignors to S. Grant & Co., Pawtucket, R. I. Hoisting apparatus	282,556	Aug. 7	102	30, 31	24	518
Newell, George E., and L. G. Ladd, assignors to Smith, Grant & Co., Pawtucket, R. I. Hoisting-bucket	290,649	Dec. 18	1615	444	25	1185
Newell, George F., Boston, Mass. Wrench	279,661	June 19	1307	363	23	2360
Newell, George H., Woodsville, N. H. Permutation-padlock	287,300	Oct. 23	1938	530	25	371
Newell, Lorenzo D., Providence, R. I. Self-leveling berth	276,867	May 1	430	115	23	1702
Newell, Nelson C., Springfield, Mass. Button	273,132	Feb. 27	1963	552	23	806
Newell, Nelson C., Springfield, Mass. Button	273,133	Feb. 27	1964	552	23	806
Newell, Nelson C., Springfield, Mass. Button	279,002	June 5	471	129	23	2204
Newell, Nelson C., Springfield, Mass. Button	290,092	Dec. 11	890	253	25	1051
Newell, William H., Williamsburg, Mass. Injector	283,013	Aug. 14	642	182	24	621
Newhall, Charles W., Jr. (See Aiken, Benjamin F., Jr., assignor.)						
Newhall, Eustis, <i>et al.</i> (See Bacon, Charles H., assignor.)						
Newhall, George M., Philadelphia, Pa. Apparatus for stirring, mixing, and melting sugar, &c.	276,065	Apr. 17	1538	423	23	1506
Newhall, George M., Philadelphia, Pa. Centrifugal machine	278,260	May 22	2149	590	23	2015
Newhall, George M., Philadelphia, Pa. Machine for drying sugar and other substances	286,056	Oct. 2	340	94, 95	25	63
Newhouse, Frederick, and H. Mooers, Toledo, Ohio. Fire-escape	277,600	May 15	1341	361	23	1867
Newkirk, Abram, Cleveland, Ohio. Insect-destroyer	287,704	Oct. 30	2455	661	25	477
Newland, William, Brooklyn, N. Y. Fire-escape	280,070	June 26	1801	506	23	2452
Newlands, Benjamin E. R. (See Duncan and Newlands.)						
Newlin, Charles A. (See Wells and Newlin.)						
Newlin, William, Attica, Ind. Hub	283,271	Aug. 14	961	268	24	679
Newlin, William, and S. Whitehall, Attica, Ind. Making wheels for vehicles, &c.	279,584	June 19	1219	338	23	2345
Newlore, Matthew, Grand Island, Neb. Chain-saw	285,651	Sept. 25	1818	518	24	1242
Newmaker, Henry, Stoneborough, Pa. Cone-pulley	283,646	Aug. 21	1413	396	24	768
Newman, Charles H., Rochester, N. Y. Steam-packing	277,151	May 8	812	214	23	1771
Newman, Charles H., Elmira, N. Y., assignor to Detroit Iron and Brass Manufacturing Company, Detroit, Mich. Waffle-iron	270,973	Jan. 23	1425	411	23	294
Newman & Co., L. (See Bray, Morris P., assignor.)						
Newman, Elmer P., Dimondale, Mich. Vehicle-hub	276,706	May 1	220	56	23	1662
Newman, Isaac. (See Bowers, Alfred H., assignor.)						
Newman, John A., Chicago, Ill. Card for teaching drawing	282,659	Aug. 7	221	65	24	538
Newman, Joseph, Sacramento, Cal. Vehicle-seat	279,266	June 12	811	224	23	2272
Newman, Nelson, Springfield, Ill. Sign	283,647	Aug. 21	1413	396	24	769
Newman, Thomas C., Chicago, Ill. Fruit-squeezer	283,014	Aug. 14	643	182	24	621
Newman, William, Sherman, Tex. Lamp	281,716	July 24	1733	470	24	320

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Newsham, Nock & Douglas. (See Douglas, John B., assignor.)						
Newsom, John B., assignor of one-half to E. Priest, Eufaula, Ala. Combined planter and cultivator.	283,272	Aug. 14	962	268	24	679
Newsom, John J., Oakland, assignor of one-half to J. C. Plunkett, San Francisco, Cal. Attrition-mill.	288,724	Nov. 20	1187	324	25	727
Newth, W. H. D. (See Ritchie, James, assignor.)						
Newton, Albert H., <i>et al.</i> (See Buck, James A., assignor.)						
Newton, Andrew, <i>et al.</i> (See Buck, James A., assignor.)						
Newton, Andrew C., <i>et al.</i> (See Buck, James A., assignor.)						
Newton, Edward B. (See Newton, John F., Jr., assignor.)						
Newton, James. (See Hall and Newton.)						
Newton, John, Clifford, Ind. Combined post and base.	272,149	Feb. 13	702	192	23	573
Newton, John, Clifford, Ind. Fence.	285,427	Sept. 25	1557	438	24	1193
Newton, John, Clifford, Ind. Railway tie and stringer.	285,833	Oct. 2	62	19	25	13
Newton, John F., Jr., assignor to E. B. Newton, Boston, Mass. Grate-bar for furnaces, &c.	271,508	Jan. 30	2095	602	23	418
Newton, Robert, Providence, R. I. Reducing-valve.	282,557	Aug. 7	103	31	24	518
Newton, Robert, Providence, R. I. Steam-trap.	282,558	Aug. 7	105	31, 32	24	518
Newton, Robert, Providence, R. I. Valve for steam-traps.	284,469	Sept. 4	375	104	24	967
Newton, Stephen S., Binghamton, N. Y. Bottle-stopper.	279,418	June 12	1017	282	23	2304
Newton, Stephen S., Binghamton, N. Y. Bottle-stopper.	279,419	June 12	1017	282	23	2304
Newton, Stephen S., Binghamton, N. Y. Bottle-stopper.	280,503	July 3	207	54	24	37
Newton, Stephen S., Binghamton, N. Y. Bottle-stopper.	280,944	July 10	755	210	24	138
Newton, Sylvester, <i>et al.</i> (See Buck, James A., assignor.)						
Newton, William H., Chicago, Ill. Bobbin-winder for sewing-machines.	270,831	Jan. 16	1241	358	23	257
Newton, William H., Chicago, Ill. Hand-punch.	271,104	Jan. 23	1578	424	23	319
Ney, Jacob, assignor to Ney Manufacturing Company, Canton, Ohio. Hay-elevator track.	287,772	Oct. 30	2551	686	25	494
Ney Manufacturing Company. (See Ney, Jacob, assignor.)						
Nizeraux, Charles P., Paris, France. Secondary battery.	271,732	Feb. 6	173	47	23	470
Niccum, Andrew, deceased, Topeka, Kans.; James R. Niccum, administrator. Flame-fastener.	285,428	Sept. 25	1558	439	24	1193
Niccum, James R., administrator. (See Niccum, Andrew.)						
Nichols, Aaron S., New Haven, Conn. Mouth-piece for telephone-transmitters.	271,903	Feb. 6	384	106	23	508
Nichols, Aaron S., Pullman, Ill. Bell attachment for organs.	281,121	July 10	961	269	24	177
Nichols, Charles H., assignor of one-half to M. Bashare, Toledo, Ohio. Cracker-screen.	282,465	July 31	2702	743	24	491
Nichols, David R., Brockville, Ontario, Canada. Carpet-sweeper.	288,590	Nov. 13	1009	278	25	693
Nichols, Francis M., Chicago, Ill. Representing and multiplying monumental and other designs.	287,310	Oct. 23	1941	530	25	371
Nichols, Frederic B., assignor of one-half to C. Thomson, Halifax, Nova Scotia, Canada. Apparatus for evaporating sirups and viscous substances.	276,192	Apr. 24	1700	470	23	1541
Nichols, Frederic B., and C. Thomson, Halifax, Nova Scotia, Canada; said Nichols assignor to said Thomson. Manufacturing fish-meal.	276,868	May 1	432	-----	23	1702
Nichols, Frederic B., and C. Thomson, Halifax, Nova Scotia, Canada. Making radiating flues.	226,219	Oct. 9	536	147	25	109
Nichols, George, Seymour, Conn. Expansion-bit.	289,125	Nov. 27	1672	464	25	823
Nichols, George B., Galveston, Tex. Weather and fire strip for box-car doors.	279,420	June 12	1018	283	23	2304
Nichols, George B., Galveston, Tex. Lumber-door for railway box-cars.	280,395	July 3	67	18	24	14
Nichols, George H., <i>et al.</i> (See Herreshoff, John B. F., assignor.)						
Nichols, H. N. (See Sharpneck, William S., assignor.)						
Nichols, Harry M., New York, N. Y. Manufacture of steel.	276,453	Apr. 24	2035	-----	23	1599
Nichols, Jacob J. (See McLewee, William S., assignor.)						
Nichols, Mark M., New York, N. Y. Flexible tubing.	284,050	Aug. 28	1933	540	24	872
Nichols, Melville S., <i>et al.</i> (See Matzeliger, Jan E., assignor.)						
Nichols, Ralph K., Lower Lake, Cal. Cultivator.	289,127	Nov. 27	1673	464	25	823
Nichols, Shepard & Company. (See Hoag, Andrew J., assignor.)						
Nichols, Shepard & Company. (See Robinson, William A., assignor.)						
Nichols, Shepard & Company. (See Shepard, Hoag, and Thomson, assignors.)						
Nichols, Simeon, Lisbon, Me., assignor of one-fourth to C. W. Parker, Chicago, Ill. Rail-way-switch.	274,814	Mar. 27	2014	561	23	1204
Nichols, Thomas R., Lynn, Mass. Spool holder and unwinder for sewing-machines.	280,504	July 3	208	54	24	37
Nichols, Walter B., Danville, Ky. Car-coupling.	278,728	June 5	67	21	23	2136
Nichols, William. (See Ross, James S., assignor.)						
Nichols, William, Boston, Mass. Telephone local-call instrument.	283,354	Aug. 14	1067	{ 300 301 }	24	699
Nichols, William A., Philadelphia, Pa. Watch-protector.	285,154	Sept. 18	1232	346	24	1129
Nichols, William H., <i>et al.</i> (See Herreshoff, John B. F., assignor.)						
Nichols, William H., assignor to Bevin Brothers Manufacturing Company, East Hampton, Conn. Chime attachment for harness.	284,885	Sept. 11	888	250	24	1062
Nicholson, Charles W., Assamooosick, Va. Peanut cleaner and polisher.	290,914	Dec. 25	1958	541	25	1253
Nicholson, Coleman L., Philadelphia, Pa. Hod-elevator.	290,347	Dec. 18	1212	339	25	1116
Nicholson, Henry C., Mount Washington, Ohio. Electric railway-signal.	275,255	Apr. 3	473	132	23	1307
Nicholson, Henry C., Kenton, Ky. Relay for quadruplex telegraphs.	289,301	Nov. 27	1875	521	25	862
Nicholson, Marcus D. (See Maranville, Egbert L., assignor.)						
Nicholson, William H., <i>et al.</i> (See Leake, Lewis C., assignor.)						
Nicholson, William L. (See Peeler, Abner, assignor.)						
Nicholson, William T., Providence, R. I. Machine for and method of cutting teeth upon file-blanks.	278,169	May 22	2024	556	23	1994
Nicht, Alexander J. (See Nicht, Josef, assignor.)						
Nicht, Josef, assignor of one-half to A. J. Nicht, Auburn, N. Y. Flour-bolt.	288,845	Nov. 20	1326	364	25	753
Nickel, David, Morris, Ill. Door-hanger.	290,093	Dec. 11	891	253	25	1051
Nickerson, Amos, Somerville, Mass. Alarm for elevators.	284,654	Sept. 11	604	170	24	1012
Nickerson, Charles E. (See Bowers, George W., assignor.)						
Nickerson, Fred, A., assignor to Dickinson Hard Rubber Company, Springfield, Mass. Metal die for plastic materials.	285,057	Sept. 18	1112	310	24	1109
Nickerson, Fred, A., assignor to Dickinson Hard Rubber Company, Springfield, Mass. Compound die for plastic materials.	285,058	Sept. 18	1113	311	24	1109
Nickerson, Fred, A., assignor to Dickinson Hard Rubber Company, Springfield, Mass. Die for the manufacture of articles from plastic materials.	285,059	Sept. 18	1114	311	24	1109
Nickerson, George W., Yarmouth, Mass. Adjustable calk for horseshoes.	280,071	June 26	1802	507	23	2453
Nickerson, Hiram B., New Bedford, Mass. Combined chair and fish-plate for railway-joints.	288,656	Nov. 20	1093	300	25	713
Nickerson, Luke A., and J. L. Dufrene, Rockford, Ill. Carpet-fastener.	287,388	Oct. 23	2031	552	25	387
Nicklaus, Oscar A., <i>et al.</i> (See Blair, James C., assignor.)						
Nickum, George S., assignor of one-half to E. F. Stoddard, Dayton, Ohio. Oil-cup.	288,102	Nov. 6	387	109	25	575
Nicol, Robert, Jr., Oshkosh, Wis. Pocket.	278,587	May 29	2567	701	23	2097



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Nicolaisen, Eberhardt, New York, assignor of nine-sixteenths to N. Ussing, J. A. Rüs, Brooklyn, and J. T. Nagle, New York, N. Y. Electric mail-conveyer .....	271,904	Feb. 6	385	106	23	508
Nicols, Marshall D., Sewickley, and T. W. Webb, Pittsburg, Pa., assignors to said Nicols. Bolt-threading machine .....	272,079	Feb. 13	615	167	23	558
Nicolson, Charles P., Lamar, Mo. Car-coupling .....	277,051	May 8	681	178	23	1749
Nicolson, Charles P., Chicago, Ill. Skirt-protector .....	289,020	Nov. 27	1544	426	25	800
Niobell, Bernhard S., Scranton, Pa. Furnace-grate .....	270,100	Jan. 2	313	93	23	64
Nida, Charles, New York, N. Y. Machine for cleaning intestines .....	289,302	Nov. 27	1877	{ 521 522 }	{ 25 }	862
Niedringhaus, Frederick G. and W. F., St. Louis, Mo. Attaching handles to vessels of enameled iron-ware .....	286,627	Oct. 16	1068	287	25	210
Niedringhaus, Frederick G. and W. F., St. Louis, Mo. Hinge for vessels of enameled iron-ware .....	286,628	Oct. 16	1069	288	25	210
Niedringhaus, William F. (See Niedringhaus, Frederick G. and W. F.) .....						
Niedringhaus, William F., St. Louis, Mo. Vessel of enameled iron-ware .....	290,596	Dec. 18	1549	427	25	1174
Niedringhaus, William F., St. Louis, Mo. Vessel of enameled iron-ware .....	290,597	Dec. 18	1550	427	25	1174
Niedringhaus, William F., St. Louis, Mo. Vessel of enameled iron-ware .....	290,598	Dec. 18	1550	427	25	1175
Nichaus, Lambert, St. Louis, Mo. Brick-kiln .....	290,261	Dec. 18	1104	309	25	1097
Niekrenz, Christian, Farina, Ill. Car-coupling .....	287,849	Nov. 6	70	21	25	520
Nielsen, Hans J. (See Madsen and Nielsen.) .....						
Nielsen, Lauritz B., Chicago, Ill. Centrifugal creamer .....	281,916	July 24	1992	546	24	366
Nielsen, William, New York, N. Y. Decorating rooms .....	275,692	Apr. 10	1075	293	23	1418
Nielsen, Christian. (See Albrecht and Nielsen.) .....						
Niemiller, Charles, assignor to G. Uchtman, Cincinnati, Ohio. Rocking-chair .....	279,879	June 19	1559	436	23	2404
Nienstädt, Ernst, Berlin, Germany. Etching glass .....	273,588	Mar. 6	452	.....	23	912
Nierstheimer, George, Newport, Ky. Burial-case .....	290,996	Dec. 25	2079	573	25	1271
Nies, Phillip, assignor of two-thirds to J. Schlegel and J. Erbe, Newark, Ohio. Ice pick and breaker .....	285,060	Sept. 18	1115	311	24	1109
Nieso, Henry E., and G. Dunkel, assignors to F. O. Matthiessen & Wiechers Sugar Refining Company, Jersey City, N. J. Apparatus for cooling or drying granular materials ..	278,356	May 29	2298	{ 628 629 }	{ 23 }	2050
Niesendorfer, Peter G., Baltimore, Md. Combined bung-bush and stamp-protector ..	286,474	Oct. 9	864	234	25	168
Niesendorfer, Peter G., Baltimore, Md. Gate-valve .....	286,475	Oct. 9	865	235	25	168
Niggeman, Charles H., Lexington, Mich. Bnton or stud .....	281,442	July 17	1626	444	24	296
Nightingale, John. (See Nightingale, Joseph and J.) .....						
Nightingale, Joseph and J., Paterson, N. J. Method of and appliance for locking separate skeins of silk .....	287,705	Oct. 30	2456	661	25	477
Niles Tool Works. (See Reiss, George T., assignor.) .....						
Niles, Truman B., Swanville, Ind. Seed-planter .....	285,652	Sept. 25	1819	518	24	1242
Nilson, James M., Maumee, Ind. Water-wheel .....	289,021	Nov. 27	1544	426	25	800
Nilson, Nils, Maple Plain, Minn. Spring-tooth for agricultural implements .....	280,072	June 26	1803	507	23	2452
Nimmo, Andrew, Bristol, R. I. Calipers .....	280,073	June 26	1804	507	23	2453
Nimmo, Edward B., Brooklyn, N. Y. Stylographic pen .....	284,569	Sept. 4	500	140	24	988
Nimmo, George, Jersey City, N. J. Crucible .....	271,105	Jan. 23	1579	454	23	319
Nindemann, William F. C., New York, N. Y. Gaff for fore-and-aft vessels .....	280,945	July 10	757	210	24	139
Nine, William F., and A. R. Case, Sully, Iowa. Dumping-platform .....	288,103	Nov. 6	388	110	25	575
Nirdlinger, Albert H. (See Youngs, George B., assignor.) .....						
Nishwitz, Frederick, Millington, N. J. Agricultural machine .....	288,657	Nov. 20	1094	300	25	713
Nishwitz, Frederick, Millington, N. J. Harrow .....	288,658	Nov. 20	1095	{ 300 301 }	{ 25 }	713
Nissen, Peter C., Chicago, Ill. Refrigerator-car .....	280,224	June 26	1976	555	23	2484
Nitsche, Alexander. (See McCray, Benjamin F., assignor.) .....						
Niver, Seneca A., Buffalo, N. Y. Clothes-washer .....	273,134	Feb. 27	1965	552	23	806
Nix, John D., Milwaukee, Wis. Adjustable reel for harvesters and mowing-machines ..	290,792	Dec. 25	1805	{ 499 500 }	{ 25 }	1227
Nix, Manning L., Paris, Tex. Cotton-gin feeder .....	274,961	Apr. 3	103	28	23	1242
Nix, Manning L., and S. McClelland, Paris, Tex. Sash-holder .....	271,905	Feb. 6	387	106	23	509
Nixon, Jacob, Winfield, Kans. Track for traction-engines .....	282,758	Aug. 7	343	97	24	560
Nixon, Miles G., Chicago, Ill. Planing attachment for lathes .....	275,693	Apr. 10	1075	{ 293 294 }	{ 23 }	1418
Noakes, James O. (See Herzog, F. Benedict, assignor.) .....						
Noar, Isaac, New York, N. Y. Neckscarf .....	278,588	May 29	2568	702	23	2098
Noar, Isaac, New York, N. Y. Neckscarf .....	289,356	Nov. 27	1946	540	25	875
Nobel, Alfred, assignor, by mesne assignments, to Giant Powder Company, San Francisco, Cal. Explosive compound. (Reissue.) .....	10,267	Jan. 9	912	.....	23	187
Noble, A. F., et al. (See Ritter, Andrew, Jr., assignor.) .....						
Noble, Ezekiel H. (See Smith and Vincent, assignors.) .....						
Noble, George H. (See Glass and Noble.) .....						
Noble, George H. (See Willcox and Noble.) .....						
Noble, Henry T., Dixon, Ill. Harrow .....	283,805	Aug. 28	1618	456	24	818
Noble, James, Jr. (See Mullen and Noble.) .....						
Noble, John A. (See Folant, Jacob, assignor.) .....						
Noble, John E., assignor of one-sixth to C. J. Leming, Mulberry, Ohio. Combined insulator and lightning-arrester .....	280,324	June 26	2101	590	23	2506
Noble, John H. (See Inghram, John F., assignor.) .....	280,323	June 26	2100	590	23	2506
Noble, John T., St. Louis, Mich. Hose-cart .....						
Noble, Theron A. (See Hedge and Noble.) .....						
Noble, Theron A., et al. (See Baker, George C., assignor.) .....						
Noblett, William, Chicago, Ill. Detonating burglar-alarm .....	287,850	Nov. 6	71	21	25	520
Nock, George W., Philadelphia, Pa. Conpling for bell-cords, &c. .....	279,267	June 12	812	225	23	2272
Nock, John, Constantinople, Turkey. Machine for forging anchors .....	273,135	Feb. 27	1966	{ 552 553 }	{ 23 }	806
Noe, Jabez B., Nevada, Mo. Press for making harness-pads .....	280,925	June 26	1978	556	23	2485
Nogaz, Russell H., Dundee, Mich. Rotary tile-ditching machine .....	284,320	Sept. 4	201	56	24	938
Nögerath, Rudolph. (See Baumotte, Hermann, assignor.) .....						
Nolan, John H., Boston, Mass. Fireproofing composition .....	289,022	Nov. 27	1545	.....	25	800
Nolan, John M., deceased, assignor to W. Shannon, Waterbury, Conn. Rake .....	285,653	Sept. 25	1820	518	24	1242
Nolan, Lewis B., Austin, Ark. Cotton-gin power .....	276,454	Apr. 24	2035	565	23	1599
Nolan, Patrick W., New York, N. Y., assignor to himself and C. Bardwell, Summit, N. J. Hot-air register .....	270,832	Jan. 16	1243	358	23	258
Nolf, André L., Brussels, Belgium. Process of and apparatus for obtaining chlorine and sodium .....	271,906	Feb. 6	388	107	23	509
Noll, William H., Milton, Ind. Atmospheric clothes-pounder .....	282,759	Aug. 7	344	97	24	560
Nolton, Thomas J., Lake City, Colo. Trestle or platform attachment for ladders .....	271,509	Jan. 30	2096	{ 602 603 }	{ 23 }	418

## Alphabetical list of patentees—Continued.

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Noonan, Burnett J., Fern Ridge, Mo. Bar for aligning railway-rails.....	275,256	Apr. 3	476	133	23	1307
Noppel, Emil, Philadelphia, Pa. Horn for drawing on shoes.....	288,474	Nov. 13	872	236	25	667
Norburn, Charles A. (See Norburn, John and C. A.)						
Norburn, John and C. A., Danville, Va.; said John Norburn assignor to said C. A. Norburn. Plug-tobacco.....	284,321	Sept. 4	202	56	24	938
Nordenfelt, Thorsten, Westminster, England. Projectile.....	270,101	Jan. 2	314	93	23	64
Nordenfelt, Thorsten, Westminster, England. Breech-loading ordnance.....	282,008	July 24	2098	575	24	383
Nordyke, Charles A., Cincinnati, Ohio. Removable bay-window.....	280,946	July 10	758	210	24	139
Nordyke & Marmon Company. (See Marmon, Daniel W., assignor.)						
Nordyke & Marmon Company. (See Marmon and Warrington, assignors.)						
Nordyke & Marmon Company. (See Warrington, Jesse, assignor.)						
Nordyke & Marmon Company of Indiana. (See Marmon, Daniel W., assignor.)						
Norman, James E. (See Lilly and Norman.)						
Norman, Lawrence F., Boston, Mass. Boot or shoe.....	289,439	Dec. 4	80	23	25	900
Norman, William W. (See Bell and Norman.)						
Norris, Albert N., Rushville, Ind. Cultivator.....	272,080	Feb. 13	618	167	23	559
Norris, Albert N., Rushville, Ind. Corn-planter.....	276,869	May 1	433	115	23	1702
Norris, Daniel W., Elgin, Ill. Can for oil and other liquids.....	276,066	Apr. 17	1539	{ 423 424 }	{ 23 23 }	{ 1506 1506 }
Norris, Daniel W., Elgin, Ill. and W. Young, Dayton, Ohio; said Norris assignor to said Young. Wire-stretching machine.....	288,350	Nov. 13	715	196	25	640
Norris, George S., Baltimore, Md. Bottle-stopping device.....	272,081	Feb. 13	619	167	23	559
Norris, George S., Baltimore, Md. Bottle-stopping device.....	281,290	July 17	1186	328	24	223
Norris, John C., Crete, Nehr. Combined paper-sack, twine, and tea-paper case.....	270,687	Jan. 16	1069	306	23	224
Norris, Joseph, and N. Moore, assignors of one-third to A. H. Low, Duke Centre, Pa. Locking stop-cock.....	288,725	Nov. 20	1188	324	25	728
Norris, Willard H., Glens Falls, N. Y. Bosom-shirt.....	289,778	Dec. 4	502	139	25	973
Norris, William R., Fort Ann, N. Y. Educational map.....	279,268	June 12	813	225	23	2272
Norseng, Gulbrand, Hamar, Norway. Potato-digger.....	282,917	Aug. 7	523	{ 146 147 }	{ 24 24 }	{ 593 593 }
Norton, Henry W. (See Hudson, John W., assignor.)						
North & Co., O. B. (See Hanford, Robert G., Jr., assignor.)						
North & Co., O. B. (See Hubbard, George M., assignor.)						
North & Co., O. B. (See O'Brien, James, assignor.)						
North & Co., O. B. (See Zeller, Melancthon E., assignor.)						
North, George S., South Norwalk, Conn. Photographic camera.....	276,455	Apr. 24	2036	565	23	1599
North, John, Middletown, assignor to J. H. Whitmore, Naugatuck, Conn. Molding-machine.....	274,646	Mar. 27	1816	{ 504 505 }	{ 23 23 }	{ 1170 1170 }
North, Stephen, Syracuse, N. Y. Ear-trumpet. (Reissue).....	10,268	Jan. 9	914	263	23	187
North Western Manufacturing Company. (See Bullock and Jackson, assignors.)						
North Western Steele Wheel Company. (See Wilder, Charles O., assignor.)						
North, William C., Cleveland, Ohio. Vapor-stove.....	272,462	Feb. 20	1103	312	23	648
Northall, William H. (See Leet and Northall.)						
Northey, John P., Toronto, Ontario, Canada. Steam-actuated valve.....	274,647	Mar. 27	1820	505	23	1171
Northey, Thomas, Toronto, Ontario, Canada. Steam-actuated valve.....	287,706	Oct. 30	2457	{ 661 662 }	{ 25 25 }	{ 477 477 }
Northrup, Charles L., Salem, Mass. Automatic switch-closer.....	283,721	Aug. 21	1508	425	24	786
Northrup, George B., assignor to W. & E. T. Fitch, New Haven, Conn. Buckle attachment.....	272,748	Feb. 20	1469	413	23	712
Northrup, Israel H., New York, N. Y., assignor of two-thirds to A. H. Byington, Norwalk, Conn. Mail-bag.....	272,577	Feb. 20	1256	350	23	674
Northrup, H. Davis, et al. (See Davis, Clayton N., assignor.)						
Northway, Winslow P., assignor of one-half to J. L. Wilford, Minneapolis, Minn. Centrifugal separator.....	288,257	Nov. 13	581	161	25	617
Northwestern Fertilizing Company. (See Kimpen, Cornelius, assignor.)						
Northwestern Horse Nail Company. (See Wills and Kingsland, assignors.)						
Northwestern Manufacturing and Car Company. (See Clarke, Willard A., assignor.)						
Northwestern Manufacturing Company. (See Bullock, Daniel, assignor.)						
Northwestern Sleigh Company. (See Chapman, John A., assignor.)						
Norton, Edward S. (See Devor, James R., assignor.)						
Norton, Edwin, Chicago, Ill. Soldering cans.....	274,362	Mar. 20	1438	{ 394 395 }	{ 23 23 }	{ 1097 1097 }
Norton, Edwin, Chicago, Ill. Can and making the same.....	277,920	May 22	1716	469	23	1941
Norton, Edwin, Chicago, Ill. Combined cork and screw nozzle.....	287,046	Oct. 23	1603	441	25	309
Norton, Edwin, Chicago, Ill. Paint-can.....	287,047	Oct. 23	1604	441	25	309
Norton, Edwin, and J. G. Hodgson, assignors to said Norton and O. W. Norton, Chicago, Ill. Machine for seaming sheet-metal cans.....	272,972	Feb. 27	1763	{ 493 494 }	{ 23 23 }	{ 770 770 }
Norton, Edwin, and J. G. Hodgson, assignors to said Norton and O. W. Norton, Chicago, Ill. Can-ending machine.....	274,363	Mar. 20	1440	{ 395 396 }	{ 23 23 }	{ 1097 1097 }
Norton, Edwin, and J. G. Hodgson, assignors to said Norton and O. W. Norton, Chicago, Ill. Sheet-metal can.....	275,936	Apr. 17	1386	381	23	1480
Norton, Edwin, and J. G. Hodgson, assignors to said Norton and O. W. Norton, Chicago, Ill. Can-testing machine.....	287,048	Oct. 23	1606	{ 441 442 }	{ 25 25 }	{ 310 310 }
Norton, George E., New Haven, Conn. Clock-bell.....	276,456	Apr. 24	2037	566	23	1599
Norton, George W., Freeman, Me. Car-coupling.....	284,974	Sept. 11	995	281	24	1082
Norton, Hiram, et al. (See Moulton, Fordyce M., assignor.)						
Norton, John B., Philadelphia, Pa. Belt-fastening.....	289,926	Dec. 11	692	194	25	1014
Norton, Levi D., assignor to E. D. Albro Company, Cincinnati, Ohio. Gluing-machine.....	290,094	Dec. 11	891	253	25	1051
Norton, Lorenzo B., New Haven, Conn. Reed-organ.....	270,974	Jan. 23	1426	411	23	294
Norton, Oliver W. (See Norton and Hodgson, assignors.)						
Norton, Rowland S., Troy, N. Y. Sewing-machine.....	270,244	Jan. 9	495	146	23	107
Norton, Rowland S., assignor to G. B. Chett, Brother & Co., Troy, N. Y. Sewing-machine gage.....	280,758	July 3	516	145	24	91
Norton, Thomas, Detroit, Mich., assignor to T. A. Jebb, Buffalo, N. Y. Manufacturing crystallized grape-sugar.....	285,654	Sept. 25	1820	329	24	1242
Norton, Zack, Rossville, Ill. Neck-yoke.....	277,503	May 15	1224	329	23	1849
Norwood, Horace W., Philadelphia, Pa., assignor to Norwood Spark Preventive and Smoke Consuming Company, Camden, N. J. Water-elevator.....	272,463	Feb. 20	1104	312	23	648
Norwood, Horace W., Philadelphia, Pa., assignor to Norwood Spark Preventive and Smoke Consuming Company, Camden, N. J. Draft-regulator for locomotive and other furnaces.....	278,813	June 5	182	53	23	2153
Norwood, Horace W., Philadelphia, Pa., assignor to Norwood Spark Preventive and Smoke Consuming Company, Camden, N. J. Draft-regulator.....	278,814	June 5	183	53	23	2153
Norwood, Horace W., Philadelphia, Pa., assignor to Norwood Spark Preventive and Smoke Consuming Company, Camden, N. J. Air-injector.....	279,269	June 12	814	225	23	2272



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Norwood Spark Preventive and Smoke Consuming Company. (See Norwood, Horace W., assignor.)						
Noteman, Alonzo, Toledo, Ohio. Portable steam boring-engine	273,136	Feb. 27	1968	553	23	806
Notley, William, Pawtucket, assignor of one-half to A. A. Mann, Lincoln, R. I. Vehicle-wheel	286,476	Oct. 9	866	235	25	168
Notting, Bernard, Port Washington, Wis. Bung-extractor	285,655	Sept. 25	1822	519	24	1243
Novotny, Frank. (See Burkhard and Novotny.)						
Nowell, Annie E. (See Nowell, Oliver S., assignor.)						
Nowell, Oliver S., assignor to A. E. Nowell, Boston, Mass. Safety attachment for elevators	285,762	Sept. 25	1964	556	24	1266
Nowell, T. S., et al. (See Huse, Warren D., assignor.)						
Nowell, Thomas S. (See Prouty, George W., assignor.)						
Noyes, David F., Lewiston, Me. Lumber-drier	286,552	Oct. 9	961	259	25	185
Noyes, Ella A. (See Noyes, William H. and E. A.)						
Noyes, Lizzie B. (See Noyes, Walter B., assignor.)						
Noyes, Walter B., assignor to L. B. Noyes, Saginaw, Mich. Curtain-roller	278,037	May 22	1861	508	23	1966
Noyes, Walter B., assignor to L. B. Noyes, Saginaw, Mich. Curtain-roller	278,038	May 22	1862	508	23	1966
Noyes, William H., Newburyport, Mass. Stove top and cover	278,170	May 22	2027	557	23	1994
Noyes, William H., Newburyport, Mass. Top-cover for kerosene, gas, and other stoves	279,421	June 12	1019	283	23	2305
Noyes, William H. and E. A., Newburyport, Mass. Store	282,660	Aug. 7	222	65	24	538
Nugent, Daniel D., Newark, N. J. Curtain-ring	279,585	June 19	1320	338	23	2345
Nugent, Daniel D., assignor to W. T. Mercereau & Co., Newark, N. J. Curtain-bracket	284,143	Aug. 28	2057	570	24	893
Nugent, Edward, Brooklyn, assignor of one-half to A. K. Johnston, Staten Island, N. Y. Wood-screw machine	282,107	July 31	2232	{ 614 615 }	24	412
Nugent, Richard C., Pittsburg, Pa. Machine for beveling colters, &c.	272,082	Feb. 13	620	168	23	559
Nugent, Richard C., assignor to B. P. Wells, T. T. Wightman, and J. G. Wainwright, Pittsburg, Pa. Machine for flanging pipes	286,569	Oct. 9	986	{ 265 266 }	25	189
Nuhn, John, and F. Kuehne, Jersey City, N. J. Elastic label	281,391	July 17	1314	363	24	245
Null, George W., Green Mount, Pa. Lifting-jack	284,975	Sept. 11	996	281	24	1082
Null, Isaac N., Winston, N. C. Evaporator	269,877	Jan. 2	63	19	23	15
Nulty, James T., Philadelphia, Pa. Spike	277,921	May 22	1717	469	23	1941
Numan, Isaac W., Canton, Ohio. Hame-tug attachment	271,260	Jan. 30	1768	512	23	359
Nunamacker, By, De Soto, Iowa. Corn-planter	289,927	Dec. 11	692	194	25	1014
Nunamaker, William, Kansas City, Mo. Car-coupling	277,152	May 8	813	214	23	1772
Nunn, Philip, Sandusky, Ohio. Refrigerative vessel	273,137	Feb. 27	1969	554	23	807
Nungesser, Philip P., Cleveland, Ohio. Magneto-electric machine	287,773	Oct. 30	2552	{ 686 687 }	25	494
Nungesser, Philip P., Cleveland, Ohio. Dynamo or magneto electric machine	287,774	Oct. 30	2553	687	25	494
Nunn, James W., assignor of one-half to E. Epps, Kingstree, S. C. Hub-attaching device	287,311	Oct. 23	1941	530	25	371
Nunns, John R., Milford, and J. A. Smith, assignors to Automatic Safety Boiler and Engine Company, New Haven, Conn. Automatic boiler-feed	288,591	Nov. 13	1010	278	25	693
Nussbeck, Wilhelm, Berlin, Germany. Beer-cooling apparatus	276,870	May 1	434	115	23	1702
Nute, Alonzo I. (See Allen, Lester H., assignor.)						
Nute, John H., assignor to himself and A. F. Downie, New Glasgow, Nova Scotia, Canada. Machine for serving rope	275,937	Apr. 17	1387	382	23	1480
Nutt, Isaiah, New York, N. Y. Splice-bar for railway-rails	272,749	Feb. 20	1470	413	23	712
Nutt, James, Oxford, Ohio. Vehicle-spring	290,701	Dec. 25	1691	465	25	1205
Nutting, James F. (See Holmes, William C., assignor.)						
Nutting, James H., Callisburg, Tex. Cultivator	274,962	Apr. 3	104	29	23	1242
Nutting, Samuel E., Iron Ridge, Wis. Seal-lock	278,450	May 29	2413	658	23	2070
Nutting, Thomas B., Morristown, N. J. Car-coupling	277,773	May 15	1545	420	23	1905
Nutting, Thomas B., assignor to himself and T. B. Nutting, Jr., Morristown, N. J. Gang and sulky plow	287,851	Nov. 6	71	22	25	520
Nutting, Thomas B., assignor to himself and T. B. Nutting, Jr., Morristown, N. J. Sulky-harrow	287,852	Nov. 6	72	22	25	520
Nutting, William R. (See Tirrell, Jacob P., assignor.)						
Nyce, David D., et al. (See Nyce and Hunsicker, assignors.)						
Nyce, Joseph K., and I. C. Hunsicker, assignors to themselves, W. D. Heebner, D. D. Nyce, and I. A. Anden, Skippack, Pa. Car-coupling	289,357	Nov. 27	1947	541	25	875
Nye, David, et al. (See Miller, Frank, assignor.)						
Nye, George E., et al. (See Ballou, Hiram P., assignor.)						
Nye, Joseph K., Fairhaven, Mass. Bottle-stopping machine	273,881	Mar. 13	832	225	23	984
Nye, Marshall M. (See McCalip and Nye.)						
Nye, Mirtillo A., Charlotte, Mich. Belt-fastening	276,620	May 1	93	25	23	1643
Nye, Sherman R., Chicopee Falls, Mass. Truss-pad	290,095	Dec. 11	892	254	25	1051
Nystrom, John W., Philadelphia, Pa. Steam-engine	272,306	Feb. 13	886	248	23	607
Nystrom, John W., Philadelphia, Pa. Steam-engine governor	272,307	Feb. 13	887	{ 248 249 }	23	607
O'Bannon, William H. (See Snider and O'Bannon.)						
O'Bannon, William H., and J. J. Snider, Cleburne, Tex. Churn-motor	285,504	Sept. 25	1643	462	24	1209
O'Beirne, Edward J., Evansville, Ind. Constructing towers	279,422	June 12	1020	283	23	2305
O'Blenus, Anthony W., New York, N. Y. Staining compound for wood	270,833	Jan. 16	1244		23	258
O'Brien, James, New York, N. Y. Boot for horses	290,096	Dec. 11	893	254	25	1051
O'Brien, James, Minneapolis, Minn., assignor to O. B. North & Co., New Haven, Conn. Trace-buckle	288,475	Nov. 13	873	236	25	668
O'Brien, John, et al. (See Vincent, John, Jr., assignor.)						
O'Brien, Joseph, Kalamazoo, Mich. Artificial leg	290,915	Dec. 25	1958	541	25	1253
O'Brien, Simon, assignor to himself and H. P. Howard, Bristol, R. I. Hydraulic motor for vessels	286,477	Oct. 9	867	235	25	168
O'Brien, Thomas, New York, N. Y. Tricycle	287,566	Oct. 30	2260	613	25	440
O'Brien, Thomas, Boston, Mass. Reefing and furling fore-and-aft sails	287,707	Oct. 30	2459	662	25	477
O'Brien, Walter B., Jr. (See O'Brien, William F. and W. B., Jr.)						
O'Brien, William F., San José, and W. B. O'Brien, Jr., Santa Clara, Cal. Automatic egg-boiler	284,051	Aug. 28	1934	541	24	872
O'Brien, Willis, San Francisco, Cal. Two-wheeled vehicle	275,512	Apr. 10	848	230	23	1379
O'Connor, James, Jackson, Mo. Brake-shoe	284,052	Aug. 28	1935	541	24	873
O'Connor, Jeremiah, Piedmont, Cal. Clamp for stone-work	285,918	Oct. 2	179	51	25	35
O'Connor, John, Toronto, Ontario, Canada. Car-coupling	282,009	July 24	2099	576	24	384
O'Connor, John D. (See Swanton, John G., assignor.)						
O'Connor, John F. (See Scouller, Alexander, assignor.)						
O'Connor, John J., and R. M. White, assignors of one-third to C. L. Gish, Wellsville, N. Y. Car-coupling	271,106	Jan. 23	1580	454	23	320
O'Connor, John S., assignor of one-half to L. J. Dordlinger, White Mills, Pa. Apparatus for supplying abrading and polishing material to cutting and polishing tools	283,273	Aug. 14	963	268	24	679

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O'Connor, Michael J., Henderson, Ky. Pneumatic apparatus for excavating foundations ..	285,834	Oct. 2	63	19, 20	25	13
O'Donel, Irwin M., Pittsburg, Pa. Telephone-exchange .....	283,806	Aug. 23	1619	456 } 24	818	
O'Donnell, James, San Francisco, Cal. Car-brake .....	289,128	Nov. 27	1674	464	25	823
O'Donnell, James B., Hazleton, Pa. Car-brake .....	275,513	Apr. 10	849	230	23	1379
O'Donnell, Michael F., <i>et al.</i> (See Vincent, John, Jr., assignor.)						
O'Donnell, Thomas, Philadelphia, Pa. Quill pen-holder .....	271,107	Jan. 23	1581	455	23	320
O'Donoghue, James D., Brooklyn, N. Y. Toy race-course .....	288,476	Nov. 13	874	237	25	668
O'Donovan, Timothy C., Walker's Mills, Pa. Car-coupling .....	290,097	Dec. 11	893	254	25	1051
O'Flaherty, John. (See Pearson, Marshall H., assignor.)						
O'Grady, John, assignor to F. X. Ohlen, Columbus, Ohio. Insertible saw-tooth .....	286,478	Oct. 9	868	236	25	168
O'Hara, John H., Throopsville, N. Y. Grain-binder .....	272,150	Feb. 13	702	193	23	573
O'Hara, Patrick H., Philadelphia, Pa. Coffee or tea pot .....	270,463	Jan. 9	772	226	23	160
O'Hara, Robert, and C. H. Remington, Gilroy, Cal. Horseshoe .....	282,108	July 31	2237	615	24	413
O'Hara, William P., Cincinnati, Ohio. Sampling-tube or liquor-thief .....	275,094	Apr. 10	1076	294	23	1419
O'Harra, George W., assignor of one-half to J. A. Hoedemaker, Kalamazoo, Mich. Rheostat .....	283,138	Aug. 14	789	221	24	647
O'Hern, Patrick, Chapman, Nebr. Railway-switch stand .....	284,144	Aug. 28	2058	571	24	893
O'Keefe, John, assignor to Excelsior Manufacturing Company, St. Louis, Mo. Rotary grate .....	284,471	Sept. 4	376	105	24	968
O'Kelly, Joseph G., Chicago, Ill. Weather-strip for door-sills .....	282,109	July 31	2237	616	24	413
O'Lally, Patrick K., Boston, Mass. Blind and door spring .....	283,649	Aug. 21	1415	396	24	769
O'Lally, Patrick K., Boston, Mass. Door-check .....	289,697	Dec. 4	417	117	25	959
O'Leary, Arthur J. (See Moore and O'Leary.)						
O'Leary, Michael J., Springfield, Cal. Bridle-bit .....	274,648	Mar. 27	1821	506	23	1171
O'Malley, Thomas M., assignor of two-thirds to A. Gilmartin and J. Deegan, Bellaire, Ohio. Nut-lock .....	290,916	Dec. 25	1961	542	25	1253
O'Malley, William T. (See Devers, William J., assignor.)						
O'Neill, David W., <i>et al.</i> (See Smith, John B., assignor.)						
O'Neill, John, assignor to himself and T. J. Lally, Boston, Mass. Sad-iron holder .....	279,591	June 19	1223	340	23	2346
O'Neill, Samuel. (See Gibbs, Richard, assignor.)						
O'Neill, Charles Z., assignor to Chapman-O'Neill Manufacturing Company, New York, N. Y. Street-sweeping machine .....	270,834	Jan. 16	1244	359	23	258
O'Neill, Eugene, San Francisco, Cal. Cut-off-valve gear .....	271,352	Jan. 30	1895	548	23	382
O'Neill, Eugene, San Francisco, Cal. Valve-gear for steam-engines .....	278,451	May 29	2413	658	23	2070
O'Reilly, Andrew J., St. Louis, Mo. System of laying telegraph-wires .....	284,655	Sept. 11	604	171	24	1012
O'Reilly, Austin, Springfield, Mass. Beer-faucet .....	285,656	Sept. 25	1823	519	24	1243
O'Reilly, Patrick, New York, N. Y. Regulating-valve .....	274,512	Mar. 27	1659	461	23	1141
O'Shaughnessy, James F., New York, N. Y. Treatment of cotton-seed .....	286,953	Oct. 9	965		25	186
O'Sullivan, James S., Troy, N. Y. Barrel-making machine .....	273,072	Apr. 3	251	69, 70	23	1269
O'Sullivan, Michael J., assignor of three-fourths to J. F. Morrison, Baltimore, Md. Telegraph-reclay .....	286,955	Oct. 16	1481	407	25	281
Oakman, Samuel, Melrose, Mass. Covering for bottles .....	287,049	Oct. 23	1608	442	25	310
Oakman, Samuel, Melrose, Mass., assignor to American Insulator Company, of New York. Telegraph-insulator .....	288,360	Nov. 13	716	196	25	640
Oaks, William A. C., assignor to Goodell Company, Antrim, N. H. Guard for carving-forks .....	277,052	May 8	683	178	23	1749
Oakville Company. (See Moore, Samuel, assignor.)						
Obenchain, Frank, South Whitley, Ind. Sliding gate .....	283,648	Aug. 21	1414	396	24	769
Obenchain, John T., Logansport, Ind. Machine for dressing millstones .....	282,760	Aug. 7	345	98	24	560
Obenchain, John T., Logansport, Ind. Machine for facing millstones .....	282,761	Aug. 7	347	98	24	561
Obenchain, John T., Logansport, Ind. Grinding-mill .....	289,695	Dec. 4	415	116	25	958
Ober, Bertha, Urbana, Ill. Toy for the production of loud explosions .....	285,917	Oct. 2	178	51	25	34
Ober, William Y., Lynn, Mass. Machine for finishing seams .....	285,061	Sept. 18	1116	311 } 24	1109	
Oberlander, Sophia M., Baltimore, Md. Rubber boot .....	288,846	Nov. 20	1328	364	25	754
Oberle, Franklin X., St. Joseph, Mo. Kitchen-safe .....	274,021	Mar. 13	993	272	23	1012
Oberle, Louis J., and J. Janggen, assignors of one-third to J. K. Farley, Dubuque, Iowa. Machine for steaming jumbles, crackers, &c., before baking .....	281,201	July 10	1068	294	24	196
Obermayer, Simon, <i>et al.</i> (See Topmiller, Bernard, assignor.)						
Oberst, Peter J., St. Paul, assignor to T. B. Farrington, Minneapolis, Minn. Overcoat. (Reissue) .....	10,384	Sept. 18	1482	417	24	1174
Obetz, Charles F., <i>et al.</i> (See Williams, William, assignor.)						
Odell, Alfred T., and J. H. Cordell, Marshall, Mo. Car-coupling .....	289,852	Dec. 11	603	168	25	999
Odell, Edwin, Elko, Nev. Nut-lock .....	283,505	Aug. 21	1258	353	24	739
Odell, Emory E. (See Rusling and Odell.)						
Odell, John B., Chicago, Ill. Galvanic battery .....	275,845	Apr. 17	1282	352	23	1460
Odell, John B., Chicago, Ill. Device for lighting gas by electricity .....	277,053	May 8	684	178	23	1749
Odell, Levi J., assignor of two-fifths to H. Kingman, W. and I. Walton, Fairbury, Ill. Check-row planter .....	289,696	Dec. 4	416	117	25	958
Odell, Risdon M. (See Hill, Webb, and Odell.)						
Odell, Risdon M., and D. L. McKittrick, Sr., Baton Rouge, La. Mechanical motor .....	270,688	Jan. 16	1070	306 } 23	224	
Odell, Udolpho H., Dayton, Ohio. Grinding-mill .....	279,880	June 19	1559	436	23	2404
Odio, Benjamin, <i>et al.</i> (See Montejó, Miguel A., assignor.)						
Odiome, David W., Elizabeth, N. J. Umbrella-tie .....	276,457	Apr. 24	2038	566	23	1599
Odiome, David W., Elizabeth, N. J., and E. Broseman, New York, N. Y., assignors to said Odiome. Pinking-machine .....	288,847	Nov. 20	1329	364	25	754
Odom, Andrew J., Sumner, Ga. Pivoted-jaw vise .....	280,226	June 26	1978	556	23	2485
Oehler, K. (See Hepp, Eduard, assignor.)						
Oelkers, John B. (See Bogert, Mortimer P., assignor.)						
Ofeldt, Frank W., Newark, N. J. Naphtha-engine .....	279,270	June 12	815	225 } 23	2272	
Offenbacher, Perry, Buck Creek township, Hancock county, Ind. Rotary harrow .....	270,245	Jan. 9	496	146	23	107
Offermann, Johann, and T. Jegler, Munich, Bavaria, Germany. Producing compound felted and textile fabrics .....	288,726	Nov. 20	1189	325	25	728
Ogborn, Harrison, Richmond, Ind. Machine for separating cockle, &c., from grain .....	283,015	Aug. 14	644	182 } 24	622	
Ogborn, Harrison, assignor to Richmond Caster Company, Richmond, Ind. Caster .....	273,298	Mar. 6	71	20	23	846
Ogborn, Rhoda C. (See Rowlett, Oliver B., assignor.)						
Ogden, Ferris, Mennt Vernon, Ohio. Valve-gear .....	281,122	July 10	962	270	24	177
Ogden, John W., Brooklyn, N. Y. Adjustable bed-bottom .....	272,973	Feb. 27	1765	494	23	770
Ogden, Mortimer C., Brooklyn, N. Y., assignor to Eagle Lock Company, Terryville, Conn. Adjustable book-lock .....	284,470	Sept. 4	376	104	24	967



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Ogden, Samuel E. (See Gore, Charles E., assignor.)						
Oglesby, Moore & Co. (See Farris, Edwin B., assignor.)						
Oglethorpe, Joseph C., Knoxville, Tenn. Grate attachment	270,246	Jan. 9	497	147	23	107
Ohio Curtain Cornice Company. (See Montgomery, James M., Jr., assignor.)						
Ohio Power and Light Company. (See Woolley, Leonidas G., assignor.)						
Ohl, Henry S., Jr., Philadelphia, Pa. Sash-fastener	281,291	July 17	1187	323	24	223
Ohl, Percy C., Plainfield, N. J. Insulator for electrical conductors	280,947	July 10	759	210	24	139
Ohl, Percy C., Plainfield, N. J. Telephone-call	280,948	July 10	759	211	24	139
Ohlen, Frank X. (See O'Grady, John, assignor.)						
Ohlsen, Hans C., assignor to T. T. Haydock, Cincinnati, Ohio. Fifth-wheel	283,139	Aug. 14	790	221	24	647
Ohly, Charles H., Sandusky, assignor to A. J. Frederick, Oberlin, Ohio. Telephone-sup- port	283,183	Nov. 6	482	134	25	591
Ohly, Ludwig M., New York, N. Y. Apparatus for rendering animal-fats	275,404	Apr. 10	710	190	23	1356
Ohnstein, Isidor, Chicago, Ill. Treating jute, butts, and animal-hair	277,054	May 8	684		23	1749
Okell, Peter, Fort Madison, Iowa. Belt and bucket elevator	277,774	May 15	1546	420	23	1905
Okie, Frederick E. (See McMurtrey, Williams, and Okie.)						
Okie, Frederick E., Linwood, and J. F. Simpson, Philadelphia, Pa. Wrench	279,271	June 12	819	226	23	2273
Olander, Paul J., Boston, Mass. Folding spring-mattress	274,963	Apr. 3	105	29	23	1243
Old, James, Allegheny, Pa. Stop-valve	286,479	Oct. 9	869	236	25	169
Olden, William P., Springfield, Ill. Pump-valve	270,102	Jan. 2	315	93	23	64
Oldendorph, Henry, Belleville, Ill. Valve	274,364	Mar. 20	1443	396	23	1098
Oldham, John, and B. N. Payne, assignors to B. W. Payne & Sons, Corning, N. Y. Steam- boiler	272,578	Feb. 20	1257	350	23	674
Oldroyd, William, Columbus, Ohio. Fire-escape	278,171	May 22	2027	557	23	1994
Oldroyd, William, Columbus, and G. H. Smith, Jr., Lancaster, Ohio. Hair-spring stud for watches	273,138	Feb. 27	1971	554	23	807
Olds, Allen. (See Leach and Olds.)						
Olds, Annie H. (See Olds, Harmon D., assignor.)						
Olds, Harmon D., assignor to A. H. Olds, Cedar Rapids, Iowa. Ladder-truck	280,227	June 26	1979	556	23	2485
Olds, John D., Fort Wayne, Ind. Valve-gear	281,123	July 10	964	270 271	24	177
Olin, Thomas D. (See Stickle, William H., assignor.) (Reissue.)						
Olin, William F., assignor to W. Deering, Chicago, Ill. Harvester-reel	286,629	Oct. 16	1070	288	25	210
Olinger, John R., Chicago, Ill. Lunch-box	279,662	June 19	1308	364	23	2361
Oliver, Alfred H., Poughkeepsie, N. Y. Cloth cover for sewing-machines	276,270	Apr. 24	1791	498	23	1357
Oliver Brothers & Phillips. (See Bray, Thomas J., assignor.)						
Oliver, D. Franklin, Huntsville, Mo. Pitman-box	289,779	Dec. 4	503	139	25	974
Oliver, David B., Allegheny, Pa. Metallic fence-post	280,505	July 3	209	55	24	38
Oliver, David B., Allegheny, Pa. Metallic fence-post	281,717	July 24	1733	471	24	320
Oliver, David B., Allegheny, Pa. Metallic fence-post. (Reissue)	10,366	Aug. 14	1087	305	24	702
Oliver, James (See Anderson and Oliver.)						
Oliver, James, assignor to South Bend Iron Works, South Bend, Ind. Colter-bracket	284,322	Sept. 4	202	57	24	938
Oliver, James B., Pittsburg, assignor to T. B. Kerr, Allegheny city, Pa. Barb for fences	286,147	Oct. 2	448	122	25	83
Oliver, John L., assignor of one-half to P. Moessinger, Cincinnati, Ohio. Mail-bag catcher	273,351	Mar. 6	187	51	23	866
Oliver, Robert S., assignor to Rathbone, Ward & Co., Albany, N. Y. Oil or vapor stove	281,917	July 24	1993	546	24	366
Ollis, John W., assignor to himself, W. W. Bishop, and P. Smith, Joliet, Ill. Railway-rail joint	273,882	Mar. 13	832	226	23	984
Olvey, Richard J., Buffalo, N. Y. Operating belts and pulleys	289,440	Dec. 4	81	23	25	901
Olvey, Richard J., Buffalo, N. Y. Operating belts and pulleys	289,441	Dec. 4	82	23	25	901
Olmstead, Albert P., West Troy, N. Y. Soldering-iron	277,601	May 15	1342	361	23	1867
Olmstead, C. L. (See Cooke, Frederic D., assignor.)						
Olmstead, Calvin, Elba, Mich. Wagon-brake	278,589	May 29	2569	702	23	2098
Olmstead, John A., Graniteville, N. Y. Making rubber shoes and boots, and roller-dies therefor	272,305	Feb. 13	888	249	23	607
Olmsted, Benjamin F., Grand Rapids, Mich. Cut-off valve	284,472	Sept. 4	377	105	24	968
Olmsted, David R., Prophetstown, Ill. Aerial railway	287,458	Oct. 30	2122	576	25	412
Olmsted Electric Light and Power Company. (See Olmsted, Joseph, assignor.)						
Olmsted, Joseph, assignor to United States Electric Lighting Company, New York, N. Y. Electric-arc lamp	279,163	June 5	612	166 167 168	23	2227
Olmsted, Joseph, assignor to Olmsted Electric Light and Power Company, New York, N. Y. Dynamo-electric machine	290,098	Dec. 11	894	254	25	1051
Olmsted, Oscar B., Beloit, Wis. Detachable rocker	271,907	Feb. 6	390	107	23	509
Olmsted, Oscar B., Chicago, Ill. Drive-well point	287,708	Oct. 30	2459	662	25	477
Olney, George B. (See Payne, William H., assignor.)						
Olsen, Christian, St. John, New Brunswick. Gangway-ladder	290,348	Dec. 18	1213	339	25	1117
Olsen, Gustav, assignor of one-half to E. A. Rix, San Francisco, Cal. Mining-car	270,689	Jan. 16	1071	307	23	224
Olsen, Hakon K., Coalville, Utah Ter. Sawing-machine	275,069	Apr. 3	248	69	23	1265
Olsen, Olaf R. (See Fulton and Olsen.)						
Olsen, Olaf R., and H. H. Fulton, assignors to E. B. Martindale, Indianapolis, Ind. Pulley	271,108	Jan. 23	1582	455	23	320
Olsen, Olaf R., Indianapolis, Ind., assignor to Indianapolis Machine and Bolt Works, of Indiana. Hoop-planer	279,496	June 12	1108	305 306	23	2319
Olsen, Olaf R., assignor to Indianapolis Machine and Bolt Works, Indianapolis, Ind. Pul- ley	280,228	June 26	1981	556	23	2485
Olson, Amond. (See Amundson and Olson.)						
Olson, Christopher H., Decatur, Ill. Screw-driver	278,261	May 22	2150	590	23	2015
Olson, Christopher H., Decatur, Ill. Pinchers for setting box-corners	278,262	May 22	2151	591	23	2015
Olson, Holcomb, Mariadahl, Kans. Horseshoe	272,750	Feb. 20	1471	413	23	712
Olson, Lars O., Chicago, Ill. Bracket	287,853	Nov. 6	73	22	25	520
Olson, Nils F., Chicago, Ill. Automatic numbering-machine	283,016	Aug. 14	649	183 184	24	622
Olson, Peter J., assignor of one-half to A. E. Bowe and C. R. Cook, Northfield, Minn. Ma- chine for binding grain	273,760	Mar. 13	673	180 181	23	957
Olson, Peter J., assignor of one-half to A. E. Bowe and C. R. Cook, Northfield, Minn. Grain- binder	273,761	Mar. 13	678	182 183	23	958
Olshewski, Alexander, Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Apparatus for producing rods or tubes of celluloid or other plastic material	278,667	May 29	2671	730 731	23	2115
Olshewski, Alexander, Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Machine for treating compounds of pyroxyline	280,659	July 3	382	107 108	24	68
Olwin, William G., et al. (See Schaeffer, Lester A., assignor.)						
Omensetter, Elhanan, Philadelphia, Pa. Underground conduit for electric wires	283,807	Aug. 28	1622	457	24	818
Omensetter, Elhanan, assignor of one-half to A. H. Mershon, Philadelphia, Pa. Vault-cover	275,775	Apr. 10	1196	328	23	1439
Onderdonk, John P., Philadelphia, Pa. Paper bag	277,153	May 8	814	214	23	1772
Onderdonk, John P., Philadelphia, Pa. Paper bag	279,586	June 19	1221	338	23	2345

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Onderdonk, John P., Philadelphia, Pa. Paper bag.....	279,588	June 19	1232	339	23	2346
Onderdonk, John P., Philadelphia, Pa. Paper bag.....	279,589	June 19	1232	339	23	2346
Onderdonk, John P., Philadelphia, Pa. Paper bag.....	279,590	June 19	1233	339	23	2346
Onderdonk, Lausung, Plainfield, N. J., assignor of one-half to H. P. Wells and C. C. Brown. Ruffing and plaiting attachment for sewing-machines.....	272,309	Feb. 13	889	{ 249 250 }	{ 23 23 }	607
Oney, R. T., <i>et al.</i> (See Ware, Charles L., assignor.)						
Onslow, Adolphe, Jersey City, N. J. Pendulum-scale.....	281,292	July 17	1188	{ 328 329 }	{ 24 24 }	223
Onslow, Charles, Port Ewen, N. Y. Music-leaf turner.....	282,110	July 31	2238	616	24	413
Opdyke, Ida R., Plainfield, N. J. Child's crib.....	275,070	Apr. 3	249	69	23	1268
Operti, Albert, New York, N. Y. Sectional picture.....	279,976	June 26	1682	472	23	2432
Opp, Benjamin F., Havana, Ill. Road-engine.....	287,709	Oct. 30	2460	663	25	477
Oppe, Auguste C. (See Oppe, Ernest W., assignor.)						
Oppe, Ernest W., assignor to A. C. Oppe, New York, N. Y. Mirror attachment for row-boats.....	278,039	May 22	1863	509	23	1966
Oppel, George A., <i>et al.</i> (See Byard, Washington I., assignor.)						
Oppenheimer, Sigmund. (See Davis, Ferdinand E., assignor.)						
Oram, George C., Brooklyn, N. Y., assignor to himself and W. H. Daly, Bergen Point, N. J. Oil-can.....	274,815	Mar. 27	2015	561	23	1205
Oram, John M., Dallas, Tex. Time-signal for telephones.....	278,357	May 29	2300	{ 629 630 }	{ 23 23 }	2050
Oram, John M., Dallas, Tex. Telephone time-signal repeating system.....	287,710	Oct. 30	2462	{ 663 664 }	{ 25 25 }	478
Orbeton, William W. S., Lynn, Mass. Window-blind support.....	272,751	Feb. 20	1472	414	23	713
Orcutt, Edward L., Somerville, Mass. Electric railway-signal.....	272,464	Feb. 20	1105	312	23	648
Orcutt, Jerome, and C. R. Richards, assignors to Union Metallic Cartridge Company, Bridgeport, Conn. Machine for capping cartridge-shells.....	279,497	June 12	1110	306	23	2319
Orcutt, William D., assignor of one-half to J. H. Busell, Boston, Mass. Rotary cutter.....	283,808	Aug. 28	1624	457	24	818
Ord, Edward O. C., Jr., and J. A. Kress, U. S. Army. Range-finder for rifles.....	277,922	May 22	1718	469	23	1941
Ord, William, Brooklyn, Ohio. Cultivator.....	287,956	Nov. 6	298	60	25	544
Ordway, Albert H., East Templeton, Mass. Spring rocking-chair.....	281,124	July 10	960	271	24	178
Orin, John, Paducah, Ky. Machine for swaging saw-teeth.....	272,465	Feb. 20	1107	313	23	648
Orme, Alexander, Chicago, Ill. Safety-valve.....	286,148	Oct. 2	449	122	25	83
Ormsby, Edwin A., <i>et al.</i> (See Ormsby, William, assignor.)						
Ormsby, Elisha S., Brooklyn, N. Y. Nipper-head for spinning-machines.....	286,727	Oct. 16	1195	322	25	232
Ormsby, Frank E., Naumburg, N. Y. Combined chimney ventilator and heater.....	273,589	Mar. 6	453	122	23	912
Ormsby, J. Whitney, Milwaukee, Wis. Lime-bin.....	270,464	Jan. 9	773	226	23	160
Ormsby, Madison M., David City, Nebr. Fire-escape.....	283,650	Aug. 21	1416	397	24	769
Ormsby, William, assignor to himself, E. A. Ormsby, Boston, Mass., and W. B. Mendum. Sash-balance.....	285,505	Sept. 25	1644	462	24	1209
Orne, Charles P., Cambridge, assignor, by mesne assignments, to himself and J. S. Orne, Cambridgeport, Mass. Electric battery.....	283,355	Aug. 14	1071	301	24	700
Orne, Joel S. (See Orne, Charles P., assignor.)						
Orpen, Henry, St. Louis, Mo. Type-writing machine.....	279,790	June 19	1448	406	23	2385
Orpen, Henry, St. Louis, Mo. Type-writing machine.....	284,570	Sept. 4	502	{ 140 141 }	{ 24 24 }	989
Orr, James H., Ukiah, Cal. Animal-shears.....	288,104	Nov. 6	390	110	25	575
Orr, Painter and Company. (See Smith, William H., assignor.)						
Orr, R. L. (See Irwin, George L., assignor.)						
Orr, William, Jr., Trenton, N. J. Support for wire-cloth lathing.....	278,263	May 22	2151	591	23	2015
Orrill, Don. (See Lockwood and Orrill.)						
Ortman, Barnim F., and L. G. Gilbert, Buffalo, N. Y. Grease-cup.....	278,172	May 22	2028	557	23	1994
Ortman, Barnim F., Buffalo, assignor of one-half to G. Urban, Jr., Cheektowaga, N. Y. Gear-wheel.....	287,711	Oct. 30	2465	664	25	478
Orton, Benjamin F., <i>et al.</i> (See Orton, Chester B., assignor.)						
Orton, Benjamin F., East Saginaw, Mich. Tower for electric lights.....	280,850	July 10	637	179	24	118
Orton, Benjamin F., East Saginaw, Mich. Tower.....	290,099	Dec. 11	895	255	25	1051
Orton, Charles E., <i>et al.</i> (See Orton, Chester B., assignor.)						
Orton, Chester B., assignor to B. H. Williams, Lawrenceville, Pa., B. F. Orton, East Saginaw, and C. F. Orton, Bay City, Mich. Baling-press.....	280,325	June 26	2103	590	23	2506
Orton, Lyman O., Philadelphia, Pa. Cutter for planing-machines.....	286,630	Oct. 16	1071	288	25	210
Orton, Lyman O., Philadelphia, Pa. Saw-guide.....	288,727	Nov. 20	1191	325	25	728
Orton, Lyman O., Philadelphia, Pa. Governor.....	288,728	Nov. 20	1192	325	25	728
Orton, Lyman O., Philadelphia, Pa. Table for planing-machines.....	288,729	Nov. 20	1193	325	25	729
Orton, Lyman O., assignor of one-fourth to R. M. Popham, Philadelphia, Pa. Cross-tie and fastening for railway-rails.....	290,793	Dec. 25	1806	500	25	1227
Orten, Lyman O., and L. H. Berry, Philadelphia, Pa. Mortising-machine.....	280,326	June 26	2105	591	23	2507
Ortloff, Henrietta S., and J. C. Kloborg, New York, N. Y.; said Kloborg assignor to said Ortloff. Imitation feather.....	282,661	Aug. 7	223	65	24	538
Orum, Morris L., Philadelphia, Pa. Gage-slide for rotary cutters.....	278,815	June 5	184	53.54	23	2154
Orvis, Franklin K., Dixon, Ill. Cultivator.....	275,846	Apr. 17	1283	{ 352 353 }	{ 23 23 }	1460
Orvis, Franklin K., Dixon, Ill. Cultivator.....	275,847	Apr. 17	1284	353	23	1460
Orvis, Orel D., New York, N. Y. Steam-boiler and other furnaces.....	273,299	Mar. 6	72	20.21	23	466
Orvis, Orel D., and N. B. Adams, New York, N. Y. Street-railway structure and car therefor.....	285,657	Sept. 25	1823	{ 519 520 }	{ 24 24 }	1243
Orvis, Orel D., and N. B. Adams, New York, N. Y. Street-subway.....	288,730	Nov. 20	1194	326	25	729
Orvis, Orland D., Chicago, Ill. Hydrocarbon-furnace.....	288,477	Nov. 13	875	{ 237 238 }	{ 25 25 }	668
Orvig, Thomas G., <i>et al.</i> (See Moore, James D., assignor.)						
Osborn, Adelbert E., assignor to Model Machine Company, Waco, Tex. Oil-press mat.....	285,300	Sept. 18	1395	394	24	1160
Osborn, Adelbert E., assignor to Model Machine Company, Waco, Tex. Feed-water regulator.....	290,100	Dec. 11	897	255	25	1052
Osborn, Adelbert E., assignor to Model Machine Company, Waco, Tex. Fire-kindler.....	290,997	Dec. 25	2081	573	25	1272
Osborn, Albert I., New Point, Ind. Fence.....	284,656	Sept. 11	606	171	24	1013
Osborn, Alexander C., Clarksburg, W. Va. Set-works for saw-mills.....	282,214	July 31	2383	656	24	436
Osborn, Benct, <i>et al.</i> (See Paino, Henry M., assignor.)						
Osborn, John H., Springfield, Mass., assignor to Leader Sewing Machine Company, Cleveland, Ohio. Sewing-machine treadle.....	281,392	July 17	1314	363	24	245
Osborn, John H., Springfield, Mass., assignor to Leader Sewing Machine Company, Cleveland, Ohio. Sewing-machine stand.....	282,559	Aug. 7	106	32	24	518
Osborn, John H., Springfield, Mass., assignor to Leader Sewing Machine Company, Cleveland, Ohio. Needle-clamp and thread-guide for sewing-machines.....	284,657	Sept. 11	606	171	24	1013



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Osborn, Melzar. (See Johnson and Osborn.)						
Osborn, Oliver S., New Haven, Conn. Landau-carriage-top lock .....	290,349	Dec. 18	1214	{ 340 341 342 507 508 }	25	1117
Osborn, Walter A., Owosso, Mich. Trip-gear for harvester-rakes .....	289,074	June 26	1805	{ 507 508 }	23	2453
Osborne, Charles H. (See Cory, David P., assignor.)						
Osborne & Co., C. S. (See Dixon, David A., assignor.)						
Osborne & Co., D. M. (See Miller, Andrew C., assignor.)						
Osborne, Eugene F., St. Paul, Minn. Steam-heating apparatus for railway-roundhouses .....	288,848	Nov. 20	1330	365	25	754
Osborne, Henry F., Newark, N. J. Creasing-wheel .....	275,848	Apr. 17	1285	353	23	1461
Osborne, Henry F., Newark, N. J. Creasing-machine .....	276,271	Apr. 24	1792	498	23	1558
Osborne, Henry F., Newark, N. J. Leather-creasing wheel .....	290,262	Dec. 18	1105	310	25	1097
Osborne, John H., Philadelphia, Pa. Button-hole cutter .....	277,602	May 15	1343	362	23	1867
Osborne, John H., Philadelphia, Pa. Circular-knitting machine .....	277,603	May 15	1345	362	23	1868
Osborne, John H., Philadelphia, Pa. Knitting-machine .....	285,155	Sept. 18	1233	{ 346 347 }	24	1129
Osborne, John H., Hayt's Corners, N. Y. Neck-yoke .....	282,918	Aug. 7	524	147	24	593
Osborne, John W., Washington, D. C., assignor to W. H. Forbes, Boston, Mass. Elastic roller .....	277,154	May 8	815	215	23	1772
Osborne, John W., Washington, D. C., assignor to W. H. Forbes, Boston, Mass. Transferring designs .....	282,111	July 31	2239	{ 616 617 618 }	24	413
Osborne, John W., Washington, D. C., assignor to W. H. Forbes, Boston, Mass. Method of and apparatus for transferring designs .....	282,112	July 31	2248	{ 617 618 }	24	414
Osborne, John W., Washington, D. C., assignor to W. H. Forbes, Boston, Mass. Pulley, roller, or friction-wheel .....	287,567	Oct. 30	2261	614	25	440
Osborne, John W., Washington, D. C., assignor to W. H. Forbes, Boston, Mass. Pulley, roller, or wheel .....	287,568	Oct. 30	2263	{ 614 615 }	25	441
Osborne, John W., Washington, D. C., assignor to W. H. Forbes, Boston, Mass. Inking apparatus for printing-presses .....	287,569	Oct. 30	2268	615	25	441
Osborne, John W., Washington, D. C., assignor to W. H. Forbes, Boston, Mass. Electrical apparatus for and method of controlling paper, &c. ....	287,957	Nov. 6	209	60, 61	25	544
Osborne, John W., Washington, D. C., assignor to W. H. Forbes, Boston, Mass. Pulley, roller, or friction-wheel .....	289,367	Nov. 27	1962	546	25	878
Osborne, John W., Washington, D. C., assignor to W. H. Forbes, Boston, Mass. Pulley, roller, or wheel .....	289,368	Nov. 27	1964	547	25	878
Osborne, Owen, Philadelphia, Pa. Cut stocking .....	288,592	Nov. 13	1012	278	25	693
Osborne, Theodore B. (See Huntington, Lawson G., assignor.)						
Oscola Manufacturing Company. (See Jackson, William J., assignor.)						
Osgood, Byron A. (See Osgood, Edwin P., assignor.)						
Osgood, Byron A., Boston, assignor of one-half to E. P. Osgood, Malden, Mass. Cash-car system .....	283,917	Aug. 28	1746	493	24	840
Osgood, Edwin P. (See Osgood, Byron A., assignor.)						
Osgood, Edwin P., Malden, Mass., assignor of one-half to B. A. Osgood. Cash-car .....	290,190	Dec. 11	1002	282	25	1072
Osgood, Enoch, Boston, Mass. Compensating-balance for time-pieces .....	278,173	May 22	2030	558	23	1995
Osgood, Galen N., Boston, Mass. Cotton-gin .....	284,223	Sept. 4	87	24	24	919
Osgood, James H., assignor to himself and D. Wilson, Boston, Mass. Horse-hitching device .....	272,466	Feb. 20	1108	313	23	649
Osgood, James M., Somerville, Mass. Spring shade-roller .....	280,229	June 26	1981	557	23	2455
Osgood, Josiah A., Boston, Mass. Packing for piston-rods .....	274,365	Mar. 20	1444	396	23	1098
Osgood, Josiah A., Boston, Mass. Metallic packing .....	274,816	Mar. 27	2016	561	23	1205
Osgood & MacNaughton. (See Osgood, Ralph R., assignor.)						
Osgood, Ralph R., assignor to Osgood & MacNaughton, Albany, N. Y. Head-block for A-frames of dredges .....	285,658	Sept. 25	1826	521	24	1243
Oshe, Edward. (See Ungemach and Oshe.)						
Osler, Albert W. (See Wood, Richard G., assignor.)						
Osmer, Friedrich, Brooklyn, N. Y. Apparatus for taking off ammonia from bone-black retorts .....	287,570	Oct. 30	2269	615	25	441
Osmer, William H., Somonauk, Ill. Frame for horse fly-nets .....	275,071	Apr. 3	250	69	23	1269
Osmer, William H., and R. M. Grier, Bonfils Station, Mo. Horse-collar pad .....	284,658	Sept. 11	607	171	24	1013
Oster, Jacob. (See Boch, Philipp, assignor.)						
Oster, Peter G., Cologne-on-the-Rhine, Prussia, Germany. Manufacture of oil as a substitute for linseed-oil .....	277,331	May 8	1021	-----	23	1808
Osterhage, Frederick, Vincennes, Ind. Sash-lock .....	285,659	Sept. 25	1828	521	24	1244
Östlund, Carl, Stockholm, Sweden. Cooking-stove .....	270,690	Jan. 16	1072	{ 307 308 426 }	23	225
Ostmire, William A., Brooklyn, assignor to H. Brewster, J. W. and C. M. Britton, New York, N. Y. Pole-sulky .....	283,722	Aug. 21	1509	{ 425 426 }	24	787
Ostrander, John W., Chicago, Ill. Attachment for applying power to machinery .....	281,293	July 17	1189	329	24	224
Ostrander, Jonathan, Cleveland, Ohio. Machine for rolling metal bars .....	274,964	Apr. 3	105	29, 30	23	1243
Ostrogovich, Francesco, assignor to Société Seconde Roos and F. Ostrogovich, Florence, Italy. Automatic printing-telegraph .....	281,788	July 24	1831	{ 501 502 }	24	338
Ostrom, Freeland W., Troy, N. Y. Sewing-machine needle .....	270,247	Jan. 9	498	147	23	108
Otis, Charles G., New York, N. Y. Steering apparatus .....	285,835	Oct. 2	64	20	25	14
Otis, Charles R., Yonkers, N. Y. Elevator .....	271,353	Jan. 30	1896	549	23	382
Otis, Elisha W., Chelsea, Mass. Skate-roller .....	285,836	Oct. 2	65	20	25	14
Otis, George A., Buffalo, N. Y. Overflow for feed-water heaters .....	278,590	May 29	2570	702	23	2098
Otis, John D., Peoria, Ill. Clover-harvester .....	290,599	Dec. 18	1551	428	25	1175
Otis, Samuel L., assignor to A. H. & C. B. Alling, Birmingham, Conn. Machine for sewing bands to knitted work .....	279,003	June 5	472	130	23	2204
Ottot, John D. (See Thomas and Ottot.)						
Ott, Benedict, et al. (See Shoemaker, Jacob, assignor.)						
Ott, Harry B. (See Lang and Ott.)						
Ott, Jacob C., Centralia, Ill. Convertible shaft and tongue for vehicles .....	290,462	Dec. 18	1375	380	25	1144
Ott, John F., Newark, N. J., assignor to Edison Electric Light Company, New York, N. Y. Regulator for dynamo-electric machines .....	271,654	Feb. 6	82	23	23	455
Ottawa Gate Manufacturing Company. (See McCurdy, David, assignor.)						
Ottawa Glass Company. (See Zellers, Theodor A., assignor.)						
Ottawa Tile Company. (See Johnson, Ernest V., assignor.)						
Ottenheimer, Albert, Stuttgart, Germany, assignor to Ottenheimer Brothers, New York, N. Y. Corset-clasp .....	276,978	May 1	578	152	23	1725
Ottenheimer Brothers. (See Ottenheimer, Albert, assignor.)						
Otterson, Thomas G., Philadelphia, Pa., assignor of one-half to J. Wharton, Camden, N. J. Jar-fastener .....	285,062	Sept. 18	1117	313	24	1109

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Otto, Henry, Bloomington, Ill. Flue-cleaning machine .....	290,998	Dec. 25	2082	{ 573 574 }	25	1272
Otto, Henry, and P. F. Bell, Bloomington, Ill. Balanced slide-valve .....	290,650	Dec. 18	1616	445	25	1186
Otto, John. (See Gay, William A., assignor.)						
Otto, Nicolaus A., Deutz-on-the-Rhine, Prussia, Germany. Gas-motor engine .....	288,478	Nov. 13	879	238	25	668
Otto, Nicolaus A., Deutz-on-the-Rhine, Prussia, Germany. Gas-engine .....	288,479	Nov. 13	880	238	25	669
Otto, Willy. (See Mayrhofer, Carl A., assignor.)						
Ottumwa Iron Works. (See Grotz, Charles, assignor.)						
Oudin, Eugene E. (See Herzog, F. Benedict, assignor.)						
Oudin, Eugene E., New York, N. Y. Imitation stained glass .....	279,423	June 12	1021	283	23	2305
Oudin, Eugene E., New York, N. Y. Manufacture of imitation stained glass .....	284,659	Sept. 11	608		24	1013
Quimet, Adolphe, <i>et al.</i> (See Therrien, Louis C., assignor.)						
Qury, Eugene, Cherbourg, assignor to J. A. Lannes, Paris, France. Manufacture of chains .....	273,139	Feb. 27	1972	554	23	807
Outwaite, John, Oceola, Ohio. Sash-fastener .....	285,919	Oct. 2	180	52	25	35
Outlaw, John A., Lewiston, N. C. Hame .....	287,571	Oct. 30	2270	615	25	441
Overacker, John. (See Flott and Overacker.)						
Overall, George W., Memphis, Tenn. Cistern .....	274,022	Mar. 13	994	272	23	1012
Overbury, Frank. (See Bushnell, Orsamus, assignor.)						
Overend, Charles E., Portland, Oreg. Carpenter's bevel .....	282,560	Aug. 7	107	32	24	519
Overhuls, Daniel, Ceralvo, Ky. Fence .....	286,057	Oct. 2	341	95	25	63
Overland Telephone Company. (See Baxter, Myron L., assignor.)						
Overman, Albert H., Hartford, Conn., and C. F. Hadley, Chicopee, Mass. Tricycle .....	270,691	Jan. 16	1073	{ 308 309 }	23	225
Overman, Albert H., and C. F. Hadley, Chicopee, Mass., assignors to Overman Wheel Com- pany, Hartford, Conn. Tricycle .....	282,358	July 31	2568	704	24	468
Overman, Albert H., and C. F. Hadley, Chicopee, Mass., assignors to Overman Wheel Com- pany, Hartford, Conn. Velocipede-wheel .....	283,413	Aug. 21	1140	322	24	718
Overman Wheel Company. (See Overman and Hadley, assignors.)						
Overmeyer, John B. (See Freeman, Alva M., assignor.)						
Overton, James T., Winton, S. C. Plow .....	280,230	June 26	1983	557	23	2485
Overton, Jesse, Jackson, Tenn. Combined fire place and cooking-stove .....	286,058	Oct. 2	342	85	25	63
Oviatt, Solomon E., Willoughby, Ohio. Thrashing-machine .....	277,055	May 8	685	178	23	1749
Owen, Asa K., Tennessee, Ill. Car-coupling .....	270,103	Jan. 2	317	93	23	64
Owen, Charles F., Chicago, Ill. Printing-press movement .....	276,621	May 1	94	25	23	1643
Owen, George B. (See Woodruff, Owen, and Beecher.)						
Owen, George B., Winsted, Conn. Gong-bell. (Reissue) .....	10,348	July 3	550	153	24	97
Owen, Joseph, New York, N. Y. Fruit-receptacle .....	282,215	July 31	2383	656	24	436
Owen, Thomas G., assignor to A. H. Parker, Chicago, Ill. Truss .....	273,590	Mar. 6	454	122	23	912
Owens, Thomas. (See Dulaney and Owens.)						
Owsley, Heaton, assignor to St. Nicholas Toy Company, Chicago, Ill. Making steel wheels .....	285,763	Sept. 25	1964	556	24	1266
Oyler, Henry, Peru, Ind. Gate .....	271,109	Jan. 23	1582	455	23	320
Oyston, Charles, Little Falls, N. Y. Nozzle for fire-engines and other purposes .....	280,759	July 3	518	145	24	92
Pabst, Mathias, Washington, D. C. Preventing overflow from back water .....	271,110	Jan. 23	1583	455	23	320
Pace, Richard R., Lineville, Ala. Cotton-chopper .....	281,125	July 10	970	271	24	178
Pace, Richard R., Lineville, Ala. Automatic vehicle-brake .....	289,698	Dec. 4	419	117	25	959
Pacholder, Morris, Baltimore, Md. Self-adjusting box .....	282,359	July 31	2568	704	24	468
Paci, Giuseppe, New York, N. Y. Machine for shelling green peas and beans .....	289,699	Dec. 4	420	118	25	959
Pacific Gas Governor Association. (See Amick, Myron J., assignor.)						
Pacific Tucking and Manufacturing Company. (See Fisher and Hart, assignors.)						
Packard, Fredrick, Brockton, and N. W. Arnold, Abington, Mass. Last for boots and shoes .....	270,975	Jan. 23	1427	412	23	294
Packard, Henry F. (See Warren and Packard.)						
Packard, Henry R., and W. H. Wilber, assignors of one-third to A. Field Tack Company, Taunton, Mass. Machine for cutting nail, tack, and rivet plates .....	277,923	May 22	1719	{ 469 470 }	23	1941
Packard, Henry R., assignor of one-half to A. Field Tack Company, Taunton, Mass. Ma- chine for trimming and shaping the heads of tacks .....	289,023	Nov. 27	1546	{ 426 427 }	25	800
Packard, James W., Brockton, Mass. Sewing-machine needle .....	279,498	June 12	1111	306	23	2319
Packard, Nathaniel R., 2d, Brockton, Mass. Congress-gaiter .....	287,312	Oct. 23	1942	531	25	371
Packard, S. Fremont, Brockton, Mass. Channeling and sole shaping or rounding machine .....	277,056	May 8	686	179	23	1749
Packard, Wales A., assignor of one-half to W. M. Baker, Urbana, Ohio. Dash-board for vehicles .....	275,257	Apr. 3	477	133	23	1307
Packer, Charles W., Philadelphia, Pa. Ice-cream freezer .....	272,752	Feb. 20	1473	414	23	713
Packer, Clinton M., Cambridgeport, Mass. Weather-strip .....	282,216	July 31	2384	657	24	436
Packer, Ezra L., Toulon, Ill. Buckle .....	279,424	June 12	1022	284	23	2305
Packer, George W. (See Packer, John F., assignor.)						
Packer, Henry H., Boston, Mass. Punching-machine .....	272,151	Feb. 13	704	{ 193 194 }	23	573
Packer, John F., assignor of one-half to G. W. Packer, Rock Falls, Ill. Hay-loader .....	282,762	Aug. 7	349	99	24	561
Packham, Frank R., assignor to J. C. Baker, Mechanicsburg, and J. B. Van Doren, Fre- mont, Ohio. Crimping-tongs .....	273,382	Mar. 6	189	51	23	866
Paddock, Charles K., St. Louis, Mo. Two-wheeled vehicle .....	278,358	May 29	2301	630	23	2050
Paddock, John H. (See Farnham, Orison L., assignor.)						
Padmore, Casper P., Philadelphia, Pa. Bicycle .....	288,849	Nov. 20	1333	{ 365 366 }	25	754
Paepke, Oscar F., Indianapolis, Ind. Caster .....	270,605	Jan. 16	965	279	23	206
Pagan, Orestes, Philadelphia, Pa. Car-axle box .....	287,572	Oct. 30	2271	616	25	441
Pago, Caleb D., Morgan, Colo. Holder for hitching-straps .....	273,300	Mar. 6	74	21	23	847
Pago, Caleb D., Morgan, Colo. Hitching-strap holder .....	275,695	Apr. 10	1077	294	23	1419
Pago, Carlos L., Cambridgeport, Mass. Box-fastener .....	284,660	Sept. 11	610	172	24	1013
Page, Clark D., Rochester, N. Y. Brick-kiln .....	286,728	Oct. 16	1197	{ 323 324 }	25	232
Page, Clark D., Rochester, N. Y., assignor of one-half to A. Albright. Brick-kiln .....	286,729	Oct. 16	1199	323	25	233
Page, D. (See Page, La Fayette W. and D.)						
Page, Edward C., and J. B. McCleery, Chicago, Ill. Order-holder .....	273,301	Mar. 6	75	21	23	847
Page, George K. (See Keller, Henry, assignor.)						
Page, Harry W., and H. Carley, said Carley assignor of one-half to T. McKenna, Long Branch, N. J. Electric alarm for steam-boilers, &c .....	290,101	Dec. 11	898	555	25	1052
Page, Harvey L., Washington, D. C. Blind and shutter .....	287,712	Oct. 30	2466	664	25	478
Page, Henry D., and W. E. Raynor, San Bernardino, Cal. Two-wheeled vehicle .....	274,217	Mar. 20	1254	346	23	1065
Page, John W., Rollin, Mich. Wire lock for fences .....	285,660	Sept. 25	1828	521	24	1244
Page, La Fayette W., Shreveport, La. Fly-fan .....	284,224	Sept. 4	88	24	24	919
Page, La Fayette W. and D., Shreveport, La. Car-coupling .....	538,258	Nov. 13	583	161	25	618
Page, Lewis H., Preston, Conn. Steam-generator .....	277,848	May 15	1628	443	23	1919
Page, Milton E., <i>et al.</i> (See Yancey, William L., assignor.)						
Page, Ostinello F. (See Emery, Charles L. L., assignor.)						
Page, Rowley, Galesburg, Ill. Indicator for post-office boxes .....	282,662	Aug. 7	224	65	24	538



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Page, Rowley, Galesburg, Ill. Indicator for post-office boxes	283,918	Aug. 28	1747	493	24	840
Page, T. C. (See Hadley, George W., assignor.)						
Page, T. Nichols, Boston, Mass. Pneumatic door-check	285,156	Sept. 18	1235	347	24	1129
Pagel, J. C. Friedrich, assignor to O. F. Hall, Detroit, Mich. Vehicle-body	284,754	Sept. 11	735	205	24	1035
Pagenhart, Charles L., <i>et al.</i> (See Pritchard, Nathaniel J., assignor.)						
Pagenhart, Charles L. (See Taylor and Pagenhart.)						
Paige, William H. (See Bacon and Paige.)						
Paige, William H., Cleveland, Ohio. Car-roofing	287,459	Oct. 30	2123	576	25	412
Paige, William H., Springfield, Mass. Car-wheel	274,218	Mar. 20	1255	346	23	1065
Paige, William H., Springfield, Mass., assignor of one-half to A. Middleton, Philadelphia, Pa. Machine for punching and forming nuts	272,083	Feb. 13	621	168	23	559
Paige, William H., assignor of one-half to D. D. Warren, Springfield, Mass. Sleeping-car	288,361	Nov. 13	716	196	25	640
Pain, Robert W., New York, N. Y., assignor, by mesne assignments, to National Automatic Piano and Organ Manufacturing Company, of New York. Mechanical musical instrument	270,606	Jan. 16	966	279	23	206
Paine, George C., Boston, Mass. Bit-stock	286,840	Oct. 16	1336	365	25	257
Paine, Henry M., assignor to H. W. Morehouse and B. Osborn, Newark, N. J. Magneto-electric machine	290,350	Dec. 18	1214	342	25	1117
Paine, Irving, Hornellsville, N. Y. Shutter	282,663	Aug. 7	225	66	24	539
Paine, John W., Baltimore, Md. Automatic mail-elevator	276,707	May 1	221	57	23	1662
Paine, Tracy L. (See De Garis and Paine.)						
Paine, William H., Brooklyn, N. Y. Gage for elongation and compression of materials under strain	285,661	Sept. 25	1829	522	24	1244
Painter, Jacob A., Arthur, Ill. Vise	276,622	May 1	95	26	23	1644
Painter, Robert M., West Mansfield, Ohio. Thill-coupling	284,053	Aug. 28	1936	541	24	873
Painter, William, Baltimore, Md. Pulley-covering	283,356	Aug. 14	1072	301	24	700
Painter, William, J. L. Murrill, and L. R. Keizer, Baltimore, Md. Machine for flattening the seams of sheet-metal roofing	277,332	May 8	1022	274	23	1808
Pairpoint, Thomas J., New Bedford, Mass. Boot or shoe polishing machine	274,649	Mar. 27	1821	506	23	1171
Paist, Edward. (See Paist, George, assignor.)						
Paist, George. (See Hoopes and Paist.)						
Paist, George, Philadelphia, assignor of one-half to E. Paist, West Chester, Pa. Nut-lock	290,999	Dec. 25	2084	574	25	1272
Palace Marine Berth Company. (See Merrill, Benjamin F., assignor.)						
Palliser, Edward, West Kensington, county of Middlesex, England. Projectile	275,258	Apr. 3	478	133	23	1307
Palmer, Aaron, Rochester, N. Y. Fire-escape	280,231	June 26	1984	557 558	23	2486
Palmer, Aaron, Rochester, N. Y. Fire-escape	290,917	Dec. 25	1962	542	25	1253
Palmer, Albert E., Owosso, Mich. Registering attachment for wood-working machines	293,353	Mar. 6	190	51	23	866
Palmer, Augustus C., Utica, N. Y. Electric annunciator	289,552	Dec. 4	226	63	25	926
Palmer, Cassius C., Oakland, Cal. Safety device for elevators	281,550	July 17	1509	415	24	278
Palmer, Cassius C., Oakland, Cal. Refrigerating apparatus	290,794	Dec. 25	1807	500 501	25	1227
Palmer, Cassius C., Oakland, Cal. Refrigerating apparatus	290,795	Dec. 25	1813	501	25	1228
Palmer, Cassius C., New York, N. Y. Refrigerating-car	290,600	Dec. 18	1552	428 429	25	1175
Palmer, Charles H. (See Loryea and Palmer.)						
Palmer, Charles H., New York, N. Y., assignor to J. M. Bemis, Boston, Mass., and S. A. Bemis, St. Louis, Mo. Sewing-machine	271,908	Feb. 6	391	107	23	509
Palmer, Dolphas D., Waltham, Mass. Stem-winding mechanism for watches	272,310	Feb. 13	892	250	23	607
Palmer, Edward, West Garland, Me. Whiffletree	283,274	Aug. 14	964	268	24	679
Palmer, Enoch A., Lamartine, Wis. Straw-carrier for thrashing-machines	289,442	Dec. 4	82	24	25	901
Palmer, Frank L., New London, Conn. Printing fabrics	280,075	June 26	1807	508	23	2454
Palmer, Frank L., New London, Conn. Process of and apparatus for picking rags and waste from shoddy	280,076	June 26	1808	509	23	2454
Palmer, Frederic A., New York, N. Y. Mattress or bed-bottom	282,561	Aug. 7	107	32	24	519
Palmer, Frederick. (See Sharpe and Palmer.)						
Palmer, Frederick, Hampton, Va. Locking-latch	276,623	May 1	96	26	23	1644
Palmer, George E., Boston, assignor of one-half to J. Lombard, Cambridgeport, Mass. Electro-galvanic belt	279,881	June 19	1561	436	23	2405
Palmer, George H., <i>et al.</i> (See Chamberlain, Blanchard, assignor.)						
Palmer, George H., Fairhaven, Mass., assignor to T. M. Bissett and T. J. Conroy, New York, N. Y. Fishing-reel	281,918	July 24	1994	546	24	366
Palmer, George M., assignor to Williams Manufacturing Company, Plattsburg, N. Y. Sewing-machine	270,104	Jan. 2	318	94	23	65
Palmer, Harry E., <i>et al.</i> (See Chamberlain, Blanchard, assignor.)						
Palmer, Henry A., Villisca, Iowa. Car-coupling	286,480	Oct. 9	871	236	25	169
Palmer, Henry S., Santa Ana, Cal. Gang-plow	288,362	Nov. 13	719	196	25	640
Palmer, Isaac E., Middletown, Conn. Machine for straightening and finishing fabrics	270,835	Jan. 16	1246	359	23	258
Palmer, Isaac E., Middletown, Conn. Hammock	270,836	Jan. 16	1249	359	23	259
Palmer, Isaac E., Middletown, Conn. Hammock	270,837	Jan. 16	1250	360	23	259
Palmer, Isaac E., Middletown, Conn. Hammock or bed-bottom	271,510	Jan. 30	2098	603	23	418
Palmer, Isaac E., Middletown, Conn. Hammock	272,311	Feb. 13	894	250	23	608
Palmer, Isaac E., Middletown, Conn. Hammock	272,312	Feb. 13	896	251	23	608
Palmer, Isaac E., Middletown, Conn. Delivery apparatus for machines for finishing fabrics	284,323	Sept. 4	203	57	24	938
Palmer, Jeremiah, Brooklyn, N. Y. Attachment for cultivators and planters	278,452	May 29	2414	658 659	23	2070
Palmer, John A. (See Dement and Palmer.)						
Palmer, John D., Patchogue, N. Y. Window-screen	279,882	June 19	1561	437	23	2405
Palmer, John H., New York, N. Y. Feed-bag attachment	289,129	Nov. 27	1676	465	25	824
Palmer, John H., Philadelphia, Pa. Mechanical movement	290,796	Dec. 25	1818	502	25	1228
Palmer, John W., Port Republic, Va. Egg-carrier	285,429	Sept. 25	1559	439	24	1193
Palmer, Joseph, Concord, N. H. Machine for making bands for railway-springs	273,302	Mar. 6	75	21	23	847
Palmer, Noah, <i>et al.</i> (See Sauter, Charles, assignor.)						
Palmer, Richard B., Paris, Mo. Centrifugal machine for treating sorghum and other sugars	277,155	May 8	817	215	23	1772
Palmer, Samuel D. (See Dement and Palmer.)						
Palmer, Stephen. (See De Witt, Emil F., assignor.)						
Palmer, Timothy G., Schultsville, N. Y. Torpedo-signal for railways	285,920	Oct. 2	180	52	25	35
Palmer, Wesley S., <i>et al.</i> (See Yerby and Stilson, assignors.)						
Palmer, William A., Rome, Ga. Shearing, punching, and riveting machine	284,054	Aug. 28	1936	541	24	873
Palmer, William A., Rome, assignor of one-half to F. W. Mummier, Cartersville, Ga. Key-joint	283,651	Aug. 21	1417	397	24	769

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Palmer, William F. (See Snively and Palmer.)						
Palmer Wire Company. (See Young, Franklin, assignor.)						
Palmer Wire Company. (See Young, Wyman, assignor.)						
Panabaker, Peter F., Coon Rapids, Iowa. Car-coupling	280,949	July 10	760	211	24	139
Pangborn, Charles H., Buchanan, Mich. Platform-gear for wagons	284,225	Sept. 4	89	24	24	919
Pangborn, Samuel B., Boston, Mass. Lantern	285,506	Sept. 25	1646	463	24	1209
Pankhurst, John F., Cleveland, Ohio. Marine steam-windlass	287,050	Oct. 23	1608	443	25	310
Pannster, Gustav, assignor to Modes & Brauer, Plagwitz, near Leipsic, Germany. Christmas-tree stand	280,851	July 10	638	180	24	119
Papineau, Peter, Paxton, Ill. Buggy-pole	290,463	Dec. 18	1376	380	25	1144
Papineau, Peter, Paxton, Ill. Wagon-standard	290,702	Dec. 25	1692	466	25	1205
Pappa, James, Oswego, N. Y. Fire-escape	275,514	Apr. 10	850	230	23	1379
Paquelin, Claude A., Paris, France, assignor to W. V. B. Phillips, Providence, R. I. Carbureting apparatus. (Reissue)	10,353	July 17	1653	450	24	300
Paquette, Joseph, St. Louis, Mo. Randing-machine	288,850	Nov. 20	1314	366	25	755
Paradise, Frank D., Memphis, Tenn. Sash-fastener	288,731	Nov. 20	1195	326	25	729
Parcello, Albert L. (See Parkhurst, Edward B., assignor.)						
Pardee, Joel S., and A. Morley, New Troy, Mich. Nut-lock	283,506	Aug. 21	1259	353	24	739
Pardeuss, Semon J., Brooklyn, N. Y. Fire-escape tower	277,156	May 8	818	215	23	1772
Pardue, John P., St. Louis, Mo. Secretary	279,004	June 5	475	130	23	2204
Parent, Anthony, et al. (See Hinden, Mathias J., assignor.)						
Parent, John, Brunswick, Me. Thill-coupling jack	279,005	June 5	476	130	23	2204
Parfitt, Walter E., Brooklyn, N. Y. Latrine and water-closet	284,976	Sept. 11	998	281	24	1083
Pariseau, Stanislas, St. John Baptist, Quebec, Canada. Spring-bed	281,789	July 24	1838	502	24	338
Parish, Heber, Burlington, Iowa. Grain separator and cleaner	287,154	Oct. 23	1737	476	25	335
Park, Aaron, assignor to himself and T. P. Baker, Ottumwa, Iowa. Car-coupling	288,105	Nov. 6	331	110	25	575
Park, Hardy B., Dallas, Tex. Apparatus for forcing liquids from barrels	286,631	Oct. 16	1073	228	25	211
Park, Harvey S., Henderson, Ky. Electro-magnetic car-brake	274,023	Mar. 13	995	273	23	1012
Park, James, assignor to T. E. Haselhurst, Troy, N. Y. Feed-water heater and feeder	275,342	Apr. 3	605	163	23	1328
Park, James, assignor to T. E. Haselhurst, Troy, N. Y. Feed-water heater	289,929	Dec. 11	694	194	25	1015
Park, James, assignor to T. E. Haselhurst, Troy, N. Y. Water heater and feeder	289,930	Dec. 11	695	195	25	1015
Park, James A., assignor of one-half to P. E. Park, Lansing, Mich. Harness-snap	270,105	Jan. 2	818	94	23	65
Park, James A., assignor of one-half to P. E. Park, Lansing, Mich. Breast-strap slide for harness	272,753	Feb. 20	1474	414	23	713
Park, James A., assignor of one-half to P. E. Park, Lansing, Mich. Buckle	272,754	Feb. 20	1474	415	23	713
Park, James A., assignor of one-half to P. E. Park, Lansing, Mich. Buckle	272,755	Feb. 20	1475	415	23	713
Park, James A., assignor of one-half to P. E. Park, Lansing, Mich. Buckle	272,756	Feb. 20	1476	415	23	713
Park, John C., assignor of one-half to A. W. Potts, Jefferson, Ga. Wagon-brake	288,659	Nov. 20	1098	301	25	714
Park, John S., and J. W. Graham, Rockport, Ind. Gland	279,499	June 12	1112	307	23	2319
Park, John S., and J. W. Hackett; said Hackett assignor to W. R. Beeler, Rockport, Ind. Millstone-driver	289,303	Nov. 27	1879	522	25	863
Park, Oscar H., and W. H. Elliott, Clarinda, Iowa. Vignetting attachment	286,632	Oct. 16	1074	289	25	211
Park, Snella E. (See Park, James A., assignor.)						
Park, Sallie P., Washington, D. C. Bathing attachment for bird-cages	276,871	May 1	434	115	23	1703
Park, Samuel M., Chicago, Ill. Assorting-machine	283,414	Aug. 21	1140	323	24	719
Park, William R., Taunton, Mass. Mechanical movement	277,849	May 15	1629	444	23	1920
Parke, Amos S., Bay City, Mich. Pump-piston	279,663	June 19	1310	364	23	2361
Parke, Horace D., Syracuse, N. Y. Ironing-table	273,140	Feb. 27	1973	555	23	807
Parke, Richard, assignor to himself and H. Goldberg, New York, N. Y. Wood-filler	281,721	July 24	1746		24	322
Parke, Richard, and H. Goldberg; said Parke assignor to said Goldberg and I. Goodman, New York, N. Y. Composition for size	283,652	Aug. 21	1417		24	770
Parker, Abijah S., Cincinnati, Ohio. Prep for carriage-tops	269,878	Jan. 2	64	20	23	15
Parker, Abijah S., Cincinnati, Ohio. Hub-band	274,136	Mar. 20	1148	316	23	1046
Parker, Abijah S., Cincinnati, Ohio. Carriage-curtain knob-patch fastener	274,137	Mar. 20	1149	316	23	1046
Parker, Andrew H. (See Owen, Thomas G., assignor.)						
Parker, Benjamin, Brooklyn, N. Y. Candy-cutting machine	270,468	Jan. 9	780	223	23	162
Parker, Charles B. and O. B., South Hadley, assignors of one-third to B. P. Glover, Holyoke, Mass. Card-grinder	277,604	May 15	1347	363	23	1868
Parker, Charles B. and O. B., South Hadley, and B. P. Grover, Holyoke, Mass. Card-grinding machine	286,633	Oct. 16	1074	289	25	211
Parker, Charles P., Joliet, Ill. Check-row attachment for seed-planters	281,919	July 24	1996	547	24	366
Parker, Charles W. (See Nichols, Simon, assignor.)						
Parker, Christopher C., Farlington, Kans. Instrument for treating the vagina and uterus	275,405	Apr. 10	712	190	23	1357
Parker Company, Charles. (See Chapman, Frank H., assignor.)						
Parker Company, Charles. (See Griswold and Chapman, assignors.)						
Parker Company, Charles. (See Griswold and Wooding, assignors.)						
Parker Company, Charles. (See Jones, Augustus H., assignor.)						
Parker Company, Charles. (See Leonard, William G., assignor.)						
Parker Company, Charles. (See Parker and Griswold, assignors.)						
Parker Company, Charles. (See Range, Otis J., assignor.)						
Parker Company, Charles. (See Wooding, Ralph A., assignor.)						
Parker, Dexter W., Meriden, Conn. Extension-chandelier	275,515	Apr. 10	852	230	23	1380
Parker, Dexter W., Meriden, Conn. Extension-chandelier	277,057	May 8	636	179	23	1749
Parker, Dexter W., Meriden, Conn. Extension-chandelier	278,359	May 29	2301	630	23	2050
Parker, Dexter W., Meriden, Conn. Lamp-support	278,729	June 5	69	21	23	2136
Parker, Dexter W., and L. F. Griswold, assignors to C. Parker Company, Meriden, Conn. Extension lamp-fixture	282,028	July 24	2125	582	24	387
Parker, Dexter W., and L. F. Griswold; said Griswold assignor to C. Parker Company, Meriden, Conn. Extension library-lamp	285,063	Sept. 18	1119	313	24	1110
Parker, Edward, assignor to Winchester Repeating Arms Company, New Haven, Conn. Machine for greasing cartridges	286,059	Oct. 2	343	96	25	63
Parker, Edward H., Eau Claire, Wis., and C. Robinson, Hornellsville, N. Y.; said Parker assignor of one-third to said Robinson. Endless-belt conveyor	284,324	Sept. 4	205	57	24	939
Parker, Edwin L., and S. Peterson, Queensville, Ind. Elevator	282,763	Aug. 7	350	99	24	561
Parker, Emery, New Britain, Conn., assignor to Nashua Lock Company, Nashua, N. H. Striking-plate for locks	279,006	June 5	476	131	23	2204
Parker, Emery, New Britain, Conn., assignor to Nashua Lock Company, Nashua, N. H. Lock-case	281,294	July 17	1191	329	24	224
Parker, George A., Marlborough, N. H. Machine for twisting grass for fuel	272,737	Feb. 20	1477	415	23	714
Parker, George F., Boston, Mass. Maul-stick	289,700	Dec. 4	421	118	25	959
Parker, Henry, New York, N. Y. Drawers	280,232	June 26	1966	558	23	2486
Parker, Henry S., Spencer, Iowa. Cuspidor	284,473	Sept. 4	378	105	24	968
Parker, Hiram, Mount Pleasant, Iowa. Railway-rail coupling	280,760	July 3	519	146	24	92



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Parker, Horatio G., trustee. (See Richardson, Henry M., assignor.) (Reissue.)	276,067	Apr. 17	1541	424	23	1506
Parker, James F., and C. D. Arnn, Ralston, Tenn. Automatic wagon-brake	287,854	Nov. 6	74	22, 23	25	520
Parker, John H., Malden, Mass. Boot and shoe	284,977	Sept. 11	999	281	24	1083
Parker, John L., Worcester, Mass. Die for forming spinning-ring holders	275,938	Apr. 17	1388	382	23	1480
Parker, John P. E. (See Griswold, Thaddens M., assignor.)						
Parker, Knight K., Circleville, Ohio. Straw-stacker	286,060	Oct. 2	344	96	25	64
Parker, Lewis C., Robinson, Kans. Gas-engine. (Reissue.)	10,290	Feb. 20	1607	450	23	737
Parker, Lewis C., Yonkers, N. Y. Electric igniting device for gas-engines	287,855	Nov. 6	76	23	25	521
Parker, Newton, Pulaski, N. Y. Sled-brake	277,775	May 15	1547	420	23	1905
Parker, Onesiphorus B. (See Parker, Charles B. and O. B.)						
Parker, Onesiphorus B. (See Parker and Grover.)						
Parker, Oscar J., and J. Cardy, Cedar Keys, Fla. Insecticide	283,507	Aug. 21	1259		24	739
Parker, Robert G. (See McMellon, Frederick, assignor.)						
Parker, Samuel. (See Davis, Wyrick, and Parker.)						
Parker, Samuel R., and P. P. Deveny, Plymouth, Ohio. Shifting-rail for buggy-seats	280,660	July 3	384	108	24	68
Parker, Samuel W., and H. Blackman, New York, N. Y. Disinfecting apparatus for water-closets	272,758	Feb. 20	1478	416	23	714
Parker, Samuel W., and H. Blackman, New York, N. Y. Fire-escape	289,701	Dec. 4	423	118	25	959
Parker, Sidney, Chicago, Ill. Steam-jet for smoke-consuming furnaces	283,609	Aug. 23	1626	457	24	819
Parker, Sidney, assignor of one-half to E. D. Cox, Chicago, Ill. Conduit for electric wires	279,977	June 26	1683	472	23	2432
Parker, Stephen D. (See Vance and Parker.)						
Parker, Theodore H., assignor of one-half to C. E. and F. Fuller, Boston, Mass. Electric gas-lighter	286,481	Oct. 9	872	236	25	169
Parker, Thomas S., Schenectady, N. Y. Sewing-machine trimmer	270,465	Jan. 9	774	227	23	160
Parker, Thomas S., Schenectady, N. Y. Sewing-machine trimmer	270,466	Jan. 9	776	227	23	161
Parker, Thomas S., Schenectady, N. Y. Trimming attachment for sewing-machines	270,467	Jan. 9	778	228	23	161
Parker, Washington L., Chicago, Ill. Lubricator	279,592	June 19	1824	340	23	2346
Parker, William F., Madison, Wis. Pillow-sham supporter and lifter	279,978	June 26	1684	473	23	2432
Parker, William S. (See Cook, James W., assignor.)						
Parkes, William E. (See Sutcliffe, Lichfield W., assignor.)						
Parkhill, Clair S., Hornellsville, N. Y. Watch-tower and signal-lantern	271,261	Jan. 30	1770	513	23	359
Parkhill, Joseph H., assignor of one-half to D. O. Quinn, Mount Pleasant, Iowa. Presser-foot for sewing-machines	282,113	July 31	2254	618	24	415
Parkhurst, Amos F., Kewanee, Ill., assignor to E. H. Everett, Newark, Ohio. Bottle-stopper	289,928	Dec. 11	693	194	25	1015
Parkhurst, Ansel E., et al. (See Grant, Joseph C., assignor.)						
Parkhurst, Darius, assignor of one-half to G. H. Knight, St. Louis, Mo. Head-block	274,366	Mar. 20	1446	396	23	1098
Parkhurst, Edward B., Woburn, assignor to himself and A. L. Parcell, Boston, Mass. Electric governor	286,841	Oct. 16	1337	365 366	25	257
Parkinson, Joseph, Danville, Va. Railway-car	279,791	June 19	1450	406	23	2386
Parks, Calvin M., Washington, D. C. Railway-switch	272,313	Feb. 13	897	251	23	608
Parks, Dana, Boston, Mass. Self-leveling ship's berth	280,233	June 26	1986	558 559	23	2486
Parks, John A., New York, N. Y. Flask for producing chilled castings	278,174	May 22	2030	558	23	1995
Parks, John A., and G. V. Sheffield, assignors of one-third to E. Hayes, New York, N. Y.; said Sheffield assignor to said Parks and Hayes. Electrical type-writer	280,077	June 26	1809	509	23	2454
Parks, Thomas H., et al. (See Lockwood, James F., assignor.)						
Parlin, William H., Canton, Ill. Cultivator	276,272	Apr. 24	1793	498 499	23	1558
Parnee, Lucius, Mackinaw, Ill. Weather-strip	279,425	June 12	1023	284	23	2305
Parnee, George E., Circleville, N. Y. Sash-fastener	280,950	July 10	762	211	24	140
Parnee, Henry S., New Haven, Conn. Car-brake	273,762	Mar. 13	683	183	23	959
Parnee, William L., assignor to Derby Bit Company, Ansonia, Conn. Bit-stock	281,920	July 24	1997	547	24	367
Parnee, William L., assignor to Derby Bit Company, Ansonia, Conn. Machine for forming auger-bits	286,554	Oct. 9	966	260	25	186
Parmenter, James S., Woodstock, Ontario, Canada. Device for converting motion	271,969	Feb. 6	392	108	23	510
Parmenter, James S., Woodstock, Ontario, Canada. Fire-escape	285,301	Sept. 18	1397	395	24	1160
Parmenter, Orville L., Cincinnati, assignor to Lima Paper Mill, Lima, Ohio. Egg and fruit carrier	276,273	Apr. 24	1795	499 500	23	1558
Parmenter, Zenas. (See Bill, Charles H., assignor.)						
Parnall, Alf N. and G. A., Denver, Colo., assignor of one-half to F. Goodrich, New Britain, Conn. Hinge	290,464	Dec. 18	1377	380	25	1145
Parnall, Alfred N. (See Parnall, George A. and A. N.)						
Parnall, George A. (See Parnall, Alf N. and G. A.)						
Parnall, George A. and A. N., assignors to W. E. Scott, Denver, Colo. Adjustable anti-friction bearing	290,601	Dec. 18	1559	429	25	1176
Parnell, Edward W., assignor of one-half to J. Simpson, Liverpool, county of Lancaster, England. Manufacture of alkalies	283,508	Aug. 21	1260		24	739
Parr, John, Humboldt, Nebr. Iron cross-tie	277,333	May 8	1023	274	23	1808
Parr, John, Humboldt, Nebr. Nut-lock	282,114	July 31	2255	619	24	415
Parr, Polet, Willow Springs, Mo. Picture-frame	276,024	May 1	97	26	23	1644
Parrett, Richard J., Portland, Ind. Window-screen	270,469	Jan. 9	761	228	23	162
Parrish, William H., Richmond, Va. Tub-handle	285,302	Sept. 18	1398	395	24	1160
Parrish, William H., assignor of one-half to G. E. Aiken, Salem, Oreg. Combined header, thrasher, and separator	282,217	July 31	2385	657	24	436
Parry, Charles T. (See Wilder and Parry.)						
Parry, Charles T., Philadelphia, Pa. Machinery for grinding or polishing cross-head guides	270,106	Jan. 2	319	94	23	65
Parry, George T., Philadelphia, Pa. Metallic mercantile banding-strap	290,351	Dec. 18	1217	342	25	1117
Parry, George T., Philadelphia, Pa. Marine signal-light	290,918	Dec. 25	1963	542	25	1254
Parsels, William C., Ellenville, N. Y. Fire-escape	287,856	Nov. 6	78	23	25	521
Parshall, Charles H., Jr., Detroit, Mich. Lubricator	283,017	Aug. 14	652	184	24	623
Parson, Henry E., New York, N. Y. Ore-pulverizing machine	282,218	July 31	2388	658	24	437
Parsons, Albert S., Huntington, W. Va. Electrical car-brake	270,248	Jan. 9	499	147	23	108
Parsons, Arthur W., Brooklyn, N. Y. Cook	275,406	Apr. 10	713	190	23	1357
Parsons, Charles C., Brooklyn, N. Y. Water-proof compound of mangrove rosin, or cativo, and caoutchouc	278,591	May 29	2571		23	2098
Parsons, Charles E., Medford, Mass., assignor to Brunswick Antimony Company, New Brunswick, Canada. Producing golden sulphuret of antimony	278,816	June 5	186		23	2154
Parsons, Charles H., Shauk's, Ohio. Elliptic spring	278,175	May 22	2031	558	23	1995
Parsons, Henry F., San Francisco, Cal., and H. Borchardt, Bridgeport, Conn., assignors to D. Cook, San Francisco, Cal. Hand rock-drilling machine	281,718	July 24	1734	471 472	24	320
Parsons, Henry F., San Francisco, Cal., and H. Borchardt, Bridgeport, Conn., assignors to D. Cook, San Francisco, Cal. Rock-drilling machine	281,719	July 24	1730	472 473	24	321

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Parsons, Henry F., San Francisco, Cal., and H. Borchardt, Bridgeport, Conn.; said Parsons assignor to D. Cook, San Francisco, Cal. Mechanical movement.....	281,720	July 24	1744	473	24	321
Parsons, John G. (See Clark and Parsons.)						
Parsons, John G. (See McIntyre and Parsons.)						
Parsons, John J. (See Rasmussen, Anders, assignor.)						
Parsons, Josephus, and J. W. Trinkle, Kent, Ind. Piano-violin.....	272,314	Feb. 13	898	251	23	608
Parsons, Walter, Medford, Mass. Pie-plate.....	274,219	Mar. 20	1256	346	23	1065
Parsons, Winslow R., Waterloo, Iowa. Braiding attachment for sewing-machines.....	290,465	Dec. 18	1377	381	25	1145
Parsons, Winslow R., Waterloo, Iowa. Binder and hemmer attachment for sewing-machines.....	290,797	Dec. 25	1819	502	25	1929
Partridge, Alfred, assignor to E. P. Donnell, Chicago, Ill. Perforating-machine.....	290,102	Dec. 11	899	256	25	1053
Parvin, John and T. H., Carmi, Ill. Clutch device.....	270,107	Jan. 2	320	93	23	65
Parvin, Robert C., Mount Holly, N. J. Axle-box.....	288,851	Nov. 20	1335	366	25	755
Parvin, Thomas H. (See Parvin, John and T. H.)						
Pasmore, Edward J., and C. Y. McClure, Denver, Colo. Piano-panel protector.....	289,130	Nov. 27	1676	465	25	824
Passeno, Joseph, Washington, D. C. Rowlock.....	287,155	Oct. 23	1739	476	25	335
Passmore, Everett G., Philadelphia, Pa. Sweeping-machine.....	283,415	Aug. 21	1142	323	24	719
Patchell, Oswald C. (See Gorton, Patchell, and Gorton.)						
Pattee, Theodorus H., Greencastle, Ind. Lightning-rod.....	282,562	Aug. 7	108	33	24	519
Pattee, Theodorus H., and T. D. Ridge, Greencastle, Ind.; said Ridge assignor to said Pattee. Tripod-standard for lightning-rods.....	271,733	Feb. 6	176	47	23	470
Patek, Gottlieb. (See Fichtner, Josef, assignor.)						
Patek, Gustav, Eichwald, near Teplitz, Austria-Hungary. Guide for sewing-machines.....	271,354	Jan. 30	1898	549	23	382
Pateneande, Cyrille, Helena, Mont. Ter. Mower's candlestick.....	289,702	Dec. 4	424	118	25	960
Patent Button Company. (See Platt, Clark M., assignor.)						
Patent Plug Thumb Company. (See Campbell, Bryant D., assignor.)						
Patent Marble Veneer Company. (See Matt, Wilhelm, assignor.)						
Patent Marble Veneer Company. (See Matt, Wilhelm, assignor.) (Reissue.)						
Patterson, Edwin, Port Washington, N. Y. Oyster-dredge.....	279,792	June 19	1451	406	23	2386
Patin, Désiré. (See Grist and Patin.)						
Patric, Charles E., Rochester, N. Y. Fertilizer-distributor.....	273,883	Mar. 13	833	226	23	985
Patric, Lewis, Springfield, Ohio. Pump.....	274,965	Apr. 3	107	30, 31	23	1243
Patrick, Alexander, Urbana, Ohio. Extension-table.....	273,884	Mar. 13	834	226	23	985
Patrick, John J. R., Belleville, Ill. Device for regulating teeth.....	274,367	Mar. 20	1447	397	23	1098
Patt, William M., Plainville, Mass. Roller-chain.....	290,798	Dec. 25	1822	502	25	1929
Pattberg, Henry, Jersey City, N. J. Case for toilet-sets.....	279,272	June 12	820	227	23	2273
Pattberg, Henry, Jersey City, N. J. Wall-case for supporting whisk-brooms.....	281,393	July 17	1316	364	24	245
Pattee, John A., and J. B. Scovell, Lamar, Mo. Spectacle-case and pencil-holder.....	287,460	Oct. 30	2124	577	25	412
Pattee, Joseph O. (See Case, Pattee, and Long.)						
Pattee Plow Company. (See Joy, Edwin W., assignor.)						
Pattee Plow Company. (See Pillsbury, Ithamar P., assignor.)						
Pattee, Solon. (See Smith, Alphonso B., assignor.)						
Patten, Enos, Lynn, Mass. Edge-setting machine.....	285,303	Sept. 18	1399	395	24	1160
Patten, George. (See Woodbury, Merrill, Patten, and Woodbury.)						
Patten, George M., Holbrook, Mass. Combination ice-tool.....	277,334	May 8	1024	274	23	1809
Patten, Robert E., Bowdoinham, Me. Snow-scraper.....	289,131	Nov. 27	1677	465	25	824
Patterson, George F., et al. (See Carman, John W., assignor.)						
Patterson, George W., Philadelphia, assignor of one-half to A. Carson, Coatesville, Pa. Hub-attaching device.....	277,425	May 8	1125	302	23	1826
Patterson, Hugh, Albany, N. Y. Air-cock for steam-radiators.....	274,650	Mar. 27	1822	506	23	1171
Patterson, J. Curtis, Philadelphia, Pa. Car-brake.....	271,111	Jan. 23	1584	456	23	320
Patterson, J. Curtis, Philadelphia, Pa. Car-brake.....	285,507	Sept. 25	1647	463	24	1209
Patterson, James, Brooklyn, N. Y. Railway-rail lock.....	285,662	Sept. 25	1831	522	24	1244
Patterson, James F., Dunmore, W. Va. Apple-mill.....	275,939	Apr. 17	1390	392	23	1840
Patterson, Jerome, Sharon, Pa. Device for lowering coffins.....	285,064	Sept. 18	1121	313	24	1110
Patterson, John M. (See Hunnicutt, William H., assignor.)						
Patterson, John M. (See Mahar, Michael W., assignor.)						
Patterson, Louis, South Pueblo, Colo. Helical flanged-wheel motor.....	289,931	Dec. 11	696	195	25	1015
Patterson, Pembroke J., Chicago, Ill. Pocket hand-stamp.....	285,837	Oct. 2	66	20	25	14
Patterson, Peter, McKeesport, Pa., assignor to National Tube Works Company, Boston, Mass. Tube-coupling.....	273,591	Mar. 6	455	122	23	912
Patterson, Stephen J., Bridgeport, Conn. Preparing japanned and enameled leather.....	282,664	Aug. 7	926	.....	24	539
Patterson, Thomas, Stratford, Ontario, Canada. Spark-arrester.....	271,111	Feb. 6	393	103	23	510
Patterson, William B., Secor, Ill. Cultivator.....	281,126	July 10	971	272	24	178
Patterson, William B., Secor, Ill. Automatic grain weigher and register.....	285,921	Oct. 2	182	52, 53	25	35
Patterson, William D., San Francisco, Cal. Telemeter.....	279,273	June 12	820	227	23	2273
Patterson, William F., et al. (See Kienard, John A., assignor.)						
Patterson, William J., et al. (See Hunzeker, Rudolph S., assignor.)						
Patterson, William R., assignor, by mesne assignments, to Western Electric Company, Chicago, Ill. Pipe for telegraph-cables.....	271,262	Jan. 30	1771	513	23	360
Patterson, William R., assignor, by mesne assignments, to Western Electric Company, Chicago, Ill. Insulated electrical conductor.....	273,593	Mar. 6	458	123	23	913
Patterson, William R., assignor to Western Electric Company, Chicago, Ill. Filling telegraph-cables with insulating substances.....	273,592	Mar. 6	456	122, 123	23	912
Patterson, William R., assignor to Western Electric Company, Chicago, Ill. Splice for telegraph-cables.....	277,335	May 8	1025	275	23	1809
Patterson, William R., assignor to Western Electric Company, Chicago, Ill. Binding-post.....	279,274	June 12	821	227	23	2274
Patterson, William R., assignor to Western Electric Company, Chicago, Ill. System of laying subterranean electrical conductors.....	281,722	July 24	1747	473, 474	24	322
Patterson, William R., assignor to Western Electric Company, Chicago, Ill. Lightning-arrester for electric wires.....	281,723	July 24	1749	474	24	322
Patterson, William R., assignor to Western Electric Company, Chicago, Ill. Apparatus for filling cables with insulating substances.....	284,226	Sept. 4	90	25	24	920
Patullo, Robert M., assignor to himself, W. H. Howard, and T. W. Baxter, Cartersville, Ga. Cotton-planter.....	284,474	Sept. 4	379	105	24	968
Pattison, Catharine A. (See Pattison, Robert J., assignor.)						
Pattison, George H., Freeport, Ill. Corn-sheller.....	275,259	Apr. 3	479	133	23	1308
Pattison, George H., Freeport, Ill. Gate-hinge.....	283,416	Aug. 21	1144	323, 324	24	719
Pattison, Robert J., assignor to C. A. Pattison, New York, N. Y. Composition of matter for fire and water proof covering for roofs and walls, &c.....	284,055	Aug. 28	1938	.....	24	873
Pattison, Rufus P. (See Hall, Charles H., assignor.)						
Pattison, Rufus P., et al. (See Yancey, William L., assignor.)						
Patton, Alexander G., assignor to Patton Manufacturing Company, Columbus, Ohio. Waf-fer-iron.....	287,713	Oct. 30	2468	665	25	479



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Patton, Andrew, New Orleans, La. Plow-clevis.....	278,453	May 29	2418	659	23	2071
Patton Manufacturing Company. (See Patton, Alexander G., assignor.)						
Patton, Thomas, Cleveland, Ohio. Pipe-tongs.....	278,264	May 22	2152	591	23	2015
Patton, William P., Harrisburg, assignor of one-half to C. F. Robertson, Philadelphia, Pa. Apparatus for generating illuminating or heating gas.....	281,127	July 10	972	272	24	179
Pattysen, William D. C., assignor of two-thirds to H. S. Crowell and E. E. Bond, Marlborough, Mass. Railway-telegraph.....	290,602	Dec. 18	1561	{ 429 430 }	{ 25	1176
Patzem, Joseph, and L. Wagner, assignors of one-third to P. Delp, Chicago, Ill. Drive-chain.....	285,430	Sept. 25	1561	439	24	1193
Paul, Almarin B., San Francisco, Cal. Amalgamating ores and sands containing gold.....	285,508	Sept. 25	1647	463	24	1209
Paul, Emma A., Madison, Wis. Desk-top.....	272,759	Feb. 20	1479	416	23	714
Paul, George D., assignor to W. R. Hotchkiss, East Orange, N. J., and H. F. Willard, New York, N. Y. Canopy-holder for children's carriages.....	290,103	Dec. 11	900	256	25	1053
Paulding, William H., New York, N. Y. Chair.....	272,579	Feb. 20	1258	351	23	675
Paulding, William H., New York, N. Y. Sleeping-car.....	272,580	Feb. 20	1259	351	23	675
Paulding, William H., Peekskill, N. Y. Window-shade.....	281,128	July 10	975	272	24	179
Paulding, William H., Peekskill, and B. J. Maybeck, New York, N. Y. Car-seat.....	281,129	July 10	975	{ 272 273 }	{ 24	179
Pauli, A. W. (See Walton, Thomas, assignor.)						
Pauli, Archibald W., Wheeling, W. Va. Animal-trap.....	278,730	June 5	70	21	23	2136
Paulin, Joseph A., Mexico, Mo. Detonating railway-track signal.....	269,955	Jan. 2	158	46	23	33
Pauly, Peter, Buffalo, N. Y. Device for tapping beer barrels, casks, &c.....	285,065	Sept. 18	1122	314	24	1110
Pausch, Valentine. (See Moehl, Pausch, and Moehl.)						
Pavey, Samuel, assignor of two-thirds to W. K. Muir and A. P. Cameron, Detroit, Mich. Stock-car.....	273,141	Feb. 27	1974	555	23	808
Paxon, Amos B., Nowstead, assignor of one-half to J. E. Altenberg, Akron, N. Y. Washing-machine.....	270,976	Jan. 23	1429	412	23	294
Paxon, John C. (See Fleming, Thomas, assignor.)						
Paxson, Charles H. (See Coffield, Peter T., assignor.)						
Paxson, Edward J., Philadelphia Pa. Temporary binder.....	283,653	Aug. 21	1418	397	24	770
Payne, Benjamin N. (See Oldham and Payne.)						
Payne, Benjamin N. and D. W. Corning, N. Y. Steam-boiler.....	277,426	May 8	1126	302	23	1826
Payne, Charles F., et al. (See Hodges, Horace F., assignor.)						
Payne, David W. (See Payne, Benjamin N. and D. W.)						
Payne, Edgar D. (See Mathew and Payne.)						
Payne, Frederick C., New York, N. Y. Cabinet-bedstead.....	279,426	June 12	1024	284	23	2305
Payne, Ira T., Essex, Conn. Auger.....	270,977	Jan. 23	1429	412	23	294
Payne, Joseph B., Wellsburg, N. Y. Self fitting clothing-form.....	282,665	Aug. 7	227	66	24	539
Payne, Joseph M., Dallas, Tex. Vehicle-spring.....	280,852	July 10	678	180	24	119
Payne, Martin, Troy, N. Y. Sulky-shaft.....	270,838	Jan. 16	1250	360	23	259
Payne, Newton W., Boston, assignor to himself, B. J. Downs, and J. W. Cook, West Somerville, Mass. Faucet for beer-barrels.....	289,703	Dec. 4	425	119	25	960
Payne, Robert T., Warm Springs, Va. Car-coupling.....	286,061	Oct. 2	346	96, 97	25	64
Payne & Sons, B. W. (See Oldham and Payne, assignors.)						
Payne, William H., Western, assignor of one-half to G. B. Olney, Westernville, N. Y. Compound for removing rust spots or stains from fabrics.....	278,176	May 22	2032	-----	23	1995
Payton, James Y., Ipaava, Ark. Harrow.....	279,793	June 19	1452	407	23	2356
Payzant, Freeman, Locke Port, Nova Scotia, Canada. Process of and apparatus for extracting oil from fish liver and blubber.....	288,106	Nov. 6	392	111	25	575
Peabody, Roswell L., Waltham, Mass. Straight-line watch.....	281,295	July 17	1191	329	24	224
Peace Company, Harvey W. (See Buell, Frank A., assignor.)						
Peace Company, Harvey W. (See Sloan, Alexander, assignor.)						
Peace, Harvey W. (See Boynton and Peace.)						
Peace, John G., and E. B. Sankey, Salem, Mo. Car-coupling.....	284,886	Sept. 11	889	250	24	1063
Peacock, Elijah P., Chicago, Ill. Machine for barbing wire.....	287,714	Oct. 30	2469	{ 665 666 }	{ 25	479
Peacock, Job F., New York, N. Y. Toilet-paper pocket-case.....	273,594	Mar. 6	458	123	23	913
Peacock, Job F., New York, N. Y., assignor of one-half to A. W. Pierce, Hackensack, N. J. Manufacture of molded and plastic ware.....	273,142	Feb. 27	1976	555	23	808
Peacock, Thomas B., Topeka, Kans. Advertising windmill.....	274,651	Mar. 27	1823	506	23	1171
Peake, John L., New York, N. Y. Oil-can holder.....	284,661	Sept. 11	611	172	24	1013
Pealer, Peter P., South Dansville, N. Y. Fire-escape.....	289,304	Nov. 27	1880	{ 523 524 }	{ 25	863
Pearce, Frank I., assignor to Link-Belt Machinery Company, Chicago, Ill. Collar for shafting.....	272,974	Feb. 27	1767	495	23	770
Pearce, Frank I., assignor to Link-Belt Machinery Company, Chicago, Ill. Take-up box for shaft-journals.....	277,157	May 8	820	216	23	1772
Pearce, Frank I., assignor to Link-Belt Machinery Company, Chicago, Ill. Package-elevator.....	285,663	Sept. 25	1832	523	24	1244
Pearce, Frank I., assignor to Link-Belt Machinery Company, Chicago, Ill. Conveyor.....	285,664	Sept. 25	1833	523	24	1244
Pearce, Frank T., and J. Hoagland, Providence, R. I. Bar for watch-chains.....	284,887	Sept. 11	890	250	24	1063
Pearce, Frederick, New York, N. Y. District, police, or fire telegraph.....	288,107	Nov. 6	393	111	25	576
Pearce, Frederick, New York, and J. Jones, Brooklyn, N. Y. Lock for fire-alarm boxes.....	280,506	July 3	210	55	24	38
Pearce & Hoagland. (See Hoagland, John, assignor.)						
Pearce, William, Plantsville, assignor to himself, M. N. Woodruff, and N. A. Barnes, Southington, Conn. Ox-shoe.....	284,888	Sept. 11	890	251	24	1063
Pearce, George R., assignor of one-half to J. H. Alley, Lynn, Mass. Mechanical movement.....	272,760	Feb. 20	1480	{ 416 417 }	{ 23	714
Pearce, George R., assignor of one-half to J. H. Alley, Lynn, Mass. Feeding mechanism for sewing-machines.....	272,761	Feb. 20	1482	{ 417 418 }	{ 23	714
Pears, Harry P. (See Barr, Charles H., assignor.)						
Pearsall, G. Frank E., Brooklyn, N. Y. Folding photographic camera.....	275,073	Apr. 3	252	70	23	1269
Pearsall, G. Frank E., Brooklyn, N. Y. Photographic dry-plate holder.....	287,857	Nov. 6	78	24	25	521
Pearson, Charles C., Huntsville, Ala. Pantaloon garment.....	281,790	July 24	1839	503	24	339
Pearson, Edward T., Washington, D. C. File holder.....	282,360	July 31	2569	704	24	468
Pearson, Henry F. C., assignor of one-half to G. Ripley, Andover, Mass. Method of and apparatus for making articles of molded rubber.....	271,911	Feb. 6	394	108	23	510
Pearson, James H., Bloomfield, Ind. Fence.....	275,940	Apr. 17	1391	383	23	1481
Pearson, John M. (See Pearson, William, assignor.)						
Pearson, Joseph W., Newton, Mass. Horse-collar.....	274,966	Apr. 3	109	31	23	1243
Pearson, Marshall H., Leeds, county of York, England. Sewing-machine.....	279,500	June 12	1112	307	23	2319
Pearson, Marshall H., Leeds, county of York, England, assignor to J. O'Flaherty, Montreal, Canada. Sewing-machine.....	278,592	May 29	2572	{ 702 703 704 }	{ 23	2098
Pearson, Robert P., assignor to C. P. Hoskins, Philadelphia, Pa. Breeching-stay for harness.....	283,417	Aug. 21	1145	324	24	719

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Pearson, Robert P., assignor to C. Hassenforder, Philadelphia, Pa. Combination-tool .....	235,304	Sept. 18	1400	396	24	1160
Pearson, William, Linwood, Pa. Machine for uniting knit fabrics .....	273,143	Feb. 27	1977	{ 555 } 556	23	808
Pearson, William, Carson City, Nev., assignor to J. M. Pearson, Placerville, Cal. Bottle-filling machine .....	280,234	June 26	1988	550	23	2486
Pearsons, Galen W., Kansas City, Mo. Machine for lining water or other pipes .....	271,138	Mar. 20	1149	317	23	1046
Pease, Alfred M. (See Bauder and Pease.) .....						
Pease, Charles F., Boston, Mass. Shade-pull .....	280,507	July 3	212	55	24	38
Pease, Franklin B., Ontario Centre, N. Y. Applo-slicer .....	274,220	Mar. 20	1257	346	23	1065
Pease, Henry C., assignor of one-half to L. J. Pease, Worcester, Mass. Sole-cutting machine for boots and shoes .....	276,979	May 1	578	152	23	1725
Pease, James L., Chicopee, Mass. Tube-coupling .....	272,315	Feb. 13	900	252	23	1009
Pease, Lester J. (See Pease, Henry C., assignor.) .....						
Pease, Verne S., et al. (See Carleton, Monroe G., assignor.) .....						
Peavey, Andrew J., Somerville, Mass. Implement for perforating and clipping cigars ....	282,764	Aug. 7	351	99	24	561
Peavey, Charles A. (See Peavey, Hiram, C. A., and J. H.) (Reissue.) .....						
Peavey, Hiram, C. A., and J. H., Bangor, Me.; said Hiram Peavey assignor to said C. A. and J. H. Peavey. Cant-hook. (Reissue.) .....	10,336	June 5	635	172	23	2231
Peavey, James H. (See Peavey, Hiram, C. A., and J. H.) (Reissue.) .....						
Peavey, Lewis, and F. Kiekenapp, Fairbault, Minn. Bridle .....	274,513	Mar. 27	1660	462	23	1142
Pecan, George W., Brooklyn, N. Y. School-slate .....	270,470	Jan. 9	782	229	23	162
Pech, Joseph, Macomb, Ill. Earthenware vessel .....	280,661	July 3	385	108	24	68
Peck, Charles C. (See Chapman, William H., assignor.) .....						
Peck, Charles C., and W. H. Chapman, Middlebury, Vt. Magneto-electric generator .....	276,274	Apr. 24	1797	{ 500 } 501	23	1559
Peck, Charles C., and W. H. Chapman, Middlebury, Vt. Dynamo-electric generator .....	276,275	Apr. 24	1799	{ 501 } 502	23	1559
Peck, Charles C., and W. H. Chapman, Middlebury, Vt. Electric motor .....	279,007	June 5	477	131	23	2205
Peck, Charles C., and W. H. Chapman, Middlebury, Vt. Electric motor .....	279,008	June 5	479	131	23	2205
Peck, Don C., and F. L. Gaylord, Ansonia, Conn. Fender for furniture .....	290,466	Dec. 18	1379	381	25	1145
Peck, Edmund E., Chelsea, Mass. Recumbent chair .....	281,724	July 24	1750	{ 474 } 475	24	323
Peck, Elisha S. (See Farnum, William C., assignor.) .....						
Peck, Frank S. (See McDaniel, Perrine, and Peck.) .....						
Peck, Henry S., Corry, Pa. Suspended adjustable chair or seat .....	285,665	Sept. 25	1834	523	24	1245
Peck, John B., North Attleborough, Mass. Ornamental chain .....	278,454	May 29	2419	659	23	2071
Peck, Lewis C. (See Linscott, John M., assignor.) .....						
Peck, Ogle R. (See Brett, George, assignor.) .....						
Peck, Orrin B., assignor to himself, W. M. Abbott, and J. D. Stevens, Chicago, Ill. Vapor-burner .....	286,328	Oct. 9	699	186	25	137
Peck, Richard W., Brooklyn, N. Y. Valve-gear for steam-engines .....	286,062	Oct. 2	347	97	25	64
Peck, T. S., et al. (See Hewson, William S., assignor.) .....						
Peck, Wells M., assignor of one-half to G. Studer, Syracuse, N. Y. Vehicle-spring .....	273,242	Feb. 27	2097	588	23	828
Peckham, Fenner H., Jr., Providence, R. I. Galvanic battery .....	285,066	Sept. 18	1123	24	24	1111
Pedder, James N., Galveston, Tex. Laundry-iron .....	277,665	May 15	1348	363	23	1868
Pedder, John, Pittsburg, Pa. Method of and mold for casting steel ingots having iron centers .....	278,593	May 29	2577	704	23	2098
Peddle, William H., Roselle, and S. P. Thornton, Elizabeth, N. J. Railway-signal .....	287,051	Oct. 23	1610	443	25	310
Peddyoord, William F. (See Volkmann, Conrad D., assignor.) .....						
Pederson, Ole, assignor to R. G. Jordan and D. C. Meehan, Columbus, Ohio. Furniture-caster. (Reissue.) .....	10,304	Apr. 3	618	166	23	1330
Pederson, Ole, assignor, by mesne assignments, to D. C. Meehan and R. G. Jordan, Columbus, Ohio. Furniture-caster. (Reissue.) .....	10,305	Apr. 3	619	166	23	1330
Pederson, Ole, assignor to D. C. Meehan and R. G. Jordan, Columbus, Ohio. Caster. (Reissue.) .....	10,331	May 22	2224	609	23	2028
Pederson, Ole, assignor to D. C. Meehan and R. G. Jordan, Columbus, Ohio. Caster. (Reissue.) .....	10,332	May 22	2225	609	23	2028
Pedrick, Daniel W., Philadelphia, Pa. Chuck for planing valves .....	284,227	Sept. 4	92	25	24	920
Pedrick, Daniel W., Philadelphia, Pa. Machine for turning and boring .....	288,953	Nov. 20	1457	{ 402 } 403	25	778
Peck, William F., Brooklyn, N. Y. Applying impervious coatings to metallic surfaces. ....	273,384	Mar. 6	192	51	23	867
Pecke, George H., et al. (See Gowan, James H., assignor.) .....						
Peeler, Abner, assignor of one-half to W. L. Nicholson, Fort Dodge, Iowa. Roller-skate ...	291,000	Dec. 25	2084	574	25	1272
Peer, John A., et al. (See Magaw, Frederick L., assignor.) .....						
Peer, John A., Grass Valley, Cal., assignor to Automatic Centering Chuck Company, of New Jersey. Chuck .....	282,765	Aug. 7	353	99	24	562
Peerless Wire Mattress Company. (See Lorenzen, Immanuel, assignor.) .....						
Peet, Benjamin F., Springfield, Mass., assignor of one-half to R. T. Young, Brooklyn, N. Y. Seat for bicycles .....	290,919	Dec. 25	1965	543	25	1254
Peetz, John J., Galveston, Tex. Camel for lightening vessels .....	287,156	Oct. 23	1740	477	25	336
Peirce, Amos T., Fairhaven, Mass. Car-axle .....	285,509	Sept. 25	1649	463	24	1210
Peirce, I. Newton, Philadelphia, Pa. Bottle-stopper .....	271,734	Feb. 6	177	48	23	471
Peirce, I. Newton, Philadelphia, Pa. Spring-fastener for jar-covers .....	276,276	Apr. 24	1801	502	23	1559
Peirce, James S., Portsmouth, N. H. Artificial stone .....	282,219	July 31	2389	24	24	437
Peirce, Robert O., Boston, Mass. Sofa and lounge bed .....	274,368	Mar. 20	1448	397	23	1099
Peirce, William E., Newark, N. J. Electric time-lock .....	287,775	Oct. 30	2554	687	25	494
Peironnet, James S., Wheaton, Ill. Fertilizer-distributor .....	271,912	Feb. 6	396	108	23	510
Peironnet, James S., Wheaton, Ill. Nut-locking device .....	283,275	Aug. 14	964	269	24	679
Peirson, John W., Philadelphia, Pa. Traveling-satchel .....	285,305	Sept. 18	1401	396	24	1161
Pelisse, Augustus, Newark, N. J. Hat-sizing machine .....	276,708	May 1	224	57	23	1663
Pelisse, Augustus, Newark, N. J. Hat-sizing machine .....	279,664	June 19	1311	364	23	2361
Pelkey, Oliver, Arnot, Pa. Sled-brake .....	280,508	July 3	212	55	24	38
Pelkey, Sophia, Eau Claire, Wis. Medicine spoon and vial holder .....	277,924	May 22	1721	470	23	1941
Pelletier, Jules. (See Kelly, Simon E., assignor.) .....						
Pellier, Louis A., San José, Cal. Sewer-trap .....	290,603	Dec. 18	1564	430	25	1177
Pelling, William. (See Chambers, Josephus C., assignor.) .....						
Pelstring, Henry J., Philadelphia, Pa. Hot-air furnace .....	281,551	July 17	1511	{ 415 } 416	24	278
Pelton, Charles H., assignor of one-third to J. A. Wheeler, Grand Rapids, Mich. Car-coupling .....	269,956	Jan. 2	159	46	23	33
Pelton, Edgar J. (See Bacon, Reuben S., assignor.) .....						
Pelton, George M., Belmont, N. Y. Saw-mill dog .....	289,853	Dec. 11	604	168	25	999
Pelton, James B., assignor of one-half to D. E. Hammond, Frederick County, Md. Grain-elevator .....	274,817	Mar. 27	2018	561	23	1205



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Pelton, James B., assignor of one-half to D. E. Hammond, Mount Pleasant, Md. Grain weighing and bagging machine.....	283,018	Aug. 14	653	184	24	623
Pelton, Jerry M. (See Pelton, Theodore G., assignor.)						
Pelton, John C., Jr., San Francisco, Cal. Furniture-pad.....	273,885	Mar. 13	835	227	23	985
Pelton, Richard W., Townsend, Sandusky county, assignor of one-half to M. F. and O. P. Cowdery, Sandusky, Ohio. Feed-water heater.....	270,692	Jan. 16	1076	309	23	225
Pelton, Theodore G., assignor of one-half to J. M. Pelton, Lyons, Iowa. Expanding rose-bit.	270,554	Jan. 9	894	259	23	184
Pelz, Rudolph, Baltimore, Md. Stand and rack for newspapers.....	276,277	Apr. 24	1802	502	23	1559
Pember, Stephen. (See Bird and Pember.)						
Pember, Stephen, and S. Bird, Walpole, Mass. Paper-machine.....	285,838	Oct. 2	66	21	25	14
Pember, Stephen, and S. Bird, Walpole, Mass. Paper for carpet-linings, &c.....	285,839	Oct. 2	68	21	25	14
Pendergast, Frederic W., Rochester, Vt. Carriage-seat.....	280,509	July 3	213	56	24	38
Pendergast, Thomas H., Louisville, Ky. Hame.....	280,853	July 10	639	180	24	119
Pendergast, Timothy H. (See Forder and Pendergast.)						
Pendleton, Edward B. (See Bickmore, Albion P., assignor.)						
Pendleton, Frank P., et al. (See Stamour, John B., assignor.)						
Pendleton, John H., Brooklyn, N. Y., assignor to G. H. Ripley. Machine for scouring, cleaning, and polishing coffee, &c.....	274,369	Mar. 20	1449	397	23	1099
Pendleton, John H., Brooklyn, assignor to himself and N. W. H. Hix, New York, N. Y., A. H. and C. Tiers, Madison, N. J. Drill.....	283,509	Aug. 21	1260	353	24	739
Pendry, William A., Detroit, Mich. Valve.....	282,766	Aug. 7	354	100	24	562
Penfield Block Co. (See More and Tarbox, assignors.)						
Penfield, James W. (See Dawson, Edward, assignor.)						
Penfield, James W. (See Van Winkle, Garrett, assignor.)						
Penfield, James W., Willoughby, Ohio. Brick-kiln.....	280,024	Nov. 27	1550	427 428	25	801
Penfield, James W., Willoughby, Ohio. Roller for crushing and grinding clay.....	289,025	Nov. 27	1552	428	25	801
Penfield, James W., Willoughby, Ohio. Roller for crushing and pulverizing clay.....	289,026	Nov. 27	1553	428	25	802
Penfold, Alexander D., Ridgewood, N. J., assignor to E. J. Brooks & Co., New York, N. Y. Label-holder for freight-cars.....	276,980	May 1	581	152 153	23	1725
Peninsular Stove Company. (See Herrick, George W., assignor.)						
Penman, John. (See Schofield, Richard, assignor.)						
Penn, George, and J. D. Whitney, Syracuse, N. Y. Vehicle-spring.....	277,504	May 15	1225	330	23	1849
Pennebaker, Francis M. and W. F., Pleasant Hill, Ky. Vehicle.....	280,854	July 10	640	181	24	119
Pennebaker, William F. (See Pennebaker, Francis M. and W. F.)						
Penny, Joseph, Grand Rapids, Mich. Combined dressing-case and wash-stand.....	272,467	Feb. 20	1110	313	23	649
Pennington, Aaron S., Paterson, N. J. Address or shipping tag.....	270,108	Jan. 2	321	85	23	65
Pennington, Aaron S., and E. Beggs; said Pennington assignor to A. B. Pennington, Paterson, N. J. Sprinkler. (Reissue.).....	10,310	Apr. 10	1213	332	23	1441
Pennington, Anna B. (See Pennington and Beggs, assignors.) (Reissue.)						
Pennington, Ellis, Philadelphia, Pa. Horse-brushing machine.....	290,263	Dec. 18	1107	310	25	1098
Pennock, Homer. (See West, William, assignor.)						
Pennock, Samuel, Kennett Square, Pa. Road-grader.....	270,693	Jan. 16	1077	309	23	226
Pennock, William H., Mermaid, Del. Cultivator.....	275,260	Apr. 3	480	134	23	1308
Pennsylvania Steel Company. (See Cummings, Albert G., assignor.)						
Pennybacker, Benjamin R., Jr. (See Nash and Pennybacker.)						
Pennycook, Charles H., Glasgow, county of Lanark, Scotland. Glazing-bar.....	275,261	Apr. 3	481	134	23	1308
Pennycook, James G. (See Daly, Michael J., assignor.)						
Penrod, John F., Blairsville Intersection, Pa. Nut-lock.....	276,872	May 1	435	116	23	1703
Pentz, Albert D. (See Bolton and Pentz.)						
Pentz, L.-vi, Canton, Ohio. Vehicle-spring.....	282,563	Aug. 7	109	33	24	519
People's Telephone Company. (See Drawbaugh, Daniel, assignor.)						
Pepper, Marshall, Sidney, Ohio. Curtain-fixture.....	272,898	Feb. 27	1683	470	23	756
Pepper, Rudolph J. (See Ketchledge and Pepper.)						
Perce, Warren R., Providence, R. I. Type-writing machine.....	285,840	Oct. 2	69	21	25	15
Percival, Edward. (See Williams, David G., assignor.)						
Percival, Edward, Port Huron, Mich. Tumbler-cleaner.....	278,040	May 22	1864	509	23	1966
Perez, Mitchel, Houston, Tex. Combined tent and bed.....	279,593	June 19	1227	340	23	2347
Perez, Pedro E., New York, N. Y. Apparatus for electric telegraphy.....	274,632	Mar. 27	1824	507	23	1172
Perhades, Emil M., Brooklyn, and F. Neumüller, New York, N. Y. Caterer's wagon.....	275,516	Apr. 10	853	231	23	1380
Perkins, C. Lawrence. (See Fowler, William R., assignor.)						
Perkins, Charles G., Camden, N. J. Electric-arc lamp.....	274,370	Mar. 20	1450	397	23	1099
Perkins, Charles G., Camden, N. J. Electric-current regulator.....	274,371	Mar. 20	1451	398	23	1099
Perkins, Charles G., Camden, N. J. Switch for incandescent electric lamps.....	274,633	Mar. 27	1825	507	23	1172
Perkins, Charles G., Camden, N. J. Incandescent electric lamp.....	274,654	Mar. 27	1827	507	23	1172
Perkins, Charles G., Hoboken, N. J., assignor to Imperial Electric Light Company, New York, N. Y. Incandescent electric lamp and switch.....	287,313	Oct. 23	1943	531	25	371
Perkins, Charles G., assignor to Imperial Electric Light Company, New York, N. Y. Electric incandescent lamp and holder.....	287,314	Oct. 23	1946	531	25	372
Perkins, Charles G., assignor to Imperial Electric Light Company, New York, N. Y. Apparatus for carbonizing incandescents.....	287,315	Oct. 23	1947	532	25	372
Perkins, Charles G., assignor to Imperial Electric Light Company, New York, N. Y. Apparatus for carbonizing incandescents.....	287,316	Oct. 23	1948	532	25	372
Perkins, Charles G., assignor to Imperial Electric Light Company, New York, N. Y. Apparatus for treating incandescents.....	287,317	Oct. 23	1949	532	25	372
Perkins, Charles G., assignor to Imperial Electric Light Company, New York, N. Y. Apparatus for treating carbon filaments.....	287,318	Oct. 23	1950	532	25	373
Perkins, Charles G., assignor to Imperial Electric Light Company, New York, N. Y. Electric incandescent lamp.....	287,319	Oct. 23	1951	533	25	373
Perkins, Charles G., assignor to Imperial Electric Light Company, New York, N. Y. Automatic electric cut-out.....	287,320	Oct. 23	1952	533	25	373
Perkins, Charles G., assignor to Imperial Electric Light Company, New York, N. Y. Automatic switch and cut-out.....	287,321	Oct. 23	1953	533	25	373
Perkins, Charles G., assignor to Imperial Electric Light Company, New York, N. Y. Electric switch and cut-out.....	287,322	Oct. 23	1954	533	25	374
Perkins, Charles G., assignor to Imperial Electric Light Company, New York, N. Y. Carbon-holder for incandescent lamps.....	287,323	Oct. 23	1955	534	25	374
Perkins, Charles G., assignor to Imperial Electric Light Company, New York, N. Y. Incandescent electric lamp.....	290,467	Dec. 18	1380	381	25	1145
Perkins, Charles G., assignor to Imperial Electric Light Company, New York, N. Y. Automatic regulator for storage-batteries.....	290,468	Dec. 18	1381	382	25	1145
Perkins, Charles G., assignor to Imperial Electric Light Company, New York, N. Y. Electric lamp and switch.....	290,469	Dec. 18	1383	382	25	1146

*Alphabetical list of patentees—Continued.*

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			Spec.	Dis.	Vol.	Page.
Perkins, Charles G., assignor to Imperial Electric Light Company, New York, N. Y. Automatic electric-circuit maker and breaker.	290,470	Dec. 18	1386	{ 382 383 }	25	1146
Perkins, Daniel C. (See Sutton, Benjamin F., assignor.)						
Perkins, Franklin J., Woburn, Mass. Corn-planter	278,455	May 29	2420	660	23	2071
Perkins, Frederick E., Providence, R. I. Fagot-box	290,264	Dec. 18	1108	{ 310 311 }	25	1096
Perkins, Gardner H., Cazenovia, N. Y. Hay-knife	281,552	July 17	1512	416	24	278
Perkins, George A., assignor, by mesne assignments, to himself and G. A. Fuller, Essex, Mass. Boot and shoe nailing machine	289,443	Dec. 4	84	24	25	901
Perkins, George B., Bridgeport, Conn. Ironing-board	283,810	Aug. 28	1627	458	24	819
Perkins, George C., <i>et al.</i> (See Bugbey, Benjamin N., assignor.)						
Perkins, George H. (See Batty, William, assignor.)						
Perkins, George H., Philadelphia, Pa. Apparatus for applying flux to the seams of sheet-metal cans	270,109	Jan. 2	322	95	23	65
Perkins, George H., Philadelphia, Pa. Nail	273,385	Mar. 6	193	52	23	867
Perkins, George H., Philadelphia, Pa. Machine for shearing sheet metal	276,625	May 1	98	26, 27	23	1644
Perkins, George H., Philadelphia, Pa. Can-soldering machine	288,363	Nov. 13	720	{ 197 198 }	25	641
Perkins, Hazen H., Kewanee, Ill. End-gate for wagons	282,361	July 31	2570	704	24	468
Perkins, Jesse S. (See Cook and Perkins.)						
Perkins, Joel W., East Hampton, Conn. Mechanical toy	279,275	June 12	822	227	23	2274
Perkins, John C., assignor to G. W. Miller and H. G. Haines, Kalamazoo, Mich. Railway hand-car	290,703	Dec. 25	1693	466	25	1205
Perkins, Lyman C., Philadelphia, Pa. Clutch	284,475	Sept. 4	380	106	24	968
Perkins, Martha W. (See Sloat, Frederick, assignor.)						
Perkins, Michael R., Portsmouth, N. H. Railway-nail brace	287,573	Oct. 30	2273	616	25	442
Perkins, Nathaniel S. (See Washburn, Albert L., assignor.)						
Perkins, Nathaniel S. (See Washburn, Albert L., assignor.) (Reissue.)						
Perkins, Orson N., assignor to E. Miller & Co., Meriden, Conn. Shade-holder	286,063	Oct. 2	350	98	25	64
Perkins, Pardon T., Oswego, N. Y. Pump	287,461	Oct. 30	2124	577	25	412
Perkins, Richard B., Hornellsville, N. Y., assignor of one-half to R. P. Heilman, Emporium, Pa. Clothes-pin	272,762	Feb. 20	1485	418	23	715
Perkins, Russell B., assignor to E. Miller & Co., Meriden, Conn. Lamp-fixture	284,689	Sept. 11	891	251	24	1063
Perkins, Russell B., assignor to E. Miller & Co., Meriden, Conn. Chandelier	284,690	Sept. 11	892	251	24	1063
Perkins, Russell B., assignor to E. Miller & Co., Meriden, Conn. Extension-chandelier	285,668	Sept. 25	1837	524	24	1247
Perkins, Russell B., assignor to E. Miller & Co., Meriden, Conn. Extension lamp-fixture	288,852	Nov. 20	1336	367	25	755
Perkins, Willis J., Grand Rapids, Mich. Shingle-sawing machine	272,316	Feb. 13	901	{ 232 233 }	23	609
Perkins, Willis J., Grand Rapids, Mich. Shingle-sawing machine	287,462	Oct. 30	2127	{ 577 578 }	25	413
Perkinson, James W., Columbus, and C. E. Merrifield, Indianapolis, Ind. Straw-stacker	275,941	Apr. 17	1392	363	23	1481
Perlich, Hermann, Baltimore, Md. Insect-destroyer	273,144	Feb. 27	1978	556	23	808
Perlich, Hermann, Baltimore, Md. Insect-destroyer	289,553	Dec. 4	227	63	25	926
Perozo, Felipe, <i>et al.</i> (See Montego, Miguel A., assignor.)						
Perrett, Thomas J., Jamestown, N. Y. Device for changing speed	272,763	Feb. 20	1486	418	23	715
Perrett, Thomas J., Jamestown, N. Y. Change-speed mechanism	284,476	Sept. 4	382	106	24	969
Perrin, Thomas J., Brooklyn, N. Y. Electric switch-board	271,913	Feb. 6	397	109	23	511
Perrin, Thomas J., Brooklyn, N. Y. Electrical switch-board	271,914	Feb. 6	398	109	23	511
Perrin, Thomas J., Brooklyn, N. Y. Switch-board for telephone central offices	280,662	July 3	385	108	24	68
Perrin, Thomas J., Brooklyn, N. Y. Telephone switch-board	280,663	July 3	388	109	24	69
Perrin, William J., assignor of one-half to W. F. Freeman, Mineola, Tex. Mechanical power	281,130	July 10	977	273	24	179
Perrine, Upton. (See McDaniel and Perrine.)						
Perrine, Upton. (See McDaniel, Perrine, and Peck.)						
Perrine, William H., New York, N. Y. Fibrous product of bamboo	283,510	Aug. 21	1261		24	739
Perrottet, J. Adolphe, New York, N. Y. Pipe and hose coupling	285,157	Sept. 18	1246	347	24	1129
Perry, Alvy G., Coldwater, Miss. Cotton-seed planter and fertilizer-distributor	290,920	Dec. 25	1966	543	25	1254
Perry, Benjamin F., West Andover, Ohio. Fence	286,956	Oct. 16	1482	407	25	281
Perry, Charles E. (See Kimball and Perry.)						
Perry, Charles E. and H. H. Kimball, Bloomington, Ill. Wrist-pin lubricator	278,817	June 5	187	54	23	2154
Perry, Edward L., Paterson, N. J. Hose or tubing	289,854	Dec. 11	605	169	25	1000
Perry, Eugene L., Parkersburg, Iowa. Straw-stacker for thrashing-machines	270,471	Jan. 9	782	229	23	162
Perry, Francis L., Canandaigua, N. Y. Two-wheeled vehicle	278,041	May 22	1864	{ 509 510 }	23	1966
Perry, Francis L., Canandaigua, N. Y. Two-wheeled vehicle	280,235	June 26	1990	{ 559 560 }	23	2487
Perry, Francis L., Canandaigua, N. Y. Two-wheeled vehicle	283,811	Aug. 28	1628	458	24	819
Perry, Henry B., Chicago, Ill. Pneumatic shutter for photographic cameras	287,858	Nov. 6	80	24	25	521
Perry, James L., Berlin, Wis. Abrading cutter-head	273,304	Mar. 6	79	24	23	847
Perry, James L., Berlin, Wis. Abrading-cylinder	285,666	Sept. 25	1834	524	24	1245
Perry, James L., assignor of one-half to C. A. Mather, Berlin, Wis. Wood-polishing machine	273,303	Mar. 6	76	22, 23	23	847
Perry, James M., Sharon, Pa. Nut-lock	277,336	May 8	1026	275	23	1809
Perry, John F., Chicago, Ill. Machine for applying roofing composition to felting	284,291	Sept. 11	892	252	24	1063
Perry, John G., Jr., Nyack, N. Y. Meat-tenderer	274,372	Mar. 20	1453	398	23	1099
Perry, Orsanus E., Whitehall, Mich. Churn-motor	290,799	Dec. 25	1823	502	25	1229
Perry, Robert E. (See Smith, Gary B., assignor.)						
Perry, Samuel P., Auburn, Mass. Milking-stool	272,084	Feb. 13	622	169	23	560
Perry, Samuel P., Auburn, Mass. Milking-stool	287,958	Nov. 6	214	61	25	544
Perry, Stuart, Newport, N. Y. Device for lathing	270,839	Jan. 16	1251	360	23	259
Perry, Stuart, Newport, N. Y. Device for lathing	277,058	May 8	688	179	23	1750
Perry, Stuart, Newport, N. Y. Portable nail-driving machine	279,427	June 12	1025	{ 285 286 }	23	2306
Perry, Stuart, Newport, N. Y. Device for arranging nails in serial order	282,666	Aug. 7	228	66	24	539
Perry, Stuart, Newport, N. Y. Nail-driver's harness and lath-holder	285,510	Sept. 25	1650	464	24	1210
Perry, Stuart, Newport, N. Y. Implement for feeding nails	285,667	Sept. 25	1835	524	24	1245
Perry, Thomas O., assignor to United States Wind Engine and Pump Company, Batavia, Ill. Double-acting pump	288,108	Nov. 6	395	{ 111 112 }	25	576
Perry, William A. (See Hines, Perry, and Worthington.)						
Perry, William A. (See Mason, William B., assignor.)						
Perry, William A., <i>et al.</i> (See Leavitt, Erasmus D., Jr., assignor.)						
Perry, William H., Sharon, Pa. Spike	270,840	Jan. 16	1253	361	23	259
Perry, William L., Lowell, Mass., assignor to himself and H. F. Worrall. Treadle	271,112	Jan. 23	1585	456	23	320



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Pershing, Israel C., <i>et al.</i> (See Taylor, William, assignor.)						
Persson, Anders, and O. Söderberg, Bangor, Me. Emery-wheel	279,009	June 5	482	.....	23	2205
Pern City Plow Company. (See Lane, John, assignor.)						
Pessenger, John S., Brooklyn, N. Y., assignor to W. T. Minor, Stamford, Conn. Machine for bending the eyes of elliptic-spring plates	285,922	Oct. 2	184	53	25	36
Pester, Adolph, Brooklyn, assignor to T. Nelson & Sons, New York, N. Y. Book-holding device	273,886	Mar. 13	836	227	23	985
Petchaft, Bernard, assignor to A. Shenfield, New York, N. Y. Suspenders	277,776	May 15	1547	421	23	1905
Peteler, Alois, assignor to W. H. Peteler, New Dorp, N. Y. Fire-escape ladder	283,654	Aug. 21	1419	{ 397 398 275 276 }	{ 24 23 }	770
Peteler, Francis, Minneapolis, Minn. Power loading apparatus	277,337	May 8	1027	{ 276 276 }	{ 23 23 }	1809
Peteler, William H. (See Peteler, Alois, assignor.)						
Peteler, William H., New Dorp, N. Y. Sail-hank	277,338	May 8	1029	276	23	1809
Peterson, John, and S. Smith, Seneca Falls, N. Y. Carpet-stretcher	272,468	Feb. 20	1111	314	23	649
Peters, Alexander F., Millbury, Mass. Sheet-metal elbow for pipes	272,764	Feb. 20	1487	418	23	715
Peters, David A., Hagerstown, Md. Flexible fire-escape ladder	282,362	July 31	2571	705	24	468
Peters, Edward A. (See Berger, Peters, and Chaney.)						
Peters, George M., Columbus, Ohio. Die for making dash-frames	281,553	July 17	1513	416	24	278
Peters, H. G., <i>et al.</i> (See Cochran, William J., assignor.)						
Peters, Louis H., Buffalo, N. Y. Pocket-knife	279,794	June 19	1453	407	23	2386
Peters, Mathias, Jr., Chicago, Ill. Car-coupling	270,694	Jan. 16	1079	310	23	226
Petersen, Heinrich, Hamburg, Germany. Centrifugal creaming-machine	288,732	Nov. 20	1196	326	25	729
Peterson, Adolphus, assignor of one-half to S. C. Croft, New York, N. Y. Carpet-exhibitor	280,855	July 10	642	181	24	119
Peterson, August, Kent, Ohio. Clod-crusher	277,059	May 8	640	180	23	1750
Peterson, John, Oakland, Cal. Incubator	271,555	Jan. 30	1899	549	23	382
Peterson, Nelson, Antioch, Cal. Two-wheeled vehicle	279,428	June 12	1031	286	23	2306
Peterson, Peter. (See Fulton, Alfred, assignor.)						
Peterson, Samuel. (See Parker and Peterson.)						
Peterson, Sewell A., <i>et al.</i> (See Cole, Wesley, assignor.)						
Peterson, Swan, Knoxville, Ill. Gate	280,664	July 3	390	109	24	69
Petetin, Marie E. (See Martin, Andrew D., assignor.)						
Petit, Victor. (See Simon and Petit.)						
Petmeck, Joseph C., Austin, Tex. Cleaner for gun-barrels	289,132	Nov. 27	1678	465	25	824
Petraeus, Carl V., Philadelphia, Pa. Manufacture of porous zinciferous alum	269,957	Jan. 2	160	.....	23	34
Petrehn, Andrew P., New Albion, Iowa. Cream-gage	289,855	Dec. 11	606	169	25	1000
Petrequin, Louis, Detroit, Mich. Iron fence and telegraph post	273,887	Mar. 13	837	227	23	985
Petrie, Jerriid. (See Morse, Fred. H., assignor.)						
Pettebone, Robert T., Wyoming, Pa. Scoop	282,363	July 31	2571	705	24	469
Petterson, Carl, Brooklyn, N. Y. Refrigerator	282,220	July 31	2390	658	24	437
Petterson, Carl, Brooklyn, N. Y. Refrigerator	282,221	July 31	2392	658	24	437
Petticrew, Albert E., Springfield, Ohio. Ratchet-wrench	285,609	Sept. 25	1839	525	24	1246
Petticrew, Albert E., Springfield, assignor to W. G. Startzman & Co., Cincinnati, Ohio. Wagon-jack	278,594	May 29	2579	704	23	2099
Pettiner, William H., and J. L. Colcord, Augusta, Me. Dust-guard for railway-cars	273,595	Mar. 6	459	123	23	913
Pettingill, George D., Asbury Park, N. J. Earth-anger and lifting and lowering device for well-curbings	270,472	Jan. 9	783	229	23	163
Pettis, George C. (See Hoggson and Pettis.)						
Pettis, Walter C., College Hill, Miss. Gate	275,262	Apr. 3	482	134	23	1308
Pettitt, Charles H., Jersey City, N. J. Mortising-tool	278,177	May 22	2032	558	23	1995
Pettitt, Francis A., Valley Mills, Tex. Cotton chopper and cultivator	277,777	May 15	1548	421	23	1905
Peuchen, Arthur G., Toronto, Ontario, Canada. Paint compound	281,131	July 10	978	.....	24	179
Peuchen, Arthur G., Toronto, Ontario, Canada. Paint compound or mixture for roofs and other purposes	280,856	July 10	643	.....	24	120
Pew, Alfred. (See Pugh, John W., assignor.)						
Peyton, Cunningham R., assignor to himself and A. A. Birney, Washington, D. C. Ice-creper	284,571	Sept. 4	503	141	24	989
Peyton, William J., <i>et al.</i> (See Starr, Eli T., assignor.)						
Peyton, William J. (See Starr, Eli T. and E. E., assignors.)						
Pfaff, Rudolf H. (See Thorpe and Pfaff.)						
Pfannenstiel, Charles, New York, N. Y. Bottle-corking machine	274,221	Mar. 20	1258	347	23	1066
Pfau, Julius P., Lansingburg, N. Y. Check-valve	274,222	Mar. 20	1259	347	23	1066
Pfaudler, John M., assignor of part to E. J. Kelsey, J. Sullivan, and J. Sargent, Rochester, N. Y. Apparatus for regulating the pressure in a series of fermenting-vessels. (Reissue)	10,284	Feb. 6	531	{ 142 143 }	{ 23 23 }	532
Pfauntz, Charles, assignor of one-half to L. Stutz, St. Louis, Mo. Hinge	277,925	May 22	1722	470	23	1942
Pfauntz, Daniel M., assignor of fifty-two one-hundredths to J. J. Gumpfer, W. M. Maul, G. F. Fields, and J. F. Bacon, Philadelphia, Pa. Spring-motor for vehicles	282,919	Aug. 7	524	148	24	593
Pfeffer, Christian, Lebanon, Ill. Compound mash-tun	280,396	Dec. 3	68	19	24	15
Pfeffer, Christian, Buffalo, N. Y. Child's carriage	290,704	July 25	1693	466	25	1206
Pfeifer, Gustav H., Freiberg, Saxony, Germany. Coffee-roaster	279,179	June 12	715	195	23	2255
Pfeiffer, Louis E. (See Purvis, William B., assignor.)						
Pfeiffer, Louis E., Philadelphia, Pa. Apparatus for glass manufacture	280,397	July 3	70	19	24	15
Pfueger, Ernest F., Akron, Ohio. Artificial fish-bait	272,317	Feb. 13	905	253	23	610
Pfueger, Ernest F., Akron, Ohio. Paper-weight	279,795	June 19	1454	407	23	2386
Pfueger, Ernest F., Akron, Ohio. Artificial fish-bait	284,056	Aug. 28	1935	542	24	873
Pfueger, Ernest F., Akron, Ohio. Cuff-button	290,604	Dec. 18	1565	400	25	1177
Pfueger, Albert, assignor to R. Moser, Berlin, Germany. Clasp for albums	289,133	Nov. 27	1679	466	25	824
Pfund, Edward F., Sacramento, Cal. Portable door-fastener	290,352	Dec. 18	1218	342	25	1117
Pharr, Henry N., La Grange, Ark. Elevator attachment to ships' gang-platforms	288,109	Nov. 6	397	112	25	576
Phelan, John, assignor to himself, R. H. Lyon, and W. Acheson, Pittsburg, Pa. Machine for making links	283,919	Aug. 28	1748	{ 493 494 }	{ 24 24 }	840
Phelps, Brigham T., Belknap Falls, Vt. Dress-square	279,979	June 26	1685	473	23	2432
Phelps, Byron, assignor to Deere & Mansur Company, Moline, Ill. Corn-planter	284,662	Sept. 11	612	172	24	1013
Phelps, Byron, assignor to Deere & Mansur Company, Moline, Ill. Corn-planter	284,663	Sept. 11	614	173	24	1014
Phelps, Byron, assignor to Deere & Mansur Company, Moline, Ill. Corn-planter	284,664	Sept. 11	615	173	24	1014
Phelps, Chamberlayne, Westmoreland, N. Y. Holdback for carriages	273,596	Mar. 6	460	124	23	913
Phelps, Charles P., Princeton, Ill. Corn-planter	283,612	Aug. 28	1629	458	24	819
Phelps, Edward B., Springfield, Mass. Music-leaf holder	275,696	Apr. 10	1078	294	23	1419
Phelps, Enoch, Westfield, Mass. Whip-coupling	277,778	May 15	1549	421	23	1905
Phelps, George B., Washington, D. C. Fireproofing and furring device	279,011	June 5	484	132	23	2206
Phelps, George M., Jr., Brooklyn, N. Y., assignor to Western Electric Company, Chicago, Ill. Duplicate switch-board for telephone-exchanges	285,670	Sept. 25	1840	525	24	1246
Phelps, George N., assignor of one-half to D. Wadsworth, Brooklyn, N. Y. Extracting oleaginous and soluble matter from other bodies	288,259	Nov. 13	584	162	25	618

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Phelps, Lucius J., Chicago, Ill. Animal-trap	275,786	Apr. 10	1197	328	23	1439
Phelps, Lucius J., New York, N. Y. Automatic electric-circuit breaker	281,202	July 10	1070	295	24	196
Phelps, Oliver M., and C. Hanson; said Phelps assignor to J. A. Mack, Madison, Wis. Running-gear for vehicles	290,104	Dec. 11	901	256	25	1053
Phelps, Rodney L., Ravenna, Ohio. Grain-cutting machine	287,463	Oct. 30	2129	578	25	414
Phelps, Rodney L., Ravenna, Ohio. Grain-cutting machine	287,464	Oct. 30	2130	578	25	414
Phelps, Walter S., Wortendyke, N. J. Railway-torpedo	285,671	Sept. 25	1841	525	24	1246
Phelps, Walter S., Wortendyke, N. J. Fog-signal for railways	287,157	Oct. 23	1741	477	25	336
Phelps, William M., Marshall, Mich. Mechanical movement	287,574	Oct. 30	2273	616	25	442
Phelps, William P., Philadelphia, Pa., assignor to Railroad Safety Lock and Signal Company, of New Jersey. Electrical train-stopping and signaling apparatus for land-slides	288,480	Nov. 13	881	238 239	25	669
Phenix Machine Company. (See Atherton, Abel T., assignor.)						
Philbrook, Emmeline W., Boston, Mass. Ventilating-screen for windows	286,555	Oct. 9	968	260	25	186
Philips, Ferdinand, Philadelphia, assignor of one-half to J. B. Ford, Hites, Pa. Gas-generator	277,926	May 22	1723	470	23	1942
Philips, William J. (See Barker, George F., assignor.)						
Philips, William J., and G. L. Kitson, Philadelphia, Pa. Motor for drawing wires through tubes	274,818	Mar. 27	2019	562	23	1206
Philips, William J., and G. L. Kitson, Philadelphia, Pa., assignors to said Philips. Electric cable	275,407	Apr. 10	714	191	23	1357
Philips, William J., and G. L. Kitson, Philadelphia, Pa., assignors to said Philips. Machine for manufacturing electric cables	275,408	Apr. 10	715	191	23	1357
Philips, Philander R., Carmi, Ill. Bed-spring	270,110	Jan. 2	324	95	23	66
Phillips, Edwin S., and S. A. Kealy, Louisville, Tex. Bolting-reel	274,635	Mar. 27	1828	507	23	1172
Phillips, Elwood C., Richmond, Ind. Roller-skate	280,236	June 26	1992	560	23	2487
Phillips, Elwood C., assignor of one-half to J. Marchant, Richmond, Ind. Self-acting clip for furniture-feet	271,263	Jan. 30	1771	513	23	360
Phillips, Eugene F. (See Sawyer, William H., assignor.)						
Phillips, Franklin D. (See Sorg and Phillips.)						
Phillips, George E. S., Berryville, Va. Combined seed and fertilizer dropper	284,892	Sept. 11	893	252	24	1063
Phillips, George H., assignor of one-half to W. A. Clark, Troy, N. Y. Stove-support	270,978	Jan. 23	1430	412	23	295
Phillips, Harry, Chicago, Ill. Chandelier	273,145	Feb. 27	1979	556	23	808
Phillips, Henry. (See Judd, Garritt P., assignor.)						
Phillips, Henry F., assignor to Sheldon & Co., Auburn, N. Y. Hub-attaching device	282,767	Aug. 7	355	100	24	562
Phillips, Herbert O., assignor to Holmes, Booth & Haydens, Waterbury, Conn. Machine for insulating electric conductors	285,672	Sept. 25	1842	526	24	1246
Phillips, Herbert O., assignor to Holmes, Booth & Haydens, Waterbury, Conn. Insulating electrical conductors	285,673	Sept. 25	1843	526	24	1246
Phillips, Herbert O., assignor to Holmes, Booth & Haydens, Waterbury, Conn. Insulating electric conductors	286,220	Oct. 9	537	147	25	109
Phillips, Herbert O., assignor to Holmes, Booth & Haydens, Waterbury, Conn. Insulated electric conductor	287,776	Oct. 30	2556	688	25	495
Phillips, Hiram B., Palestine, Tex. Hoop-fastening for buckets, &c.	272,469	Feb. 20	1111	314	23	649
Phillips, Hiram B., Palestine, Tex. Hoop-fastening for buckets, &c. (Reissue.)	10,337	June 5	637	173	23	2231
Phillips, Isaac N., Nashville, Tenn. Station-indicator	285,158	Sept. 18	1237	347	24	1130
Phillips, James C. (See Smith, Jacob A., assignor.)						
Phillips, James L., Worcester, Mass. Globe or similar valve	281,394	July 17	1316	364	24	245
Phillips, John, Boone, Iowa. Snow-plow	286,634	Oct. 16	1077	289 290	25	211
Phillips, John, assignor of one-half to T. F. Howley, Riley's Station, Ky. Bee-hive	272,975	Feb. 27	1769	495	23	770
Phillips, John F. E., Hannibal, Mo. Car-coupling	286,635	Oct. 16	1078	290	25	211
Phillips, John H., New York, N. Y. Boiler-feeder	280,704	Dec. 4	426	119	25	960
Phillips, Oliver O., Allegheny, Pa. Barbed fence	280,857	July 10	643	181	24	120
Phillips, R. B., et al. (See Atkinson, Henry C., assignor.)						
Phillips, Russell, assignor of one-half to W. H. Adams, Boston, Mass. Elevator	271,264	Jan. 30	1772	514	23	360
Phillips & Weeden. (See Weeden, Henry C., assignor.)						
Phillips, Whipple V. B. (See Paquin, Claude A., assignor.) (Reissue.)						
Phillips, William. (See Erdman and Phillips.)						
Phillips, William, Marshfield, Oreg. Locomotive cow-catcher	289,705	Dec. 4	427	119	25	960
Phillips, William P., Somerville, Mass. Lubricator	276,068	Apr. 17	1542	424	23	1506
Phillips, William P., Cambridge, Mass. Regulating sight-feed oil-cup	276,069	Apr. 17	1543	424	23	1507
Phillips, William R., Milford, Del., assignor to Scott Manufacturing Company, Baltimore, Md. Fruit-drier	270,695	Jan. 16	1060	310	23	226
Philp, John, Liverpool, England. Floating rudder for vessels	284,477	Sept. 4	383	106	24	969
Phinney, Frederick, et al. (See Foley, Patrick, assignor.)						
Phipps, Azor J., assignor of one-half to O. Davis, Boston, Mass. Wick-trimmer	280,510	July 3	214	56	24	38
Phipps, Daniel L., Millington, Mich. Sash-balance	278,042	May 22	1867	510	23	1967
Phipps, Edward L., Milford, Mich. Knob attachment	273,763	Mar. 13	684	183	23	959
Phipps, Edward L., Milford, Mich. Door-knob attachment	284,893	Sept. 11	894	253	24	1064
Phipps, Edward L., Milford, Mich. Knob attachment	289,305	Nov. 27	1881	524	25	863
Phoenix Iron Company. (See Shaffer, Thomas, assignor.)						
Phreaner, Samuel J., Philadelphia, Pa. Fire-escape ladder	273,386	Mar. 6	195	52	23	867
Piatt, Edward R. (See Piatt, Josiah J. and E. R.)						
Piatt, Josiah J. and E. R., La Porte, Ind. Plow	286,730	Oct. 16	1301	324	25	233
Piatt, William M., West Liberty, Ohio. Grain-binder for harvesters	276,458	Apr. 24	2039	567	23	1600
Piatti, Attilio B., New York, N. Y. Hod-elevator	271,113	Jan. 23	1586	456	23	320
Pichler, Franz, and K. Sedlacek, Vienna, Austria-Hungary. Apparatus for purifying and softening water	278,178	May 22	2033	559	23	1995
Pick, Emile, Paris, France. Plastic compound for the manufacture of stone, tiles, &c.	281,395	July 17	1317		24	245
Pickenpaugh, James N. (See Fite and Pickenpaugh.)						
Pickering, Barton, Dayton, Ohio. Book-support	284,228	Sept. 4	93	25	24	920
Pickering, Thomas R., Portland, Conn. Machine for grinding drills	282,364	July 31	2573	705	24	469
Pickett, Reuben H. (See Crapon and Pickett.)						
Pickhardt, Wilhelm, et al. (See Endemann, Hermann, assignor.)						
Picking, Frank P., Sparkill Independence, Colo. Fuse cutter and capper	276,459	Apr. 24	2042	567	23	1600
Pickwell, Robert, Kingston-upon-Hull, county of York, England. Recording-compass	272,765	Feb. 20	1488	419	23	716
Pidgeon, Francis, assignor to J. S. F. Pidgeon, Saugerties, N. Y. Steam-plow	289,554	Dec. 4	228	64	25	926
Pidgeon, Jeannette S. F. (See Pidgeon, Francis, assignor.)						
Pidgin, Charles F., and F. H. Leonard, Jr., Boston, Mass. Calculating-machine	284,755	Sept. 11	736	205 206	24	1035
Piel, Bernard F. (See Keenan, William, assignor.)						
Piel, William, St. Louis, Mo. Type-case cabinet	285,674	Sept. 25	1843	526	24	1247
Pielsticker, Carl M., London, county of Middlesex, England. Antiseptic	281,554	July 17	1515		24	279



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Piepgress, Ludwig, Hoboken, assignor to himself and B. Ehler, West Hoboken, N. J. Fire-kindler	284,057	Aug. 28	1939	542	24	873
Pierce, Arthur W. (See Peacock, Job F., assignor.)						
Pierce, Donison C., Chicago, Ill. Railway-frog	276,070	Apr. 17	1543	425	23	1507
Pierce, Donison C., Chicago, Ill. Railway-crossing	285,511	Sept. 25	1650	464	24	1210
Pierce, Dwight E. (See Lloyd and Pierce.)						
Pierce, Ebenezer, New Bedford, Mass. Breech-loading bomb-gun. (Reissue)	10,392	Oct. 9	990	267	25	190
Pierce, Franklin, New York, N. Y. Hod-elevator	283,655	Aug. 21	1420	398	24	770
Pierce, Franklin D., Buffalo, N. Y. Road-engine	274,024	Mar. 13	996	273	23	1013
Pierce, George W. (See Loring and Pierce.)						
Pierce, Henry M., Chicago, Ill. Charcoal-kiln	272,766	Feb. 20	1489	419	23	716
Pierce, Henry M., Chicago, Ill. Manufacturing charcoal	272,976	Feb. 27	1770	495	23	771
Pierce, Henry M., Chicago, Ill. Process of and apparatus for the recovery of turpentine and other wood products and for the manufacture of charcoal	277,505	May 15	1226	330	23	1849
Pierce, Henry M., Chicago, Ill. Process of and apparatus for the manufacture of turpentine	277,506	May 15	1227	330 331	23	1850
Pierce, Henry M., Chicago, Ill. Distilling and charring wood and kiln therefor	284,058	Aug. 28	1939	542	24	873
Pierce, Henry M., Chicago, Ill. Manufacturing charcoal and kiln therefor	284,059	Aug. 28	1940	542	24	874
Pierce, Samuel B., Grand Rapids, Mich. Manufacture of charcoal	278,731	June 5	71	22	23	2136
Pierce, James D., Milwaukee, Wis., assignor, by mesne assignments, to Shields & Brown, Chicago, Ill. Covering for steam-pipes, &c. (Reissue)	10,375	Aug. 28	2078	577	24	897
Pierce, James D., Milwaukee, Wis., assignor, by mesne assignments, to Shields & Brown, Chicago, Ill. Covering for steam-pipes, &c. (Reissue)	10,376	Aug. 28	2079	577	24	897
Pierce, Lucretia V., St. Louis, Mo. Combined stove, table, and cabinet	279,276	June 12	822	228	23	2274
Pierce, Samuel B., La Crosse, Wis. Machine for cutting key-seats	286,221	Oct. 9	538	147	25	109
Pierce, Webster E., trustee. (See Bate, Wallace H., assignor.)						
Pierce, Zenas B., assignor of one-half to H. L. Cushman, Taunton, Mass. Button-machine	279,180	June 12*	716	195 196	23	2255
Pierson, Henry M., Brooklyn, N. Y. Process of and apparatus for manufacturing gas	279,010	June 5	482	131 132	23	2205
Pierson, Oliver J., et al. (See Jones, Frank, assignor.)						
Pietsch, Herman, Flatbush, N. Y. Stench-trap	270,473	Jan. 9	785	230	23	163
Pietsch, Herman, Flatbush, N. Y. Stench-trap	274,139	Mar. 20	1150	317	23	1046
Piette, Ludwig, and F. Krizik, Pilsen, Austria-Hungary. Electric-arc lamp	273,888	Mar. 13	838	227 228	23	985
Piffard, Henry G., New York, N. Y. Cartridge-shell	272,581	Feb. 20	1260	351	23	675
Piffard, Henry G., New York, N. Y. Recoil-cushion for fire-arms	281,725	July 24	1751	475	24	323
Pigeon, Narcisse, Yonkers, N. Y. Evaporating liquids	290,105	Dec. 11	902	256	25	1053
Pigott, Michael A., St. Louis, Mo. Tire for wheels	289,358	Nov. 27	1948	541	25	875
Pike, Adolph, and S. Schifessinger, Chicago, Ill. Hanger for garments	284,478	Sept. 4	384	106	24	969
Pike, Charles F. (See Collings and Pike.)						
Pike, Charles F., Philadelphia, Pa., assignor, by mesne assignments, to National Anti-Sewer Gas Company, of New Jersey. Water-closet	270,113	Jan. 2	328	96, 97	23	66
Pike, Charles F., Philadelphia, Pa., assignor, by mesne assignments, to National Anti-Sewer Gas Company, Camden, N. J. Cleansing and disinfecting water-closet bowls and their traps	271,357	Jan. 30	1901	550	23	383
Pike, Charles F., Philadelphia, Pa., assignor to National Anti-Sewer Gas Company, Camden, N. J. Trap for wash-stands, &c.	270,111	Jan. 2	325	96	23	66
Pike, Charles F., Philadelphia, Pa., assignor to National Anti-Sewer Gas Company, Camden, N. J. Sealing device for the operating mechanism of water-closets	270,112	Jan. 2	326	96	23	66
Pike, Charles F., Philadelphia, Pa., assignor to National Anti-Sewer Gas Company, Camden, N. J. Casing for water-closets	270,333	Jan. 9	603	178	23	127
Pike, Charles F., Philadelphia, Pa., assignor to National Anti-Sewer Gas Company, Camden, N. J. Cock for water-closets	270,334	Jan. 9	604	178	23	128
Pike, Charles F., Philadelphia, Pa., assignor to National Anti-Sewer Gas Company, Camden, N. J. Water-closet	270,335	Jan. 9	605	178	23	128
Pike, Charles F., Philadelphia, Pa., assignor to National Anti-Sewer Gas Company, Camden, N. J. Flexible brush for cleansing water-closets, &c.	270,979	Jan. 23	1431	413	23	295
Pike, Charles F., Philadelphia, Pa., assignor to National Anti-Sewer Gas Company, Camden, N. J. Water-closet	270,980	Jan. 23	1432	413	23	295
Pike, Charles F., Philadelphia, Pa., assignor to National Anti-Sewer Gas Company, Camden, N. J. Water-closet	270,981	Jan. 23	1433	413	23	295
Pike, Charles F., Philadelphia, Pa., assignor to National Anti-Sewer Gas Company, Camden, N. J. Water-closet	271,356	Jan. 30	1900	550	23	383
Pike, Charles F., Philadelphia, Pa., assignor to National Anti-Sewer Gas Company, Camden, N. J. Cleansing water-closet and other traps	271,358	Jan. 30	1902	550	23	383
Pike, Charles F., Philadelphia, Pa., assignor to National Anti-Sewer Gas Company, Camden, N. J. Apparatus for absorbing sewer-gas in water-closets	271,359	Jan. 30	1903	550	23	383
Pike, Charles F., Philadelphia, Pa., assignor to National Anti-Sewer Gas Company, Camden, N. J. Water-closet	271,915	Feb. 6	403	109	23	511
Pike, Charles F., Philadelphia, Pa., assignor to National Anti-Sewer Gas Company, Camden, N. J. Water-closet	271,916	Feb. 6	404	109	23	511
Pike, Charles F., Philadelphia, Pa., assignor to National Anti-Sewer Gas Company, Camden, N. J. Water-closet	271,917	Feb. 6	405	110	23	512
Pike, Henry. (See Lindsley, Augustus N., assignor.)						
Pilger, August P. (See Reeves, Matthew, assignor.)						
Pilger, John S., and G. H. Knight, said Knight assignor to L. Meier, Cincinnati, Ohio. Canteen	275,697	Apr. 10	1079	295	23	1419
Pillard, Oliver E., Cambridge, Mass. Permutation-lock	270,114	Jan. 2	329	97	23	67
Pillard, Oliver E., Cambridgeport, Mass. Door-lock	271,918	Feb. 6	406	110	23	512
Pillings, George T., Baltimore, Md. Valve-gear for steam-engines	273,597	Mar. 6	461	124	23	913
Pillings, George T., Baltimore, Md. Sectional tubular boiler	276,673	May 1	436	116	23	1703
Pillings, George T., Baltimore, Md. Can-soldering machine	288,481	Nov. 13	882	239	25	669
Pillings, George T., Baltimore, Md. Machine for cutting solder	288,482	Nov. 13	884	240	25	669
Pillings, George T., Baltimore, Md. Machine for cutting can-body blanks	288,733	Nov. 20	1197	326 327 328	25	729
Pillsbury, Ithamar P., assignor to Pattee Plow Company, Monmouth, Ill. Nut-lock	274,025	Mar. 13	997	273	23	1013
Pilson, George, Yonkers, N. Y. Safety-dog for elevators	278,595	May 29	2580	704	23	2099
Pinder, James H., et al. (See Ring and Bradshaw, assignors.)						
Pino, Charles S., Providence, R. I. Manufacture of lockets	277,339	May 8	1030	276	23	1810
Pine, James K. P. (See Turner and Searle, assignors.)						
Pine, James K. P., Lansingburg, N. Y. Wagon-spring	280,858	July 10	644	182	24	120
Pine, John L., New York, N. Y. Safety-elevator	287,959	Nov. 6	6215	61	25	545
Pinhey, Robert E., Oxtou, county of Chester, England. Life-saving seat for vessels	284,229	Sept. 4	94	25, 26	24	920

*Alphabetical list of patentees—Continued.*

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Pinkham, Edwin, Baltimore, Md. Sail .....	287,465	Oct. 30	2130	579	25	414
Pinney, Henry L. (See Baker, Augustus H., assignor.)						
Pinney, Henry L., South Windsor, assignor of one-half to A. H. Baker, Hartford, Conn. Railway-switch signal .....	269,958	Jan. 2	161	47	23	34
Pinson, Benjamin F., Jr., Sullivan, Mo. Horseshoeing implement .....	275,698	Apr. 10	1079	295	23	1419
Pintard, William, assignor of one-half to D. H. Applegate, Red Bank, N. J. Safety appliance for elevators .....	286,064	Oct. 2	351	98	25	65
Pinter, Francis T., Schulenburg, Tex. Plow .....	288,734	Nov. 20	1198	328	25	729
Pintsch, Julius, Berlin, Prussia, Germany. Gas-lantern for railway-cars, &c. ....	280,761	July 3	521	146	24	92
Pintsch, Julius and R., Berlin, Germany, assignors to Pintsch Lighting Company, of New Jersey. Illuminating apparatus .....	282,115	July 31	2256	619	24	415
Pintsch Lighting Company. (See Humphreys, Alexander C., assignor.)						
Pintsch Lighting Company. (See Pintsch, Julius and R., assignors.)						
Pintsch, Richard. (See Pintsch, Julius and R.)						
Piper, Edward S., Toronto, Ontario, Canada. Signal-lamp .....	276,278	Apr. 24	1802	502	23	1559
Piper, Edwin J., Springfield, Mass. Paper-ruling machine .....	284,665	Sept. 11	616	{ 173 174 }	24	1014
Piper, Edwin J., Springfield, Mass. Pen-beam standard for ruling-machines .....	284,666	Sept. 11	618	174	24	1015
Piper, Francis M., Lynn, Mass. Lacing-stud .....	290,800	Dec. 25	1824	503	25	1229
Piper, Henry B. (See Hoag, Sidney W., Sr., assignor.)						
Piper, J. Frederic, Newport, Ky., assignor to H. Bickford, Cincinnati, Ohio. Device for reaming and tapping .....	277,507	May 15	1229	331	23	1850
Piper, Jacob M., assignor to A. M. Rank, Adeline, Ill. Top wagon-box fastener .....	290,705	Dec. 25	1694	466	25	1206
Pipersberg, Franz, Lüttringhausen, Prussia, Germany, assignor to H. Pipersberg, Philadelphia, Pa. Gas-pressure regulator .....	271,735	Feb. 6	177	48	23	471
Pipersberg, Hermann. (See Pipersberg, Franz, assignor.)						
Pitard, John H., Mobile, Ala. Car-brake .....	282,222	July 31	2393	658	24	438
Pitchford, John B., San Francisco, Cal. Automatic cut-off for engines .....	283,656	Nov. 21	1422	398	24	771
Pitchford, John B., San Francisco, Cal. Pillow-block .....	283,657	Aug. 21	1424	399	24	771
Pitkin, James, Clerkenwell, county of Middlesex, England. Secondary battery .....	274,373	Mar. 20	1453	398	23	1100
Pitman, John H. (See Borden, Edwin, assignor.)						
Pitney, Albert L., Washington, D. C. Fire-escape .....	277,340	May 8	1030	{ 276 277 }	23	1810
Pittinos, James W., Philadelphia, Pa. Coking coal-dust for manufacturing fuel and gas ..	279,796	June 19	1455		23	2387
Pittiot, Joanny, Lyons, France. Apparatus for indicating and classifying color-tints ..	280,663	July 3	391	109	24	69
Pittman, Granville W., Keokuk, Iowa. Bench-vise .....	277,158	May 8	821	216	23	1773
Pittman, Granville W., Keokuk, Iowa. Wrench .....	286,242	Oct. 16	1339	366	25	258
Pitts Agricultural Works. (See Aitken, Robert W., assignor.)						
Pitts, George T., Providence, R. I. Button .....	285,306	Sept. 18	1401	396	24	1161
Pitts, James L. (See Kelly, William, assignor.)						
Pitts, Olin, Newborn, Ga. Back-band hook for harness .....	272,767	Feb. 20	1491	419	23	716
Pittsburg Hinge Company. (See Trimble, Andrew T., assignor.)						
Pixley, Albert B., Royalton, Vt. Combined rake and tedder .....	271,265	Jan. 30	1773	515	23	360
Place, James W., et al. (See Corbin, Elijah H., assignor.)						
Planetary Wheel Manufacturing Company. (See Yates, Henry G., assignor.)						
Plankinton, William. (See Johnson, Warren S., assignor.)						
Plankinton, William, Milwaukee, Wis. Underground conduit for electric wires .....	273,305	Mar. 6	80	24	23	847
Plano Manufacturing Company. (See Hunt, George G., assignor.)						
Plano Manufacturing Company. (See Jewett, Nathan, assignor.)						
Plant, George H., Jr. (See Reach, Robert, assignor.)						
Platman, Robert, Bellona, N. Y. Seed-drill and fertilizer-distributor .....	271,736	Feb. 6	179	48, 49	23	471
Platman, Robert, Bellona, N. Y. Seed-planter and fertilizer-distributor .....	288,483	Nov. 13	884	{ 240 241 }	25	669
Platt, Benjamin G., Bayonne, assignor to J. M. Clark, Jersey City, N. J. Lead or crayon holder .....	290,191	Dec. 11	1003	283	25	1072
Platt, Clark M., assignor to Patent Button Company, Waterbury, Conn. Rivet-setting machine .....	270,555	Jan. 9	895	259	23	184
Platt, George W., Greenfield, Mass. Machine for coating pills with gelatine .....	278,456	May 29	2422	660	23	2072
Platt, James C. (See Gokey, Frank F., assignor.)						
Platt, John. (See Gibson and Platt.)						
Platt, Ralph B., St. Nicholas, Pa. Blasting-needle .....	288,110	Nov. 6	398	112	25	576
Platt, Thomas, Chester, Pa. Locking attachment for the let-off mechanism of looms ..	273,889	Mar. 13	839	228	23	986
Platt, William K., Philadelphia, Pa. Fire-extinguisher apparatus .....	270,332	Jan. 9	601	177	23	127
Platt, William S., Waterbury, Conn. Electrode for secondary batteries .....	273,598	Mar. 6	462	125	23	913
Platten, John, Sr., Fort Howard, Wis. Cultivator .....	288,111	Nov. 6	398	112	25	577
Platz, Rudolf, Rottweil, Württemberg, Germany, assignor to P. Wolf, New York, N. Y. Match .....	275,074	Apr. 3	254	70	23	1269
Player, John, Marshalltown, Iowa. Packing for stuffing-boxes .....	284,756	Sept. 11	741	206	24	1036
Playter, Frank, et al. (See Robbins, Fabius, assignor.)						
Plecker, D. A., et al. (See Dudley, Dana, assignor.)						
Plimpton, Edward S., Denison, Iowa. Mechanism for converting motion .....	274,374	Mar. 20	1454	398	23	1100
Plimpton, Henry R., Boston, Mass. Sofa-bed .....	271,919	Feb. 6	407	{ 110 111 }	23	512
Plimpton, Linus B. (See Graves, Francis C., assignor.)						
Plimpton, Linus B., Hartford, Conn. Envelope .....	282,920	Aug. 7	526	149	24	594
Plotner, Schuyler C., South Bend, Ind. Shoe-scraper .....	270,115	Jan. 2	331	97	23	67
Plowe, Eugenio H., Peoria, Ill. Pedal attachment for pianos .....	283,019	Aug. 14	655	185	24	624
Pluche, James F., assignor to G. J. Porter and C. H. Tubbs & Co., Watertown, N. Y. Folding hammock-support .....	290,921	Dec. 25	1968	543	25	1254
Plumb & Marens. (See Webb, George B., assignor.)						
Plume & Atwood Manufacturing Company. (See Atwood, Lewis J., assignor.)						
Plume & Atwood Manufacturing Company. (See Eggleston, Thomas, assignor.)						
Plummer, Abner A., assignor of one-half to I. H. Roberts, Putnam, Conn. Steam-boiler ..	285,923	Oct. 2	185	53	25	36
Plummer, Charles S., Newark, N. J., assignor to Evans, Plummer & Co., New York, N. Y. Ornamental card-board .....	289,444	Dec. 4	85	24	25	901
Plummer, John A., Jr., and T. Gainford, Newark, Cal. Hand turning-tool .....	270,474	Jan. 9	785	230	23	163
Plummer, Osgood, Worcester, Mass. Post for drilling-machines .....	274,026	Mar. 13	998	273	23	1013
Plunkett, James C. (See Newsum, John J., assignor.)						
Plunkett, John W., Dunstall Priory, county of Kent, England. Apparatus for burning gas.	280,666	July 3	392	109	24	69
Plush, Samuel M., assignor of one-half to H. Bentley, Philadelphia, Pa. Electric-circuit breaker .....	282,921	Aug. 7	527	149	24	594
Plymouth Foundry Company. (See Harlow, Ivory W., assignor.)						
Pneumatic Engine Company. (See Ayres, Jared A., assignor.)						
Poage, Walter R., assignor to W. L. Willard, Shelbyville, Mo. Bag and twine holder .....	288,853	Nov. 20	1337	367	25	755



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Pohl, E. Otto, Philadelphia, Pa. Damper regulator, indicator, and lock.....	281,726	July 24	1752	475	24	323
Pohl, George D. (See Castle and Pohl.)						
Pohl, Hermann. (See Vorpahl and Pohl.)						
Pohlmann, Charles, Louisville, Ky. House for producing and preserving ice.....	275,699	Apr. 10	1080	295	23	1419
Pohlsen, John, Newark, N. J. Light-extinguisher for lamps.....	280,511	July 3	215	56	24	39
Poindexter, Emmet P., Woburn, Ill. Flood-gate.....	290,265	Dec. 18	1109	311	25	1098
Points, Alexander G., Staunton, Va. Dinner-pail.....	281,132	July 10	978	273	24	179
Poland, Edward F. (See Merrihew and Poland.)						
Poland, Melville C. (See Merrihew and Poland.)						
Poling, Totten, assignor of one-half to H. N. Ross, Menlo, Iowa. Running-gear for wagons.	273,599	Mar. 6	463	125	23	913
Pollak, Emil, Vienna, Austria-Hungary. Manufacture of artificial leather.....	270,475	Jan. 9	786	.....	23	163
Pollard, John H., Cedar Rapids, Iowa. Stud-wrench.....	282,768	Aug. 7	356	100	24	562
Polle, Friederich W., Greenville, Miss. Vent-plug.....	284,479	Sept. 4	385	107	24	969
Pollmiller, Ferdinand, Eddyville, Iowa. Washing-machine.....	274,140	Mar. 20	1151	317	23	1046
Pollock, James C., et al. (See Ritter, Andrew, Jr., assignor.)						
Pollock, John W., Forty Eight, Tenn. Combined harrow and cultivator.....	276,071	Apr. 17	1544	425	23	1507
Pollock, Thomas H., Monongahela City, Pa. Apparatus for opening and closing lock-gates.	287,575	Oct. 30	2275	617	25	442
Poltsdorfer, John H. (See Harper, Robert W., assignor.)						
Polson, John, and J. M. Harley, Paisley, county of Renfrew, Scotland. Manufacture of starch.....	285,067	Sept. 18	1124	.....	24	1111
Pomeroy, Arthur G. (See Bunce, Thomas A., assignor.)						
Pomeroy, Daniel K., Ottawa, Ontario, Canada. Churn.....	271,966	Jan. 30	1775	515	23	360
Pomeroy, Daniel K., Ottawa, Ontario, Canada. Creamer.....	276,460	Apr. 24	2043	568	23	1600
Pomeroy, Henry C., South Bend, Ind. Skate.....	282,922	Aug. 7	528	149	24	594
Pommer, Frederick, Charleston, assignor of one-half to F. G. Altmann, Kansas City, Mo. Needle-threader for sewing-machines.....	282,116	July 31	2257	619 620	24	415
Pond, Cephus H., Kasson, assignor to E. H. Pond, Mantorville, Minn. Oil-can.....	278,179	May 22	2034	559	23	1996
Pond, Ernest H. (See Pond, Cephus H., assignor.)						
Pond, Francis, Hinsdale, assignor to himself and W. M. Pond, Chicago, Ill. Grain-car door.....	289,445	Dec. 4	86	24, 25	25	902
Pond, Henry E., assignor of one-half to J. G. Ray, Franklin, Mass. Undershoe.....	272,470	Feb. 20	1112	314	23	649
Pond, Joseph F., Cleveland, Ohio. Steam-engine.....	286,482	Oct. 9	873	237	25	169
Pond, Joseph F., Cleveland, Ohio. Chimney cowl and ventilator.....	290,266	Dec. 18	1110	311	25	1098
Pond, Orlando M., assignor to himself and C. D. Jones, Independence, Iowa. Barbed-wire fence.....	270,116	Jan. 2	332	97	23	67
Pond, W. M. (See Pond, Francis, assignor.)						
Pons, John, assignor of one-half to C. Cook, Baltimore, Md. Steam canal-boat.....	282,923	Aug. 7	529	150	24	594
Pons, John, assignor of one-half to C. Cook, Baltimore, Md. Ash-sifter.....	282,924	Aug. 7	530	150	24	595
Pontefract, James G., Pittsburg, Pa. Process of and apparatus for distillation.....	289,706	Dec. 4	427	119	25	960
Pontious, Lyman F., Adair, Ill. Drain-tile-ditch level.....	281,133	July 10	979	273	24	180
Pool, Frank V. (See Hyatt and Pool.)						
Pool, Hiram L. P., New Edinburg, Ark. Combined scraper, plow, and cultivator.....	279,429	June 12	1032	286	23	2306
Pool, John W., Smithfield, N. C. Combined cultivator and planter.....	289,707	Dec. 4	428	120	25	961
Pool, Joseph, et al. (See Lingenbell, Peter, assignor.)						
Poole Company, J. Morton. (See Titus, Odeon H., assignor.)						
Poole, Samuel, assignor to J. J. Tower, Brooklyn, N. Y. Shutter-fastener.....	287,158	Oct. 23	1744	477	25	336
Poole, Samuel, assignor to J. J. Tower, Brooklyn, N. Y. Pliers for cutting and capping fuse, &c.....	287,159	Oct. 23	1745	478	25	337
Poole, Thomas S. (See Brown and Poole.)						
Poolman, James, and F. R. Marks, New York, N. Y. Adjustable surgical and invalid chair.	278,818	June 5	187	54, 55	23	2154
Poor, George H., Portland, Me., assignor to American Brake Company, St. Louis, Mo. Locomotive-brake.....	285,068	Sept. 18	1124	314	24	1111
Poor, John O., assignor, by mesne assignments, to himself and R. E. Bean, Franklin, N. H. Pamphlet-holder.....	287,052	Oct. 23	1612	444	25	311
Poor, Townsend, Scranton, Pa. Motor.....	282,564	Aug. 7	110	33	24	519
Pope, Alexander, et al. (See Goodridge, James F., assignor.)						
Pope, Frank L. (See Gray and Pope.)						
Pope, Frank L., Elizabeth, N. J. Electro-magnetic rheotome.....	284,480	Sept. 4	386	107	24	969
Pope, Frank L., Elizabeth, N. J. Telegraphic apparatus.....	284,481	Sept. 4	387	107	24	970
Pope, Frank L., Elmora, N. J. Insulator for electrical conductors.....	290,922	Dec. 25	1969	543	25	1254
Pope, Henry W., Elizabeth, N. J. Ground-wire clamp for telegraph-lines.....	283,140	Aug. 14	791	222	24	647
Pope, Henry W., Elizabeth, N. J. Ground-wire clamp.....	283,276	Aug. 14	965	269	24	679
Pope, John L., Cleveland, Ohio. Railway-rail joint.....	286,843	Oct. 16	1342	367	25	258
Pope, Joseph T., Horseheads, N. Y. Hand-sled.....	279,430	June 12	1033	286	23	2307
Pope Manufacturing Company. (See Benham, William P., assignor.)						
Pope Manufacturing Company. (See Handy and Anthony, assignors.)						
Pope Manufacturing Company. (See Knous, John, assignor.)						
Pope Manufacturing Company. (See Wallace, Albert E., assignor.)						
Pope Manufacturing Company. (See Warner, Charles H., assignor.)						
Pope, Owen C., McMinnville, Tenn. Quilting attachment for sewing-machines.....	271,920	Feb. 6	409	111	23	512
Pope, Richard C., St. Louis, Mo. Curtain-loop.....	282,365	July 31	2574	706	24	469
Pope, Seth G., Ogdensburg, N. Y. Cutter-head.....	290,923	Dec. 25	1970	544	25	1255
Popham, Richard M. (See Orton, Lyman O., assignor.)						
Popp, Victor, Paris, France. Apparatus for winding and setting clocks.....	275,700	Apr. 10	1081	296	23	1419
Popp, Victor, Paris, France. System for pneumatic clocks.....	275,701	Apr. 10	1082	296	23	1420
Popp, Victor, Paris, France. System of gas-lighting.....	283,020	Aug. 14	656	185	24	624
Popplewell, George, Bristol, Pa. Head-rest.....	280,073	June 26	1811	510	23	2454
Port, Henry, Vincennes, France. Convertible tool.....	290,106	Dec. 11	903	257	25	1054
Porteous, James, Fresno, Cal. Dirt-scraper.....	275,075	Apr. 3	254	70	23	1269
Porteous, James, Fresno, Cal. Dirt-scraper.....	275,075	Apr. 3	254	70	23	1269
Porter, Alonzo L., Chicago, Ill. Hinge.....	289,134	Nov. 27	1679	466	25	824
Porter, Andrew C., Senatobia, Miss. Baling-press.....	283,277	Aug. 14	966	269	24	679
Porter, Benjamin F., Waukegan, J. P. Bloom, and R. Aspin, South Chicago, Ill. Hoisting-machine.....	284,294	Sept. 11	895	253	24	1064
Porter, Benjamin S., assignor to himself and D. B. Miller, Red Oak, Iowa. Two-wheeled vehicle.....	275,849	Apr. 17	1286	353	23	1461
Porter, Daniel R., Randolph, assignor of one-half to J. A. Whipple, Boston, Mass. Wrench.	286,483	Oct. 9	873	237	25	170
Porter, David T., Lawrence, Mass., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Continuous-blast apparatus.....	278,265	May 22	2153	591	23	2016
Porter, E. W. (See McDonel, Daniel A., assignor.)						
Porter, Edward N., Burlington, Vt. Door-latch.....	280,079	June 26	1812	510	23	2454
Porter, Edward N., Burlington, Vt. Door-latch.....	279,797	June 19	1450	407	23	2387
Porter, Edwin F. (See Porter, James H. and E. F.)	287,715	Oct. 30	2470	666	25	479
Porter, Eugene A., Bowling Green, Ky. Corn crushing and splitting machine.....	285,512	Sept. 25	1651	464	24	1210

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Porter, George A., Syracuse, N. Y. Steam-boiler	273,387	Mar. 6	196	53	23	867
Porter, George J., et al. (See Pluche, James F., assignor.)						
Porter, George J. M., Princeton, Ill. Sewer and drain tile	270,476	Jan. 9	787	230	23	164
Porter, Henry B., Chicago, Ill. Electric telephone	269,879	Jan. 2	65	20	23	15
Porter, Henry H., Littleton, N. H. Lace-fastener	275,942	Apr. 17	1393	384	23	1481
Porter, Henry K. (See Porter, Thomas W. and H. K.)						
Porter, Henry W. (See Hamilton, Silas H., assignor.) (Reissue.)						
Porter, J. Wood, Morris, Ill. Washing-machine	276,072	Apr. 17	1545	425	23	1507
Porter, James H., Boston, Mass. Self-leveling berth	276,874	May 1	436	117	23	1703
Porter, James H., Boston, Mass. Ash-sifter	286,484	Oct. 9	875	237	25	170
Porter, James H. and E. F., Boston, Mass. Self-leveling berth	278,732	June 5	73	22	23	2137
Porter, John F., Red Wing, Minn. Evaporating-pan	285,069	Sept. 18	1126	315	24	1111
Porter, John H., assignor of one-half to J. W. Twigg, Jackson, Mich. Cylinder-cock steam escape	290,924	Dec. 25	1971	544	25	1255
Porter, Joseph E., Ottawa, Ill. Sling for hay-elevator ropes	275,850	Apr. 17	1287	354	23	1461
Porter, Major D., Boston, Mass. Nautical signal	285,841	Oct. 2	71	21, 22	25	15
Porter Needle Company. (See Whitehead, Thomas, assignor.)						
Porter, Robert, Ottumwa, Iowa. Horse-collar	271,921	Feb. 6	410	111	23	512
Porter, Robert, Ottumwa, Iowa. Trace-carrier	276,461	Apr. 24	2045	568	23	1600
Porter, Robert, Ottumwa, Iowa. Halter	280,237	June 26	1993	561	23	2487
Porter, Robert, Ottumwa, Iowa. Harness-buckle	282,366	July 31	2575	706	24	469
Porter, Robert, Ottumwa, Iowa. Buckle	283,278	Aug. 14	966	{ 269 270 }	24	679
Porter, Samuel M. (See Tarbox, James E., assignor.)						
Porter, Sanford P., West Richfield, Ohio. Broom and dust-pan holder	276,462	Apr. 24	2046	568	23	1600
Porter, Stephen, Boston, Mass. Door-check	283,658	Aug. 21	1425	399	24	771
Porter, Thomas J., assignor of one-half to J. H. Hicks, Talladega, Ala. Pea thrasher and separator	287,324	Oct. 23	1956	534	25	374
Porter, Thomas W., Chelsea, Mass. Standard for carriage-tops	285,070	Sept. 18	1127	315	24	1111
Porter, Thomas W., Chelsea, and H. K. Porter, Boston, Mass. Spring-shackle	285,071	Sept. 18	1128	315	24	1111
Porter, Wallace, New Haven, Conn. Planer-chuck	287,160	Oct. 23	1746	478	25	337
Porter, Walter L., Emlenton, Pa. Lifting-jack	284,482	Sept. 4	389	107	24	970
Post, Anna L. (See Post, Garrett D., assignor.)						
Post, Charles F. (See Post, John W. and C. F.)						
Post, Charles W., Springfield, Ill. Cultivator	279,980	June 26	1686	473	23	2432
Post & Co. (See Anderson, Charles, assignor.)						
Post & Co. (See Hamlin, Evelyn B., assignor.)						
Post & Co. (See Kirby, John, Jr., assignor.)						
Post, Garrett D., assignor to A. L. Post, Mariner's Harbor, N. Y. Knockdown table	272,471	Feb. 20	1113	314	23	649
Post, John W., New York, N. Y. Sewing-machine	281,296	July 17	1192	330	24	224
Post, John W., New York, N. Y. Railway-car	285,675	Sept. 25	1844	527	24	1247
Post, John W., New York, N. Y. Sewing-machine	287,576	Oct. 30	2277	{ 617 618 }	25	443
Post, John W. and C. F., New York, N. Y. Velocipede	285,513	Sept. 25	1652	{ 464 465 }	24	1210
Post, Nathan L., Cleveland, Ohio. Store-cover lifter	272,472	Feb. 20	1114	315	23	650
Post Refrigerator Car Company. (See Post, William S., assignor.)						
Post Refrigerator Car Company. (See Waters, Robert H., assignor.)						
Post, William S., Boston, Mass., assignor to Post Refrigerator Car Company, Portland, Me. Refrigerating structure	288,260	Nov. 13	585	162	25	618
Postawka, Louis, Cambridgeport, Mass. Detachable and adjustable seat-back	274,375	Mar. 20	1455	399	23	1100
Posz, Henry W., Winona, Minn. Foot-power	287,716	Oct. 30	2472	666	25	480
Pott, Henry A., Cape Girardeau, Mo. Harness-loop	270,477	Jan. 9	789	236	23	164
Potter, Albert G. (See Glazier, George W., assignor.)						
Potter, Bradford S. (See Farrington, George K. and H. C., assignors.)						
Potter, Charles W. (See Cullingworth and Potter.)						
Potter, Charles W., New York, N. Y. Compressed-air motor	270,982	Jan. 23	1434	{ 413 414 }	23	295
Potter, Charles W., assignor to Sergeant & Cullingworth Company, New York, N. Y. Water-pump attachment for air-compressors	287,325	Oct. 23	1957	534	25	374
Potter, Edmund P., and W. H. Higgin, Bolton, county of Lancaster, England. Manufacture of bicarbonate of soda	279,431	June 12	1033		23	2307
Potter, Herman M., Williamsport, Pa. Watch-maker's lathe	288,854	Nov. 20	1338	367	25	755
Potter, James, Chicago, Ill. Griddle or pan lubricator	279,181	June 12	717	196	23	2256
Potter, James, assignor to Whitehead & Atherton Machine Company, Lowell, Mass. Carding-machine	280,238	June 26	1995	561	23	2488
Potter, James, assignor to A. T. Atherton, Lowell, Mass. Carding-machine	286,065	Oct. 2	352	98	25	65
Potter, James D., Portland, Me. Heating device	275,409	Apr. 10	717	191	23	1358
Potter, John F., Bellefonte, Pa. Necktie-fastener	288,735	Nov. 20	1199	328	25	730
Potter, Nathaniel F., and W. H. Penner, Jr., Providence, R. I. Blackboard	290,651	Dec. 18	1617		25	1186
Potter, Samuel A., Cincinnati, Ohio, assignor of one-half to H. M. Howard. Bicycle	287,717	Oct. 30	2472	666	25	480
Potter, Thomas O., Boston, Mass. Suspenders	280,859	July 10	645	182	24	120
Potter, William E. N., Malden, Mass. Loom-shuttle threader	286,731	Oct. 16	1201	324	25	233
Potter, Wilson L., Hartford, Conn. Belt-fastening	270,117	Jan. 2	333	98	23	67
Pottinger and Styum Manufacturing Company. (See Reinl, John G., assignor.)						
Pottinger, T. J., et al. (See Le Grande, William W., assignor.)						
Pottinger, Thomas J., Louisville, Ky. Electrical connection for railway-signals	287,466	Oct. 30	2131	579	25	414
Potts, Antony W. (See Park, John C., assignor.)						
Potts, George, Indianapolis, Ind. Tile-machine	274,514	Mar. 27	1661	462	23	1142
Potts, George C., et al. (See Hughes, Henry A., assignor.)						
Potts, Joseph C., Berwyn, assignor to himself and J. H. Coates, Philadelphia, Pa. Weaving imitation seersucker fabric	284,145	Aug. 28	2059	571	24	893
Potts, William C. (See Gathright, Albert P., assignor.)						
Pound, Hugh, Portage, Wis. Slop-bucket	289,135	Nov. 27	1681	466	25	825
Pountney, William, Port Jervis, N. Y. Lamp-kettle	281,791	July 24	1840	503	24	339
Pountney, William, Port Jervis, N. Y. Glass lamp-chimney	289,932	Dec. 11	696	195	25	1015
Pouvert, Louis J. (See Davis, John T., assignor.)						
Powell, Benjamin B., Petoskey, Mich. Speed-changing mechanism	276,463	Apr. 24	2046	569	23	1601
Powell, Benjamin B., Petoskey, Mich. Propelling-wheel	286,149	Oct. 2	450	122	25	84
Powell, Benjamin B., and J. I. Atkins, Petoskey, Mich. Spring-motor	275,410	Apr. 10	717	191	23	1358
Powell, Charlie R. (See Childs and Powell.)						
Powell, Dorwin G., Aquetuck, N. Y. Thill or shaft tug for harness	277,927	May 22	1725	471	23	1942
Powell, Edwin R., Burlington, Vt. Treatment of milk for the manufacture of butter and cheese	275,263	Apr. 3	483	{ 134 135 }	23	1308



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Powell, Edwin R., Burlington, Vt. Apparatus for the treatment of milk for the manufacture of butter and cheese	275,264	Apr. 3	485	135	23	1308
Powell, Eugene, Delaware, Ohio. Sulky-plow	290,107	Dec. 11	907	257	25	1054
Powell, John B., Philadelphia, Pa. Universal shaft-coupling	288,855	Nov. 20	1339	367	25	756
Powell, John B., assignor to W. A. Drown, Philadelphia, Pa. Umbrella-runner	288,485	Nov. 13	887	241	25	670
Powell, John B., assignor to W. A. Drown, Philadelphia, Pa. Umbrella catch and runner	288,486	Nov. 13	888	241	25	670
Powell, John F. (See McKenzie and Powell.)						
Powell, John R., Plymouth, Pa. Seal for miners' squibs	288,484	Nov. 13	886	241	25	670
Powell, Joseph M., assignor of one-third to W. A. C. Murphy, Springfield, Mo. Water-wheel	276,538	Apr. 24	2140	595	23	1617
Powell, Louis F. (See Carley, Timothy L., assignor.)						
Powell, Louis F. (See Carley, Powell, and Boggs.)						
Powell, Martin L., New Castle, Ind. Door-opener	276,626	May 1	104	28	23	1645
Powell, Newman J., Pontiac, Ill. Fire-escape	287,467	Oct. 30	2133	579	25	414
Powell, Newman J., Pontiac, Ill. Fire-escape	291,001	Dec. 25	2085	575	25	1272
Powell, Robbert, Kansas City, Mo. Car-coupling	283,920	Aug. 28	1750	494	24	841
Powell, Thomas, Chester, Pa. Fan attachment for rocking-chairs	271,114	Jan. 23	1589	456	23	321
Powell, Uriah M., Dawson, Ga. Seeding-machine	273,146	Feb. 27	1920	557	23	809
Powell, Van Rensselaer. (See Smith, Allen C., assignor.)						
Power, Calvin O., West Newton, Pa. Sash-balance	282,367	July 31	2577	707	24	469
Power, Jesse T. (See Tague and Power.)						
Power, John W., Slatesville, Va. Flood and suspension fence	276,073	Apr. 17	1546	425	23	1507
Power, Nicholas H., New York, N. Y. Automatic advertising device	282,925	Aug. 7	531	150	24	595
Powers, Charles W., Jr., Bloomfield, N. J. Folding cot	273,306	Mar. 6	81	24	23	847
Powers, David J., assignor to Union Wire Mattress Company, Chicago, Ill. Folding bed	276,464	Apr. 24	2048	569	23	1601
Powers, James F. (See Duffy, Patrick, assignor.)						
Powers, Jay W., Chicago, Ill. Balloon for wrecking purposes	284,667	Sept. 11	619	{ 174 175 }	24	1015
Powers, Jay W., assignor of one-half to M. J. Moth, Winnetka, Ill. Pump	287,053	Oct. 23	1612	444	25	311
Powers, Jesse, Chicago, Ill. Ironing-machine	275,851	Apr. 17	1288	354	23	1461
Powers, William H. (See Walker, Joseph H., assignor.)						
Powers, William H. and J. H. Walker, Grand Rapids, Mich. Burial-casket	275,265	Apr. 3	487	135	23	1309
Pozanski, Joseph, assignor of one-half to H. M. Haar, New York, N. Y. Vent for casks	289,555	Dec. 4	230	64	25	927
P'Pool, Elbert S. (See P'Pool, Frank and E. S.)						
P'Pool, Frank and E. S., Edwards, Miss. Implement for cutting briars	280,667	July 3	393	110	24	70
Pradex, Frank J., Albany, N. Y. Preserving eggs	281,555	July 17	1516		24	279
Prado, Philip, Baltimore, Md. Photo-micrographic camera	274,515	Mar. 27	1664	462	23	1142
Pradon, Leopold, assignor to M. Lambert, Paris, France. Method of and apparatus for the manufacture of oil from resinous wood	276,981	May 1	582	153	23	1726
Pramann, Adolph. (See Smith, Adolph T., assignor.)						
Prang & Co., L. (See Lane, John, assignor.)						
Pratt, Jean P., and J. P. Laroche, Bordeaux, France. Extracting nickel from ores	276,074	Apr. 17	1547		23	1508
Prather, Amos W. (See Varney, Joseph M., assignor.)						
Prather, J. N. (See Matlick, Isaac N., assignor.)						
Prather, Willis M., Kansas City, Mo. Apparatus for cleaning cisterns	270,118	Jan. 2	333	98	23	67
Prator, Belton O., Montezuma, Ga. Quilting attachment for sewing-machines	283,660	Nov. 20	1099	301	25	714
Pratt, Aaron B., Cambridge, Mass. Funnel	281,727	July 24	1752	475	24	323
Pratt, Abijah, New York, N. Y. Hammock	273,358	Mar. 6	197	53	23	867
Pratt, David F., Gardner, Mass. Guide for rattan-splitting machines	286,957	Oct. 16	1483	407	25	282
Pratt, Edwin E. (See Lettelier, John G., assignor.)						
Pratt, Edwin E., Chicago, Ill., assignor to A. N. Kellogg Newspaper Company, of Illinois. Stereotype-block	284,757	Sept. 11	742	206	24	1036
Pratt, Eldridge S. (See Adams, Orseman T. X., assignor.)						
Pratt, Frederick W., et al. (See Bond, Nathan O., assignor.)						
Pratt, George M., Middletown, Conn. Burglar-alarm	290,605	Dec. 18	1565	430	25	1177
Pratt, Henry C., Canandaigua, N. Y. Corn planter and marker	274,027	Mar. 13	999	274	23	1013
Pratt, Henry C., Canandaigua, N. Y. Grain-drill attachment	284,572	Sept. 4	504	{ 141 142 }	24	989
Pratt, Henry C., Canandaigua, N. Y. Cultivator	289,708	Dec. 4	429	120	25	961
Pratt, Herbert W., Streator, Ill. Combined key-ring and button-hook	281,297	July 17	1197	331	24	225
Pratt, John, Centre, Ala. Quilting-frame	274,967	Apr. 3	110	31	23	1244
Pratt, John P., Milford, Mass. Boot-tree	275,411	Apr. 10	718	192	23	1358
Pratt, Lemuel C., Kalamazoo, Mich. Clutch	290,706	Dec. 25	1695	467	25	1206
Pratt & Letchworth. (See Basinger, James M., assignor.)						
Pratt, Nathaniel W., Brooklyn, N. Y. Steam-boiler	275,787	Apr. 10	1198	329	23	1439
Pratt, Nathaniel W., Brooklyn, N. Y. Steam-boiler	275,788	Apr. 10	1200	329	23	1439
Pratt, Nathaniel W., Brooklyn, assignor to Babcock & Wilcox Company, New York, N. Y. Boiler-front	273,600	Mar. 6	464	{ 125 126 }	23	914
Pratt, Nathaniel W., Brooklyn, assignor to Babcock & Wilcox Company, New York, N. Y. Hinge for boilers, stoves, &c.	273,601	Mar. 6	466	126	23	914
Pratt, Samuel L., Hingham, Mass. Stiletto	278,733	June 5	74	22	23	2137
Pratt, Samuel L., Hingham, Mass. Button-fastener	278,734	June 5	75	23	23	2137
Pratt, Samuel L., Hingham, Mass. Button-setting instrument	278,735	June 5	76	23	23	2137
Pratt, Samuel L., Hingham, Mass., and A. M. English, Providence, R. I.; said English assignor to said Pratt. Button-setting instrument	287,389	Oct. 23	2032	552	25	387
Pratt & Whitney Company. (See Tucker, William W., assignor.)						
Pratt, William, Fort Laramie, Wyo. Ter. Broken-shell extractor	280,239	June 26	1996	561	23	2488
Pratt, William B., Rahway, N. J. Suspenders	286,958	Oct. 16	1485	407	25	282
Pratt, William H., Rondout, N. Y. Steam heating attachment for stoves	272,768	Feb. 20	1492	420	23	716
Prentice, George W., Providence, R. I. Button-fastener	271,267	Jan. 30	1776	516	23	361
Prentice, George W., Providence, R. I. Button-fastener	272,318	Feb. 13	906	253	23	610
Prentice, George W., Providence, R. I. Button-setting instrument	274,028	Mar. 13	1000	274	23	1013
Prentice, George W., Providence, R. I. Setting-instrument	275,702	Apr. 10	1086	296	23	1420
Prentice, George W., Providence, R. I. Button-fastener	278,266	May 22	2154	592	23	2016
Prentice, George W., Providence, R. I. Button-fastener	278,360	May 29	2303	630	23	2051
Prentice, George W., Providence, R. I. Button-fastening	283,813	Aug. 28	1630	459	24	819
Prentice, George W., Providence, R. I. Button-fastening	284,978	Sept. 11	1000	282	24	1083
Prentice, George W., Providence, R. I. Attaching buttons	286,732	Oct. 16	1203	324	25	233
Prentice, George W., Providence, R. I. Lacing-button	287,659	Nov. 6	81	24	25	521
Prentice, George W., Providence, R. I. Attaching buttons	289,136	Nov. 27	1681	467	25	825
Prentice, George W., Providence, R. I. Button and fastener	290,353	Dec. 18	1219	342	25	1117
Prentice, George W., assignor to Heaton Button Fastener Company, Providence, R. I. Button-fastening	274,376	Mar. 20	1456	399	23	1100
Prentiss, Charles A., Washington, D. C. Gas-chamber in soda-water apparatus	288,487	Nov. 13	889	242	25	670

*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Prentiss, F. F., <i>et al.</i> (See Richards, Francis H., assignor.)						
Prentiss, Frederick H., Boston, and J. A. Tilden, Hyde Park, assignors to Automatic Fire Alarm Association, Boston, Mass. Electrical thermostat.	285,676	Sept. 25	1846	527	24	1247
Prenzlaue, Herman, <i>et al.</i> (See Gardner, Marshall, assignor.)						
Prescott, Charles W., <i>et al.</i> (See Carter, Alba B., assignor.)						
Prescott, Edward F., Lancaster, Mass. Portable head-rest.	278,361	May 29	2303	631	23	2051
Prescott, Edwin, Arlington, Mass. Lifting-jack.	272,899	Feb. 27	1684	471	23	756
Prescott, Edwin, Arlington, Mass. Sliding-car-door hanger.	275,852	Apr. 17	1289	354	23	1461
Prescott, Edwin, Arlington, Mass. Carpenter's square.	280,398	July 3	71	19	24	15
Prescott, Edwin, Arlington, Mass. Door-hanger.	283,279	Aug. 14	969	271	24	680
Prescott, Edwin, Springborough, Pa. End-gate for wagons.	277,779	May 15	1549	421	23	1906
Prescott, Edwin, Springborough, Pa. Running-gear.	277,780	May 15	1550	422	23	1906
Prescott, Morrill, Holyoke, Mass. Thread-guard for spinning-machines.	285,072	Sept. 18	1129	315	24	1112
Presley, William, Washington, D. C. Propelling boats, &c.	284,325	Sept. 4	206	57	24	939
Pressler, Henry. (See Shindelbower and Pressler.)						
Prest, John E., Fall River, Mass. Drawing-frame and art of drawing and doubling slivers.	277,606	May 15	1349	363	23	1869
Prest, John E., Fall River, Mass. Thread-guard for ring-spinning frames.	279,798	June 19	1457	408	23	2387
Preston, Charles A., Norwalk, Ohio. Grate-blower.	278,736	June 5	77	23	23	2137
Preston, Charles H., Detroit, Mich. Nut-lock.	279,182	June 12	718	196	23	2256
Preston, David R., Whitewater, Wis. Platform adjustment for harvesters.	278,596	May 29	2581	705	23	2099
Preston, Edward F., <i>et al.</i> (See Mercer, John T., assignor.)						
Preston, Everett B. (See McGaffey, Ives W., assignor.)						
Preston, Everett B., Chicago, Ill. Hose-fastener.	282,466	July 31	2703	743	24	491
Preston, Everett B., Chicago, Ill. Hose-fastener.	282,467	July 31	2704	743	24	491
Preston, James, <i>et al.</i> (See Barnard, Charles S., assignor.)						
Preston, James, New York, N. Y. Boiler-hoe.	280,951	July 10	763	211	24	140
Preston, James, assignor of one-half to S. A. Burns and C. A. Cook, New York, N. Y. Pump-frame.	274,141	Mar. 20	1152	317	23	1047
Preston, John, Indianapolis, Ind. Binder-truck.	270,841	Jan. 16	1254	361	23	260
Preston, John, Indianapolis, Ind. Horse-power.	270,983	Jan. 23	1436	414	23	296
Preston, Justus M., and J. L. Bacon, Joliet, Ill. Heating-furnace.	288,856	Nov. 20	1341	368	25	756
Pretty, William, Jr., Ipswich, county of Suffolk, England, assignor to L. C. Warner, New York, N. Y. Binding attachment for sewing-machines.	273,602	Mar. 6	467	126	23	914
Pretty, William, Jr., Ipswich, county of Suffolk, England, assignor to L. C. Warner, New York, N. Y. Folding and binding attachment for sewing-machines.	273,890	Mar. 13	840	228	23	986
Preusser, Albin, assignor to H. Gruson, Buckau, near Magdeburg, Prussia, Germany. Mounting guns.	281,643	July 17	1627	445	24	297
Preusser, Richard F., Lambertville, N. J. Sad-iron.	289,709	Dec. 4	432	120	25	961
Preux, Joseph. (See Wells and Preux.)						
Prew, David, Providence, R. I. Brake-shoe.	277,159	May 8	823	216	23	1773
Price, Charles C., Jr., Elizabeth City, N. C. Cotton-picking machine.	279,799	June 19	1458	408 409 410	23	2387
Price, Edward G. (See Geibel and Price.)						
Price, Edward P., assignor of one-half to D. Reed, Canton, Ohio. Nut-lock.	270,119	Jan. 2	334	98	23	68
Price, George B., Philadelphia, Pa. Pressure regulator or governor.	273,389	Mar. 6	197	53	23	868
Price, George C., and G. W. F. Cook, assignors of one-third to W. C. Price, San Francisco, Cal. Slate-pencil sharpener.	284,326	Sept. 4	208	58	24	939
Price, George W., Baltimore, assignor to B. N. Baker, Baltimore County, Md. Steam-actuated valve.	290,354	Dec. 18	1219	343	25	1117
Price, H. Clay, Montclair, N. J., assignor to Scovill Manufacturing Company, Waterbury, Conn. Apparatus for washing photographic plates.	276,875	May 1	438	117	23	1703
Price, Henry F., Brooklyn, N. Y. Fishing-tackle case.	275,703	Apr. 10	1087	297	23	1420
Price, Jacob, San Leandro, Cal. Two-wheeled vehicle.	286,733	Oct. 16	1203	324	25	233
Price, John A., Scranton, Pa. Furnace-grate.	276,876	May 1	439	117	23	1704
Price, John A., Scranton, Pa. Range.	277,781	May 15	1551	422	23	1906
Price, John A., Scranton, Pa. Cooking stove or range.	278,267	May 22	2155	592	23	2016
Price, John A., Scranton, Pa. Furnace-grate.	282,565	Aug. 7	111	33	24	519
Price, John A., Scranton, Pa. Stove or range.	284,330	Sept. 4	95	26	24	921
Price, John B., Wollaston, Mass. Sewing-machine.	270,984	Jan. 23	1437	414	23	296
Price, Parker, Sandy Run, Pa. Railway-station indicator.	282,112	Nov. 6	399	113	25	577
Price, Robert. (See Massey, John T., assignor.)						
Price, Thomas R., Knoxville, Tenn. Table.	285,362	Sept. 18	1469	413	24	1171
Price, Wallace C. (See Price and Cook, assignors.)						
Price, William. (See Jenkins, Law, and Price.)						
Price, William, assignor of one-half to I. Baker, Erie, Pa. Spring-bed.	280,762	July 3	522	146	24	92
Prichard, George, Prichardville, Mich. Corn-sheller.	287,718	Oct. 30	2473	667	25	480
Prickett, Joshua, assignor of two-thirds to W. S. Prickett and A. H. Mellen, Marinette, Wis. Machine for reducing wood to paper-pulp.	277,060	May 8	691	180	23	1750
Prickett, Walter S., <i>et al.</i> (See Prickett, Joshua, assignor.)						
Priddy, Thomas B., assignor to Barnes Manufacturing Company, New Haven, Conn. Pad-lock.	280,327	June 26	2107	591	23	2507
Pridmore, Henry E. (See Baker and Pridmore.)						
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Harvester.	270,120	Jan. 2	335	98, 99	23	68
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Harvester-reel.	270,910	Jan. 23	1341	387	23	281
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Clutch.	272,152	Feb. 13	706	194	23	574
Prier, Anton, C. Doherty, and P. E. Everett, Kansas City, Mo. Self-closing faucet.	278,597	May 29	2582	705	23	2099
Prier, Anton, C. Doherty, and P. E. Everett, Kansas City, Mo. Self-acting faucet.	289,710	Dec. 4	432	121	25	961
Priest, Ebenezer. (See Newsom, John B., assignor.)						
Prieto, Demetrio, Mexico, Mexico. Machine for disintegrating fibrous plants.	278,668	May 29	2673	731 732	23	2115
Primus, Nelson A., Somerville, Mass. Thill-coupling.	274,656	Mar. 27	1829	508	23	1172
Prince, Benjamin M. (See Chamberlain, William T., assignor.)						
Prince, David, assignor to J. S. and I. S. Cohen, New York, N. Y. Fur cape and waist.	286,959	Oct. 16	1485	408	25	282
Prince, Frederick H. (See Eaton and Prince.)						
Prince, John, West Randolph, Vt. Hoop-shaving machine.	274,029	Mar. 13	1002	274	23	1013
Prince, Louis, Washington, D. C. Brick-mold and brick.	278,268	May 22	2156	592	23	2016
Pringle, George T. (See Murray, Edward L., assignor.)						
Printup, John C. (See Wimpee and Printup.)						
Printup, John C., Rome, Ga. Spark-arrester.	288,488	Nov. 13	890	242	25	670



*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Printz, Silas W. (See Woliston and Printz.)						
Prinz, Faustin, Dundas, Minn. Dust-collector for flour-mills	272,473	Feb. 20	1115	315	23	650
Prinz, Faustin, Milwaukee, Wis. Dust-collector for flour-mills	272,474	Feb. 20	1116	315	23	650
Prinz, Faustin, assignor of one-fourth to J. K. Gehrig, Dundas, Minn. Middlings-purifier.	272,475	Feb. 20	1121	316	23	651
Prior, George W., Boeger's Store, Mo. Shaft attachment for vehicles	287,468	Oct. 30	2133	579	25	415
Prior, Gilbert S., assignor of one-half to G. G. Batchelder, Boston, Mass. Bottle-stopper	290,192	Dec. 11	1005	283	25	1072
Prior, John T., Prior's Station, Ga. Wheel-tire	273,147	Feb. 27	1981	557	23	809
Prior, John T., Prior's Station, Ga. Plow and cultivator combined	286,485	Oct. 9	877	237	25	170
Prior, Samuel, Trenton, N. J. Heel for boots or shoes	276,279	Apr. 24	1804	503	23	1560
Pritchard, Arthur J. (See Lindsey and Raleigh, assignors.)						
Pritchard, Arthur W., Allegheny, Pa. Platen shifting attachment for type-writing machines	284,231	Sept. 4	96	26	24	921
Pritchard, Nathaniel J., Boyce, Va., assignor of three-fourths to D. E. Clark, Chambersburg, Pa., and C. L. Pagenhart, Boyce, Va. Rotary engine	286,844	Oct. 16	1342	367	25	258
Privett, John D., Oxford, Ala. Harrow	274,819	Mar. 27	2019	562	23	1206
Probst, Hermann. (See Sidersky and Probst.)						
Proctor, Charles. (See Scott and Proctor.)						
Proctor, Josiah K., assignor to J. Smith Woolen Machinery Company, Philadelphia, Pa. Friction-clutch	286,556	Oct. 9	969	261	25	186
Proctor, Josiah K., assignor to J. Smith Woolen Machinery Company, Philadelphia, Pa. Sleeve-journal for shafts	288,489	Nov. 13	891	242	25	670
Prothrook, Charles, Hadley, Mich. Plow	283,659	Aug. 21	1426	399	24	771
Propach, Henry, New York, N. Y. Dress-chart	278,160	May 22	2035	559	23	1906
Prosser, Robert W., Trenton, N. J. Saw-tooth	272,319	Feb. 13	906	254	23	610
Prosser, Thomas, assignor of one-half to J. Dumaresq, Montreal, Quebec, Canada. Apparatus for operating self-flushing closets	279,183	June 12	719	196	23	2256
Prosser, William S., Auburn, Cal. Feeding straw as fuel to furnaces	279,012	June 5	485	132	23	2306
Protze, Hermann, Elberfeld, Prussia, Germany. Preserving vaccine	273,390	Mar. 6	198		23	868
Prout, Albert P., Woodhaven, N. Y. Spike-extractor	271,268	Jan. 30	1777	516	23	361
Prout, Albert P., Wood Haven, N. Y. Spike-extractor	276,877	May 1	440	{ 117 118 }	23	1704
Prouty, George W., Boston, Mass., assignor to Prouty Press Company, Hartford, Conn. Printing-press	290,267	Dec. 18	1111	312	25	1098
Prouty, George W., assignor of one-half to T. S. Nowell, Boston, Mass. Printing-press for printing on wood	291,002	Dec. 25	2087	575	25	1273
Prouty Press Company. (See Prouty, George W., assignor.)						
Provancher, Emanuel M., Vallejo, Cal. Gas-purifying screen	272,582	Feb. 20	1261	352	23	675
Provoost, John M., Buffalo, N. Y. Telephone-call indicator	276,465	Apr. 24	2050	569	23	1601
Pruim, Hiram P., Grand Haven, Mich. Breast-pin	288,490	Nov. 13	892	242	25	670
Pruitt, John W., Russellville, Ark. Ratchet-wrench	283,357	Aug. 14	1074	301	24	700
Pruitt, Thomas H., Sioux Falls, Dak. Ter. Weather-strip	279,501	June 12	1114	307	23	2319
Prüsmann, Carl H., assignor to Schaffer & Budenberg, Buckau-Magdeburg, Germany. Tachometer	288,593	Nov. 13	1013	278	25	693
Pruss, Louis W., Minneapolis, Minn. Flour-dresser	271,360	Jan. 30	1904	551	23	383
Pruss, Louis W., Minneapolis, Minn. Flour-dressing machine	271,361	Jan. 30	1908	{ 551 552 }	23	384
Pruss, Louis W., Minneapolis, Minn. Centrifugal reel	283,814	Aug. 28	1631	{ 459 460 }	24	819
Prutzman, Joseph. (See Souders and Prutzman.)						
Prunz, Robert L., Baton Rouge, La. Fire-escape	274,657	Mar. 27	1830	508	23	1173
Pryor, Hart E., Ravenna, Ohio. Grain-cutting machine	279,594	June 19	1228	341	23	2347
Pryor, John D. (See Bull, George, assignor.)						
Pryor, John D. (See Rigby, Nicholas L., assignor.)						
Pryor, Joseph F., Houghton, Mich. Car-coupling	279,800	June 19	1463	410	23	2388
Puffer, Alvin D., Medford, Mass. Mixer or agitator for soda-water apparatus	269,959	Jan. 2	161	47	23	34
Puffer, Alvin D., Medford, Mass. Fountain	278,269	May 22	2157	{ 592 593 }	23	2016
Puffer, Alvin D., Medford, Mass. Acid-carboy support	280,860	July 10	646	182	24	120
Puffer, Alvin D., Jr., and L. W., Medford, Mass. Aerated-water apparatus	275,076	Apr. 3	255	71	23	1270
Puffer, Luther W. (See Puffer, Alvin D., Jr., and L. W.)						
Puffer, S. B., et al. (See Coram, John C., assignor.)						
Pugh, John W., assignor of one-fourth to A. Pew, Goshen, Ind. Combined saw set and jointer	274,030	Mar. 13	1003	{ 274 275 }	23	1014
Pugh, William G., assignor of one-half to L. R. Smoot, Baltimore, Md. Gas-burner check	279,595	June 19	1229	341	23	2347
Pugsley, Eugene F. (See Young and Pugsley.)						
Pullen, Alexander. (See Burr, Daniel, assignor.)						
Pullen, Joseph, assignor of two-thirds to G. Jenifer, Chicago, and H. H. Evans, Aurora, Ill. Counter-seat	271,511	Jan. 30	2099	603	23	418
Pullman, Albert B. (See Cloes, Benjamin J., assignor.)						
Pullman, Albert B., et al. (See Jackson, Andrew, assignor.)						
Pullman Door Check Company. (See Fieder, F. William, assignor.)						
Pullman, Herbert S., Rockville, assignor to Sargent & Co., New Haven, Conn. Snap-hook	275,266	Apr. 3	488	136	23	1309
Pulson, Sven, Worcester, and M. L. Snow, Sterling, Mass. Composition for emery and corundum wheels and other tools	275,704	Apr. 10	1088		23	1420
Pulson, Sven, and M. L. Snow, Worcester County, Mass. Apparatus for packing emery-wheels and similar articles for burning	287,469	Oct. 30	2134	590	25	415
Pulver, Henry. (See Candrian, Herman A., assignor.)						
Pulver, William J., Paw Paw, Ill. Harvester-reel	270,336	Jan. 9	606	{ 178 179 }	23	128
Pumphrey, Henry F., Fairfield, Iowa. Coupling for wires of electric conductors	270,478	Jan. 9	790	231	23	164
Purcell, William H., Elizabeth City, N. C. Chest-protector	288,857	Nov. 20	1342	368	25	756
Purdey, James. (See Beesley, Frederick, assignor.) (Reissue.)						
Purdie, Charles F., Detroit, Mich. Capsule-machine	276,280	Apr. 24	1804	503	23	1560
Purdie, Charles F., Detroit, Mich. Capsule-machine	276,281	Apr. 24	1806	503	23	1560
Purdie, Charles F., Detroit, Mich. Capsule-machine	276,282	Apr. 24	1807	503	23	1560
Purdie, Charles F., assignor, by mesne assignments, to F. A. Hubel, Detroit, Mich. Capsule-machine	289,780	Dec. 4	504	140	25	974
Purdy, Charles G. W., Brooklyn, N. Y. Machine for felting hat-bodies	281,134	July 10	980	274	24	160
Purdy, Clement E., Wooster, Ohio. Skate	279,105	June 5	618	168	23	2228
Purdy, George, Allegheny, Pa. Shaft-tow	277,782	May 15	1552	422	23	1906
Purdy, James H., and C. T. Welch, Bellona, N. Y. Seeding-machine	288,661	Nov. 20	1100	302	25	714
Purdy, John N., St. John, New Brunswick, Canada. Anchor catter and fisher	274,979	Sept. 11	1001	282	24	1063
Purdy, John S., Brooklyn, N. Y. Fountain-pen	279,104	June 5	616	168	23	2228
Purdy, Louise J., St. Louis, Mo. Pattern-tracer	284,573	Sept. 4	596	142	24	969

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Purefoy, Addison F., Wake Forest, N. C. Spring bed-bottom	278,362	May 29	2305	631	23	2051
Purefoy, Addison F., Wake Forest, N. C. Spring bed-bottom	279,013	June 5	486	133	23	2206
Purnell, James C., <i>et al.</i> (See Gibson, James E., assignor.)						
Pursell, John, Sr., New Haven, Conn. Reclining-chair	271,512	Jan. 30	2100	604	23	419
Pursley, James S., Atlanta, Ga. Corn-sheller	281,921	July 24	1998	547	24	367
Pursley, James S., Atlanta, Ga. Tire-tightener	288,954	Nov. 20	1459	403	25	778
Pursley, John J., Wetmore, Kans. Car-coupling	271,655	Feb. 6	83	23	23	455
Purslow, John W., Durango, Colo. Car-coupling link	273,148	Feb. 27	1982	557	23	809
Purslow, John W., Durango, Colo. Machine for twisting hay rope	275,267	Apr. 3	489	136	23	1309
Purves, Thomas B., and T. C. Craven, Greenbush, N. Y. Draw-bar	271,269	Jan. 30	1778	516 517	23	361
Purves, Thomas C., Chicago, Ill. Apparatus for cleaning steam-boilers	276,627	May 1	104	28	23	1645
Purvis, William B., assignor of one-half to L. E. Pfeiffer, Philadelphia, Pa. Hand-stamp	273,149	Feb. 27	1982	557 558	23	809
Pusch, Johann, Blue Island, assignor of one-half to L. J. Kadish, Chicago, Ill. Hermetic apparatus for racking beer	274,516	Mar. 27	1665	463	23	1142
Pusey, Joshua, Philadelphia, Pa. Match-igniter	271,737	Feb. 6	180	49	23	471
Pusey, Joshua, Philadelphia, Pa. Hose-carriage	271,738	Feb. 6	181	49	23	472
Pusey, Joshua, Philadelphia, Pa. Crayon-holder	275,517	Apr. 10	855	232	23	1380
Pushce, Charles B., Mason City, Iowa. Foot-scraper	286,329	Oct. 9	701	187	25	137
Putnam, George F., Fonda, N. Y. Vehicle-spring	281,728	July 24	1753	476	24	323
Putnam, John, and F. E. Berry, Rushville, Ill. Check-rower	285,764	Sept. 25	1965	557	24	1266
Putnam, Bayard T., Newport, R. I. Combined protractor and chart-holder	280,328	June 26	2108	591	23	2507
Putnam, George L., Mount Vernon, N. Y. Railway metallic cross-tie and trough	285,842	Oct. 2	74	22	25	15
Putnam, Henry W., Bennington, Vt. Bottling-machine	272,153	Feb. 13	707	194	23	574
Putnam, Jacob D., Lowell, Mass. Furnace for glass-factories, &c.	287,470	Oct. 30	2135	580	25	415
Putnam, John G. W., Saratoga Springs, N. Y. Coal-sieve	287,161	Oct. 23	1746	478	25	337
Putnam, John P., Boston, Mass. Water-closet and similar receptacles	285,924	Oct. 2	186	54	25	36
Putnam, John P., Boston, Mass. Water-closet and similar receptacles	285,925	Oct. 2	189	54	25	37
Putnam, John P., Boston, Mass. Water-closet	285,926	Oct. 2	191	54	25	37
Putnam, John P., Boston, Mass. Water-closet	285,927	Oct. 2	192	54	25	37
Putnam, John P., Boston, Mass. Water-closet	285,928	Oct. 2	193	55	25	37
Putnam, Joseph W., New Orleans, La. Trunk-strap	276,466	Apr. 24	2051	570	23	1601
Putnam, Simeon L. (See Putnam, Wendell P., and S. L.)						
Putnam, Theodore A. B., New York, N. Y. Carrier for underground wires, &c.	282,010	July 24	2100	576	24	384
Putnam, Theodore A. B., New York, N. Y. Insulated rail-joint	284,668	Sept. 11	620	175 176	24	1015
Putnam, Theodore A. B., New York, N. Y. Railway-crossing gate or signal	284,669	Sept. 11	622	176	24	1015
Putnam, Theodore A. B., New York, N. Y. Electrically operating railway gates or signals	284,670	Sept. 11	626	177	24	1016
Putnam, Theodore A. B., New York, N. Y. Automatic shunt-relay or circuit-closer	289,137	Nov. 27	1082	467	25	825
Putnam, Wendell P., Watertown, Mass. Curtain-fixture	279,891	June 19	1464	410	23	2388
Putnam, Wendell P., Watertown, Mass. Curtain-fixture	279,892	June 19	1465	410	23	2388
Putnam, Wendell P., Watertown, and S. L. Putnam, Boston, Mass. Curtain-fixture	279,893	June 19	1465	411	23	2388
Puvrez, Oscar, Lenze, Belgium. Filter for the manufacture of sugar, &c.	286,960	Oct. 16	1486	408	25	282
Pyle, Alexander, <i>et al.</i> (See Darling, James D., assignor.)						
Pyle, Cyrus, <i>et al.</i> (See Fuller, Willard M., assignor.)						
Pyle, George C., assignor to himself and A. M. Sullivan, Dayton, Ohio. Feed-water regulator	279,014	June 5	491	133	23	2207
Pyles, Newton O. (See Davis and Pyles.)						
Pylvit, Louis T., Philadelphia, Pa. Portable hoisting-machine	271,115	Jan. 23	1589	457	23	321
Pylvit, Louis T., Philadelphia, Pa. Driving device for metal-planers	273,150	Feb. 27	1984	558	23	809
Pylvit, Louis T., Philadelphia, Pa. Elevated railway, bridging, &c.	276,878	May 1	441	118	23	1704
Quackenbush, Henry M. (See Haviland and Gunn, assignors.)						
Quatremaire, George W., Stratford-on-Avon, county of Warwick, assignor to A. L. Bricknell, Buxton, England. Driving-gear for velocipedes	287,960	Nov. 6	217	61, 62	25	545
Queen City Sewing Machine Company. (See Darling and Kitzmiller, assignors.)						
Quer, Daniel, Atkinsonville, Ind. Suspension railway-car	277,783	May 15	1553	423	23	1706
Quefil, Charles J., Albuquerque, N. Mex. Ter. Elevated tramway, &c.	278,819	June 5	189	55	23	2155
Quick, Joseph and Joseph, Jr., Westminster, England. Tramway-locomotive	276,075	Apr. 17	1548	426 427	23	1508
Quigley, George, <i>et al.</i> (See Edwards, William F., assignor.)						
Quigley, Robert J., Toronto, Ontario, Canada. Joint for watch-cases	288,184	Nov. 6	482	134	25	591
Quimby, John H., Concord, N. H. Railway-switch	275,518	Apr. 10	857	232	23	1380
Quinet, Ildephense, and A. Denis, Denain, France. Apparatus employed in sinking pits or shafts	284,895	Sept. 11	897	253	24	1064
Quinette, Jermain P., St. Louis, Mo. Hame	283,815	Aug. 28	1634	460	24	820
Quinlan, John, Denver, Colo. Liniment	282,769	Aug. 7	337		24	562
Quinlan, Peter B. (See Milne and Gants, assignors.) (Reissue.)						
Quinlan, Washington. (See Brown, Morgan W., assignor.)						
Quinn, Daniel O. (See Parkhill, Joseph H., assignor.)						
Quinn, John F. (See Mack, Albert G., assignor.)						
Quinn, John J., Burlington, N. J. Brush for cleaning milk-cans	287,719	Oct. 30	2474	667	25	480
Quinn, Mary V., Faribault, Minn. Button-pin	286,222	Oct. 9	539	148	25	109
Quinn, Michael, Fishkill Landing, N. Y. Lathe for turning ovals	270,479	Jan. 9	790	231	23	164
Quinn, Patrick. (See Buckalew and Quinn.)						
Quinque, August, assignor to himself and J. R. Z. Keelor, Harleysville, Pa. Cribbing-plate	287,577	Oct. 30	2284	618	25	444
Quinsier, George J., Boston, Mass. Speaking-tube apparatus	277,508	May 15	1230	331	23	1850
Quint, Henry F. (See Maxwell and Quint.)						
Quirin, Emil J. F., Tioga Centre, N. Y. Pulp-washing machine	284,232	Sept. 4	97	27	24	921
Raab, Joseph, Dayton, Ohio. Turbine water-wheel	279,981	June 26	1688	474	23	2433
Raab, Peter, Warren, Ind. Road grader and scraper	288,261	Nov. 13	587	162	25	618
Raatha, Heinrich, Appleton, Wis. Plow	287,720	Oct. 30	2475	667	25	480
Rabl, Franz, assignor to Atlantic and Pacific Electric Manufacturing Company, Camden, N. J. Electric-arc lamp	280,763	July 3	524	147	24	93
Race, James H., Brooklyn, N. Y. Combined collar-button and scarf-ring	275,412	Apr. 10	720	192	23	1358
Race, James H., Brooklyn, N. Y. Running-gear for suspension-engines	280,306	Nov. 27	1882	524	25	863
Radcliffe, Edwin S., St. Paul, Minn. Suction-ventilator	272,553	Feb. 20	1262	352	23	675
Radcliff, Charles, Newark, N. J. Button	289,138	Nov. 27	1685	468	25	825
Raddish, John, Lynn, Mass. Safety attachment for car-trucks	273,307	Mar. 6	82	24, 25	23	848
Raddish, John, Lynn, Mass. Safety attachment for car-trucks	273,308	Mar. 6	83	25	23	848
Rader & Co. G. W. (See Esterbrook, William P., assignor.)						
Rader, David H., Gilroy, and J. Malsbury, Hollister, Cal. Grain thrasher and cleaner	273,391	Mar. 6	199	53, 54	23	868
Radford, Thomas, assignor of four-fifths to J. B. and W. Stevenson, M. T. Scott, and W. Radford, Bloomington, Ill. Rock-drill	272,977	Feb. 27	1771	495	23	771



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Radford, William, <i>et al.</i> (See Radford, Thomas, assignor.)						
Radovich, Lazarus, San Francisco, Cal. Rock-breaker	286,223	Oct. 9	539	148	25	109
Rae, John, New York, N. Y. Magnetic ore-separator	273,309	Mar. 6	84	25	23	848
Rae, John C. (See Hosford, Seymour A., assignor.)						
Rae, John C., Elmira, N. Y. Seal-lock	272,769	Feb. 20	1493	420	23	716
Raenble, William, Boston, Mass. Button-hole sewing-machine	277,928	May 22	1726	471	23	1942
Rafer, Edmond. (See Rafer, Engène and E.)						
Rafer, Ernest E. and E. G., assignors to Alamagny & Oriol, St. Chamond, France. Machine for making electric cables	280,764	July 3	525	147	24	93
Rafer, Engène and E., assignors to Société Industrielle des Tresses & Lacets de Saint Chamond, Saint-Chamond, France. Braiding-machine	278,669	May 29	2675	732	23	2116
Rafer, Eugène G. (See Rafer, Ernest E. and E. G.)						
Raffensparger, Christian M., assignor of one-half to G. M. Bair, Hanover, Pa. Automatic railway-signal	287,961	Nov. 6	219	62	25	545
Raffle, Sarah R., Baltimore, Md. Corset-protector	278,043	May 22	1867	510	23	1967
Raggio, Charles A., Chicago, Ill. Faucet and racking valve	283,021	Aug. 14	657	185	24	624
Rahn, Conrad, Shannon, Ill. Pessary	273,603	Mar. 6	468	126	23	914
Rahn, John W. (See Moore and Rahn.)						
Rahsskopf, Carl. (See Schmidt and Rahsskopf.)						
Railroad Safety Lock and Signal Company. (See Phelps, William P., assignor.)						
Railroad Safety Lock and Signal Company. (See Shafer, William C., assignor.)						
Railroad Safety Lock and Signal Company. (See Shafer and White, assignors.)						
Rainwater, Almarine P. (See Rainwater, Charles A., J. H., and A. P.)						
Rainwater, Charles A., J. H., and A. P., Veazey, Ga. Cultivator	285,073	Sept. 18	1129	316	24	1112
Rainwater, Joseph H. (See Rainwater, Charles A., J. H., and A. P.)						
Rairigh, William K., St. Petersburg, Pa. Safety-hook	271,116	Jan. 23	1590	457	23	321
Rairigh, William K., St. Petersburg, Pa. Safety-hook	273,310	Mar. 6	86	26	23	848
Raisbeck, George A. (See Hake and Raisbeck.)						
Raker, John. (See Barber and Raker.)						
Raleigh, Harry W. (See Lindsey and Raleigh.)						
Raleigh, John A., Columbia, Ala. Coffee-filter	288,491	Nov. 13	892	243	25	671
Ralph, Matthias, Sr., Ursa, Ill. Car-coupling	284,896	Sept. 11	898	253	24	1064
Ralston, David, Troy, N. Y. Machine for sanding brick-molds	271,964	Feb. 6	491	132	23	525
Ralston, David, Troy, N. Y. Brick-tongs	272,330	Feb. 13	907	254	23	610
Ralston Gas Engine and Manufacturing Company. (See Serrell and Ward, assignors.)						
Ralston, John. (See Hay and Ralston.)						
Ralu, Adrien, fils, Paris, France. Treating and ameliorating alcohols and alcoholic liquors	273,604	Mar. 6	469	.....	23	914
Ramacciotti, Francis, New York, N. Y. Spinning-lathe for winding piano-strings	280,512	July 3	215	56, 57	24	39
Ramage, Alexander, Russell Gulch, Colo. Lamp	280,240	June 26	1997	562	23	2488
Ramage, Charles E., Allegheny, Pa. Slate-cleaner	277,341	May 8	1031	277	23	1810
Ramsay, Alexander. (See Macfarlane, Thomas, assignor.)						
Ramsay, Charles W., Brooklyn, assignor to C. B. Hotchkiss, New York, N. Y. Apparatus for treating fermented, fermentable, and distilled liquors	271,656	Feb. 6	84	23	23	455
Ramsey, George W., assignor of one-half to D. A. Morton, Madisonville, Ky. Meat-tenderer	282,566	Aug. 7	112	34	24	519
Ramsey, Joseph T., Helena, Ark. Neck-yoke	288,364	Nov. 13	730	198	25	642
Ramsey, Lewis F. (See Griffith and Ramsey.)						
Ramseyer, George A., Dobbs Ferry, N. Y. Piano-stool	282,926	Aug. 7	532	150	24	595
Rand, Addison C. (See Divine and Rand.)						
Rand, Walter M., Olney, Ill. Feed-hopper	272,321	Feb. 13	908	254	23	610
Randall, Amelia A. (See Randall, Silas G., assignor.)						
Randall, Bellville L., Boston, Mass. Saw-set	279,015	June 5	491	133	23	2207
Randall, Calvin E., Natick, Mass. Eyelet-hole attachment for sewing-machines	270,696	Jan. 16	1081	310	23	227
Randall, Charles A., New York, N. Y. Telephone-exchange system	270,556	Jan. 9	897	259	23	185
Randall, Charles A., New York, N. Y. Telephone system and apparatus	271,513	Jan. 30	2102	604	23	419
Randall, Francis W., Tekonsha, Mich. Reversing-gear for engines	270,842	Jan. 16	1255	361	23	260
Randall, Francis W., Tekonsha, assignor to W. E. Hill and G. W. Miller, Kalamazoo, Mich. Railway-velocipede	270,480	Jan. 9	791	231	23	164
Randall, Francis W., Tekonsha, assignor to G. W. Miller and W. E. Hill, Kalamazoo, Mich. Wheel	270,481	Jan. 9	792	231	23	164
Randall, Frank C., Joliet, Ill. Check-rower for seed-planters	272,476	Feb. 20	1125	316	23	651
Randall, Frank J., <i>et al.</i> (See Chandler and Williams, assignors.)						
Randall, George F., <i>et al.</i> (See Ellis, Aldridge C., assignor.)						
Randall, Gordon P., Chicago, Ill. Heating-furnace	273,151	Feb. 27	1984	558	23	810
Randall, Horace A., <i>et al.</i> (See Ellis, Aldridge C., assignor.)						
Randall, Isaac H., Boston, Mass. Car-truck	272,154	Feb. 13	709	194	23	574
Randall, James, Norwich, Conn. Lock for fire-arms	289,856	Dec. 11	607	169	25	1000
Randall, K. E., <i>et al.</i> (See Waugh, Johnson S., assignor.)						
Randall, Lucius A., Birmingham, Mich. Latch	273,152	Feb. 27	1985	559	23	810
Randall, Silas G., Greene, N. Y. Automatic gaveling-rake for harvesters	290,801	Dec. 25	1824	503 504	25	1229
Randall, Silas G., assignor to A. A. Randall, Greene, N. Y. Seeding-machine	284,060	Aug. 28	1942	543	24	874
Randall, William H., San Francisco, Cal. Rock-drill	281,922	July 24	1999	548	24	367
Randall, William W., Marshfield, assignor of one-half to H. C. Barnes, Boston, Mass. Box-fastener	275,853	Apr. 17	1290	354	23	1462
Randel, Charles D., assignor of one-half to W. Brockner, New York, N. Y. Wire-bending machine for bale-ties	271,514	Jan. 30	2104	605	23	419
Randel, Charles D., and W. Brockner, New York, N. Y. Apparatus for attaching harbs to fence-wires	286,636	Oct. 16	1079	291	25	212
Randel, William, St. Albans, Vt., and R. Sims, Glens Falls, assignors to E. A. King, Troy, N. Y. Button-hole attachment for sewing-machines	276,709	May 1	226	57, 58	23	1663
Randolph, George W. (See Carruth, William H., assignor.)						
Randolph, Mahlon, New York, assignor of one-half to M. A. Case, Brooklyn, N. Y. Combined pneumatic grain elevator, conveyer, and cleaner	276,879	May 1	441	119	23	1704
Randolph, Theodore F., Cincinnati, Ohio. Surveyor's compass	282,117	July 31	2259	620	24	415
Range, Otis J., assignor to C. Parker Company, Meriden, Conn. Coffee-mill	272,584	Feb. 20	1263	352	23	676
Rank, Anson M. (See Piper, Jacob M., assignor.)						
Rankin, John R., Indianapolis, Ind. Printer's ink-fountain	273,605	Mar. 6	470	127	23	914
Rankin, Matthew. (See Bolton and Rankin.)						
Rankin, Matthew. (See Bolton, Strieby, and Rankin.)						
Rankin, Robert P., Clayton, Ind. Automatic elevator-guard	288,113	Nov. 6	401	113	25	577
Rankin, Thomas L., New York, N. Y. Ice-machine	270,121	Jan. 2	340	100	23	69
Rankin, Thomas L., New York, N. Y. Ice-machine	270,193	Jan. 2	429	124 125	23	88

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Ranney, Henry C. (See Hatfield, Lyman, assignor.)						
Ranney, William C., Elbridge, N. Y. Caster attachment to rockers	287,721	Oct. 30	2476	667	25	480
Ransom, Frank H., Buffalo, N. Y. Trunk or box	270,697	Jan. 16	1083	311	23	227
Ransom, Jonathan H., Jr., Boston, Mass. Nut-lock	275,705	Apr. 10	1088	297	23	1420
Ransom, Newman A., assignor to Chicago Gas Apparatus Manufacturing Company, Chicago, Ill. Apparatus for carbureting gas	275,268	Apr. 3	490	136	23	1309
Rantz, Andrew M., Cambridgeport, and C. L. Engelhardt, Boston, Mass. Sash-fastener	275,706	Apr. 10	1089	297	23	1420
Raoul, Gaston T. (See King, Hezekiah O., assignor.)						
Rapp, Almire H., Paris, France, assignor of one-half to A. Gerry, trustee, New York, N. Y. Stone-channeling machine	281,135	July 10	981	274	24	180
Rapp, Christian F. (See Dudley and Rapp.)						
Rapp, Christian F., Cincinnati, Ohio. School-slate	289,711	Dec. 4	433	121	25	962
Rasck, George P., Des Moines, Iowa. Station-indicator	271,965	Feb. 6	492	133	23	525
Rasgorshek, Gabriel and J., Plattsmouth, Nebr. Stove-pipe cleaner	284,897	Sept. 11	899	254	24	1065
Rasgorshek, John. (See Rasgorshek, Gabriel and J.)						
Rasmus, Theophil, New York, N. Y. Fur clipping and unhairing machine	275,077	Apr. 3	258	71, 72	23	1270
Rasmusen, Charles W., Chicago, Ill. Cable-railway car	289,139	Nov. 27	1686	468	25	825
Rasmusen, Charles W., Chicago, Ill. Cable-railway apparatus	290,707	Dec. 25	1695	467, 468, 469	25	1206
Rasmusen, Charles W., Chicago, Ill. Cable-railway apparatus	290,708	Dec. 25	1699	468, 469, 470	25	1207
Rasmuson, Thomas A., Forest City, Iowa. Corn-planter	286,486	Oct. 9	878	238	25	170
Rasmussen, Anders, Oshkosh, Wis. Thill for vehicles	279,804	June 19	1466	411	23	2388
Rasmussen, Anders, assignor of one-half to J. J. Parsons, Oshkosh, Wis. Two-wheeled vehicle	272,322	Feb. 13	909	254	23	610
Rasmussen, Rasmus F., New Albuquerque, N. Mex. Ter. Horse-power	280,080	June 26	1813	510	23	2455
Rasner, Henry C., and A. Walton, San Francisco, Cal. Gear-molding device	284,327	Sept. 4	208	58	24	939
Ratcliff, Frederick, New Bedford, Mass. Napkin-ring and menu-bolder	278,805	June 19	1467	411	23	2384
Ratcliff, Frederick, New Bedford, Mass. Combined pepper and salt box and napkin-ring	279,806	June 19	1467	411	23	2384
Ratcliff, Frederick, New Bedford, Mass. Pin-ushion	279,807	June 19	1468	412	23	2389
Ratcliffe, Jabez E. (See Brady and Ratcliffe.)						
Rate, Edward F., Chicago, Ill. Glove and other fastener	275,854	Apr. 17	1291	355	23	1462
Rath, Joseph, Columbus, Ohio. Can-opener	280,241	June 26	1998	562	23	2488
Rath, William, Sutton, Nebr. Combined thrashing-machine and separator	276,467	Apr. 24	2051	570	23	1601
Rathbone, Ransom. (See Morrell, James A., assignor.)						
Rathbone, Sard & Co. (See Oliver, Robert S., assignor.)						
Rathbun, Charles B., Bridgeport, Conn., assignor to G. Upton, Peabody, Mass. Sewing-machine table	271,362	Jan. 30	1909	552	23	384
Rathbun, Charles S., and S. F. Selby, Cleveland, Ohio. Carriage-bow socket	283,022	Aug. 14	658	185	24	624
Rathburn, C. M., et al. (See Lash, John S., assignor.)						
Rathmann, Johann H., Buffalo, N. Y. Combined needle and cutter for sewing boned hams	273,153	Feb. 27	1987	559	23	810
Rau, Eugen, Hartford, Conn., assignor of one-half to E. Halliday, Brooklyn, N. Y. Apparatus for dyeing with hydrocarbons	290,110	Dec. 11	910	258	25	1055
Raub, Adams D. (See Mitchell, John E., assignor.)						
Rauchenbichler, Alois. (See Küchenmeister, Gröschel, and Rauchenbichler.)						
Raughtigan, Emma J. (See Raughtigan, Michael, assignor.)						
Raughtigan, Michael, assignor of one-half to E. J. Raughtigan, Norwich, Conn. Dish-draining rack	287,471	Oct. 30	2137	580	25	415
Ravenel, Harriott H., executrix. (See Ravenel, St. Julien.)						
Ravenel, St. Julien, deceased, H. H. Ravenel, executrix, and assignor to Stoney Landing Company, Charleston, S. C. Manufacture of artificial stone	283,358	Aug. 14	1074		24	700
Rawalt, Charles T. (See Judd and Rawalt.)						
Rawlings, Emma J., St. Louis, Mo. Pillow-sham support	269,880	Jan. 2	66	20	23	15
Rawlins, Joseph W. V., Houghton, Mich. Steam rock-drill	280,668	July 3	394	110	24	70
Rawson, Samuel, Peoria, Ill. Hen-house	289,307	Nov. 27	1883	524	25	863
Rawson, Thomas. (See Eyfe and Rawson.)						
Ray, Ashbel. (See Ray, James S. and A.)						
Ray, Daisley & Co. (See Daisley, Howard, assignor.)						
Ray, Edward C. (See Eppler and Ray.)						
Ray, Frederick A., Maryland, N. Y. Car-coupling	275,943	Apr. 17	1394	384	23	1481
Ray, J. A., et al. (See Roberts, Benjamin F., assignor.)						
Ray, James H., St. Louis, Mo. Tricycle	288,114	Nov. 6	401	113	25	577
Ray, James S. and A., East Haddam, Conn. Fork	273,154	Feb. 27	1988	559	23	810
Ray, Jane A., Brooklyn, N. Y. Corset stay-plate	281,792	July 24	1841	503	24	339
Ray, Joel, Philadelphia, Pa. Aerial vessel	270,122	Jan. 2	341	100	23	70
Ray, Joseph G. (See Pond, Henry E., assignor.)						
Ray, Richard, Griffin, Ga. Shoulder-sunshade	288,115	Nov. 6	403	114	25	577
Ray, William S. (See Lea, Henry E., assignor.)						
Ray, William S., San Francisco, Cal. Wire-rope railway	278,044	May 22	1868	510, 511	23	1967
Raymond, F. F., 2d, trustee, et al. (See Barbour, E. Russell, assignor.)						
Raymond, F. F., 2d, trustee. (See Henderson, Henry A., assignor.)						
Raymond, Francois, Wood Haven, assignor to Lalance & Grosjean Manufacturing Company, New York, N. Y. Dough-mixer	283,511	Aug. 21	1262	353	24	739
Raymond, Freeborn F., 2d, Newton, Mass. Heel-nailing machine	271,117	Jan. 23	1591	458	23	321
Raymond, Freeborn F., 2d, Newton, Mass. Heel-nailing machine	271,118	Jan. 23	1592	458	23	322
Raymond, Freeborn F., 2d, Newton, Mass. Heel-nailing machine	280,399	July 3	72	20	24	15
Raymond, Freeborn F., 2d, Newton, Mass. Heel-nailing machine	287,472	Oct. 30	2137	580, 581, 582	25	416
Raymond, Freeborn F., 2d, Newton, Mass. Heel-nailing machine	289,857	Dec. 11	609	170	25	1000
Raymond, Freeborn F., 2d, Newton, Mass. Heel-nailing machine	290,109	Dec. 11	908	257, 258	25	1054
Raymond, Freeborn F., 2d, Newton, and J. E. Wheeler, Lynn, Mass. Heel-nailing machine	280,861	July 10	648	183	24	120
Raymond, Gertrude E. (See Renton, George W., assignor.)						
Raymond, James P. (See Wright, Benjamin F., assignor.)						
Raymond, John W., Lowville, Pa. Grapple	270,482	Jan. 9	793	232	23	165
Raymond, Murray M., Corry, Pa. Baby-jumper and swing	279,432	June 12	1035	287	23	2307
Raymond, Reuben, San Francisco, Cal. Glove	282,607	Aug. 7	229	66, 67	24	539
Raymond, Seymour, assignor to himself and J. Campbell, Middletown, Pa. Thermometer attachment for stoves	282,770	Aug. 7	358	100	24	562



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Raymond, Silas H., Grand Rapids, Mich. Bow for vehicle-tops. (Reisene).....	10,422	Dec. 11	1010	284	25	1073
Raymond, Silas H., Grand Rapids, Mich. Bow for vehicle-tops.....	279,016	June 5	493	134	23	2207
Raymond, Squire, East Venice, N. Y. Floor-clamp.....	279,808	June 19	1469	412	23	2389
Raymond, Squire, East Venice, N. Y. Potato digger and picker.....	286,961	Oct. 16	1487	408	25	282
Raymond, Squire, East Venice, N. Y. Weight-power.....	286,962	Oct. 16	1489	409		283
Rayner, Thomas S., assignor of one-half to C. T. and C. Ward, Springfield, Ohio. Press for molding fire-kindling substances.....	281,923	July 24	2000	548	24	367
Raynor, John B. (See Smith and Raynor.)						
Raynor, William E. (See Page and Raynor.)						
Reach, Robert, assignor to G. H. Plant, Jr., Washington, D. C. Metal-pipe-bending machine.....	280,862	July 10	651	184	24	121
Read, Benjamin F., et al. (See Freeman, Walter F., assignor.)						
Read, Calvin D., Ayer, and E. Dawson, Lowell, Mass. Cash and bundle carrier.....	280,803	July 10	652	184	24	121
Read, James J., Cambridge, Mass. Whip-rack.....	290,268	Dec. 18	1113	313	25	1099
Read, John W., West Salom, Ohio. Fence.....	285,677	Sept. 25	1847	528	24	1247
Read, Robert M. (See Blodgett, Read, and Tirrell.)						
Reading, Henry P., Eureka Springs, Ark. Stump-puller.....	275,855	Apr. 17	1292	355	23	1462
Reading Iron Works. (See Wolfe, Edward W., assignor.)						
Readie, Arthur J. E., Pawtucket, R. I. Car-seat.....	285,678	Sept. 25	1848	528	24	1248
Reagan, Harry C., Jr., West Chester, Pa. Car-step.....	273,155	Feb. 27	1985	560	23	810
Ream, Frederick, Danville, Pa. Lamp-burner.....	273,392	Mar. 6	200	54	23	868
Ream, Joseph H., Canton, Ohio. Railway-chair.....	274,377	Mar. 20	1456	399	23	1100
Reams, John V., and A. C. Majors, Burlington, Kans. Car-coupling.....	287,860	Nov. 6	81	24, 25	25	522
Reaney, William B. (See Low, Joel B., assignor.)						
Reaney, William B., Baltimore, Md. Traction-railway.....	281,924	July 24	2001	548	24	367
Reardon, John M., Shippensburg, Pa. Side-leak or sand-wall washer for oil-wells.....	277,607	May 15	1351	364	23	1869
Reardon, Patrick W., San José, Cal. Dry ore separator.....	276,710	May 1	228	58	23	1664
Reaser, Warren T., Madison, Wis. Balanced slide-valve.....	273,891	Mar. 13	841	228	23	986
Reaser, Warren T., Madison, Wis. Balanced slide-valve.....	273,892	Mar. 13	842	229	23	986
Reazor, Enos M. (See Keffler, Peter, assignor.)						
Rebstock, Christopher F., Meriden, Conn. Composition for coating metallic surfaces.....	280,864	July 10	654		24	122
Rebstock, Christian, Bridgeport, assignor to himself and C. Dietterlin, New Haven, Conn. Door-knob.....	273,893	Mar. 13	843	229	23	986
Rebstock, Christian, assignor to himself, G. Eckart, Bridgeport, and C. Dietterlin, New Haven, Conn. Drawer-pull.....	275,078	Apr. 3	263	72	23	1271
Recht, Carl, Brooklyn, N. Y. Sheet-metal-pipe joint.....	277,427	May 8	1127	303	23	1826
Reckendorfer, Babolle, executrix, et al. (See Reckendorfer, Joseph.)						
Reckendorfer, Joseph. (See Boman, Claes W., assignor.)						
Reckendorfer, Joseph. (See Boman, Claes W., assignor.) (Reissue.)						
Reckendorfer, Joseph. (See Collard, Richard M., assignor.)						
Reckendorfer, Joseph. (See Hoffman, Joseph, assignor.)						
Reckendorfer, Joseph. (See Uhlig, Richard W., assignor.)						
Reckendorfer, Joseph, deceased; B. Reckendorfer, executrix, G. A. Goldemith and W. Strauss, executors, New York, N. Y. Pen-holder.....	286,066	Oct. 2	353	99	25	65
Recker, John P., Indianapolis, Ind., assignor to Indianapolis Cabinet Company of Indiana. Flexible jointed shutter.....	277,608	May 15	1352	364	23	1869
Reckersdres, William. (See Richter, Paul, assignor.)						
Record, Alvin. (See Lee, Thomas, assignor.)						
Record, George J. (See Stark, Michael J., assignor.)						
Records, Mortimer, Forest, Del. Hand corn-planter.....	287,162	Oct. 23	1747	478	25	337
Reddan, Henry W., San Francisco, Cal. Composition for lubricating axles.....	276,711	May 1	230		23	1664
Redden, Henry, New York, N. Y. Fire-escape.....	281,557	July 17	1518	417	24	279
Redlich, Henry, Chicago, Ill. Bottle-wrapper.....	272,323	Feb. 13	909	255	23	610
Redline, Joseph, Jr., Robrsburg, Pa. Saw-mill dog.....	290,355	Dec. 18	1222	343	25	1118
Redman, Andrew J., assignor to himself and C. R. Scranton, La Crosse, Kans. Car-coupling.....	284,898	Sept. 11	900	254	24	1065
Redman, Robert S., Newark, N. J. Adjustable bracket.....	274,223	Mar. 20	1260	348	23	1066
Redmond, Charles C., San José, Cal. Apparatus for filling bottles, lamps, &c.....	281,396	July 17	1318	364	24	245
Redmond, Daniel M., Philadelphia, Pa. Machine for inserting pins or rivets in umbrella-frames.....	282,668	Aug. 7	230	67	24	539
Redmond, Edmond, assignor of one-third to W. B. Duffy, Rochester, N. Y. Gun-wad.....	274,378	Mar. 20	1457	399	23	1101
Redsull, George T., et al. (See Martin, John C., assignor.)						
Reed, Albert, Binghamton, N. Y. Car-replacer.....	284,758	Sept. 11	743	206	24	1036
Reed, Arthur, Brooklyn, N. Y. Chandelier-holding attachment.....	271,739	Feb. 6	182	49	23	472
Reed & Barton. (See Bacon, Orin F., assignor.)						
Reed & Barton. (See Tolman, Elijah, assignor.)						
Reed, Charles C., Worcester, Mass. Compression-cock.....	283,660	Aug. 21	1427	399	24	772
Reed, Charles D., Polo, Ill. Cultivator.....	290,111	Dec. 11	912	258	25	1055
Reed, Charles W., North Platte, Nebr. Apparatus for feeding calves.....	272,379	Mar. 20	1458	400	23	1101
Reed, Dudley. (See Price, Edward P., assignor.)						
Reed, Egbert S., Versailles, Ohio. Clod-crusher.....	280,513	July 3	216	57	24	39
Reed, Emma T., Victoria, Tex. Nursery-chair.....	284,671	Sept. 11	629	178	24	1016
Reed, Horatio G. H., Milwaukee, Wis. Freight-car-door lock.....	276,283	Apr. 24	1808	504	23	1560
Reed, Hudson H., assignor to J. Taylor, New York, N. Y. Hammock-carriage.....	269,881	Jan. 2	67	20, 21	23	16
Reed, J. G., et al. (See Hewson, William S., assignor.)						
Reed, J. Van D. (See Stowe, Benjamin L., assignor.)						
Reed, Jacob R., et al. (See Gray, Josiah, assignor.)						
Reed, Jacob R., et al. (See Gray and Hallenback, assignors.)						
Reed, James L., Philadelphia, Pa. Packing for piston-rods.....	270,483	Jan. 9	794	232	23	165
Reed, John. (See Brown, Richard H., assignor.)						
Reed, John L., Canjoharie, N. Y. Combined grain-drill and corn-planter.....	281,558	July 17	1519	417	24	279
Reed, La Flavius, Hornellsville, N. Y. Bark-mill.....	282,771	Aug. 7	358	101	24	562
Reed, Robert B. F., and G. Freund, Durango, Colo.; said Reed assignor to said Freund. Safety-shell for blasting.....	273,156	Feb. 27	1989	560	23	810
Reed, Thomas S., assignor to Bridgeport Brass Company, Bridgeport, Conn. Electrical conductor.....	276,880	May 1	446	119	23	1705
Reed, Thomas S., assignor to Bridgeport Brass Company, Bridgeport, Conn. Electrical conductor.....	286,963	Oct. 16	1491	410	25	283
Reed, William H., Chicago, Ill. Metallic clamp.....	269,882	Jan. 2	68	21	23	16
Reed, William H., Clifdale, Ill. Evaporator.....	280,514	July 3	217	57	24	39
Reed, William H., San Francisco, Cal. Animal-trap.....	284,759	Sept. 11	744	207	24	1036
Reed, William M., Geneva, Ind. Lemonade-shaker.....	281,925	July 24	2002	549	24	368
Reed, William S., Leominster, Mass. Knockdown or building-block toy.....	276,539	Apr. 24	2141	593	23	1617

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Reed, William S., Leominster, Mass. Toy bedstead or crib	279,665	June 19	1312	363	23	2361
Reed, William S., Leominster, Mass. Toy gun	283,661	Aug. 21	1428	400	24	772
Reed, William S., Leominster, Mass. Doll-carriage	288,662	Nov. 20	1102	302	25	714
Reed, William S., Leominster, Mass. Toy vehicle	288,663	Nov. 20	1102	302	25	714
Reed, William S., Leominster, Mass. Combination toy	288,664	Nov. 20	1103	302	25	714
Reed, William S., Leominster, Mass. Toy money-box	289,140	Nov. 27	1687	468	25	826
Reeder, James A. (See Rice, R. Fredrick, assignor.)						
Reeder, William S., St. Louis, Mo. Rib for cotton-gins	290,471	Dec. 18	1387	383	25	1146
Reeder, William S., St. Louis, Mo. Cane-mill	290,472	Dec. 18	1388	383	25	1147
Rees, Charles S., and P. Mills, Pueblo, Colo. Lock for sliding doors	274,658	Mar. 27	1831	508	23	1173
Rees, Joseph W., and J. J. Smith, Pennsylvania, W. Va. Coffee-roaster	285,929	Oct. 2	195	55	25	38
Rees, Luther, et al. (See Davies, Robert H., assignor.)						
Rees, Wesley, Memphis, Mo. Fire-escape	276,468	Apr. 24	2053	570	23	1602
Reese, Abram L., Chase, Kans. Wheat-drill	274,380	Mar. 20	1458	400	23	1101
Reese, Abram, Pittsburg, assignor of one-fourth to F. G. Kay, Allegheny City, Pa. Nut-lock	287,390	Oct. 23	2034	552	25	388
Reese, David W., Canal Dover, Ohio. Car-wheel	289,712	Dec. 4	434	121	25	962
Reese, David W., Canal Dover, Ohio. Car-wheel	289,713	Dec. 4	435	121	25	962
Reese, George F., Brooklyn, N. Y. Temporary dental plate	286,845	Oct. 16	1344	368	25	258
Reese, Henry, Baltimore, Md. Metallic sleeper for railways	272,477	Feb. 20	1126	316	23	651
Reese, Jacob, Allegheny, Pa. Dephosphorizing iron in an open-hearth furnace	284,233	Sept. 4	98		24	921
Reese, Jacob, Allegheny, Pa. Producing ingot iron and steel	286,007	Oct. 2	354		25	65
Reese, Jacob, Pittsburg, Pa. Regenerator for securing a uniform temperature in steel ingots	270,249	Jan. 9	500	148	23	108
Reese, Jacob, Pittsburg, Pa. Basic process for the dephosphorization of iron and steel	272,085	Feb. 13	623		23	560
Reese, Jacob, Pittsburg, Pa. Universal rolling-mill	272,086	Feb. 13	625	169	23	560
Reese, Jacob, Pittsburg, Pa. Compound ordnance	272,900	Feb. 27	1624	471	23	757
Reese, Jacob, Pittsburg, Pa. Blast furnace plant	273,311	Mar. 6	87	26	23	849
Reese, Jacob, Pittsburg, Pa. Continuous rolling-mill	275,856	Apr. 17	1293	355	23	1462
Reese, Jacob, Pittsburg, Pa. Machine for rolling hoops, sheets, or hollow cylinders	276,284	Apr. 24	1809	504	23	1561
Reese, Jacob, Pittsburg, Pa. Machinery for and method of manufacturing steel railway-rails	276,712	May 1	230	58, 59	23	1664
Reese, Jacob, Pittsburg, Pa. Process of and apparatus for converting cast-iron into cast-steel	277,929	May 22	1728	472	23	1942
Reese, Jacob, Pittsburg, Pa. Basic bessemer process	278,363	May 29	2308		23	2052
Reese, Jacob, Pittsburg, Pa. Utilizing the phosphorus and iron of forge-cinder	278,377	June 5	78		23	2137
Reese, Jacob, Pittsburg, Pa. Fire-escape	278,820	June 5	192	56	23	2155
Reese, Jacob, Pittsburg, Pa. Obtaining purified iron in the Bessemer basic process	279,526	June 19	1250		23	2347
Reese, Jacob, Pittsburg, Pa. Manufacture of cast-iron high in carbon and low in silicon	281,729	July 24	1754		24	325
Reese, Jacob, Pittsburg, Pa. Production of ferro-phosphorus	282,118	July 31	2261		24	413
Reese, Jacob, Pittsburg, Pa. Manufacturing crucible cast-steel	283,141	Aug. 14	792		24	647
Reese, Jacob, Pittsburg, Pa. Basic process for the manufacture of homogeneous ingot iron and steel	284,574	Sept. 4	506		24	989
Reese, Jacob, Pittsburg, Pa. Utilizing phosphorus and steel-scrap in the basic process	285,431	Sept. 25	1561		24	1194
Reese, Jacob, Pittsburg, Pa. Converting cast-iron into fibrous wrought-iron	286,330	Oct. 9	702		25	137
Reese, Jacob, Pittsburg, Pa. Process of and plant for producing cast-iron high in carbon and with a predetermined percentage of silicon	287,054	Oct. 23	1613	444	25	312
Reese, Jacob, Pittsburg, assignor to Bessemer Steel Company, (limited,) Philadelphia, Pa. Dephosphorizing metal by the Bessemer process	278,738	June 5	79		23	2137
Reese, John H. (See Cook, George W., assignor.)						
Reetz, William, Chicago, Ill. Extension case or box	287,473	Oct. 30	2143	582	25	417
Reeve, Addison A., et al. (See Farmer, James C., assignor.)						
Reeve, George W., Milburn, N. J. Sash-fastener	286,224	Oct. 9	540	148	25	109
Reeve, Thomas, Brooklyn, N. Y., assignor to Watkins Automatic Signal Telegraph Company, (limited,) of New York. Electric thermostat	269,960	Jan. 2	164	48	23	34
Reeves, Abbott M., assignor to himself and W. W. Beaty, Mansfield, Ill. Paper-bag and twine holder	288,116	Nov. 6	404	114	25	578
Reeves, Alfred B. (See Reeves, Marshal T. and A. B.)						
Reeves, Alfred B., assignor to Reeves & Co. and J. I. Irwin, Columbus, Ohio. Truck for straw-stackers	279,184	June 12	720	197	23	2256
Reeves, Benjamin F., Tuckahoe, N. J. Jack-screw	273,894	Mar. 13	844	229	23	966
Reeves, Charles W., assignor to M. M. Holmes & Co., Philadelphia, Pa. Chair	288,737	Nov. 20	1201	329	25	730
Reeves & Co., et al. (See Reeves, Alfred B., assignor.)						
Reeves & Co., et al. (See Reeves, Marshal T. and A. B., assignors.)						
Reeves, Henry C. (See Reeves, William F. and H. C.)						
Reeves, Marshal T. and A. B., Columbus, Ind. Straw-stacker	284,234	Sept. 4	100	27	24	921
Reeves, Marshal T. and A. B., assignors to Reeves & Co. and J. I. Irwin, Columbus, Ind. Straw-stacking machine	272,155	Feb. 13	710	195	23	575
Reeves, Matthew, Madison, assignor of one-half to A. P. Pilger, Norfolk, Nebr. Churn	288,738	Nov. 20	1202	329	25	730
Reeves, William F. and H. C., Meredith, Kans. Weed-cutter	287,163	Oct. 23	1748	479	25	337
Refsun, Bedvar, Chicago, Ill. Carpet-sewing machine	271,515	Jan. 30	2106	606	23	420
Rehfuß, George, assignor to himself, J. G., and M. O. Rehfuß, Philadelphia, Pa. Dental plugger	271,986	Feb. 6	494	133	23	526
Rehfuß, J. George, et al. (See Rehfuß, George, assignor.)						
Rehfuß, Martin O., et al. (See Rehfuß, George, assignor.)						
Reich, George A., San Francisco, Cal. Sewer-trap	278,045	May 22	1869	511	23	1967
Reichenbach, Oscar, deceased, assignor to R. C. Jenkinson, Newark, N. J. Staple and lock for bag-frames. (Reissne)	10,383	Sept. 18	1481	417	24	1173
Reichle, Adolph, Detroit, Mich. Two-wheeled vehicle	286,734	Oct. 16	1204	325	25	234
Reichling, Oscar E. H. N., assignor of one-half to G. H. Stuart and C. E. Ernest, Marion, Ind. Wrench	275,079	Apr. 3	265	73	23	1271
Reid, Adam, Buffalo, N. Y. Baking-oven	287,962	Nov. 6	220	62	25	545
Reid, Alban H., Philadelphia, Pa. Butter-working machine	283,142	Aug. 14	794	229	24	647
Reid, Alban H., Philadelphia, Pa. Milk-cooler	283,921	Aug. 28	1752	495	24	841
Reid, Benjamin A. (See Elder, Joseph, assignor.)						
Reid, Charles H., Danbury, assignor to R. H. Brown & Co., New Haven, Conn. Lathe-chuck	275,017	June 5	494	134	23	2207
Reid, Harvey N., Mount Sterling, Ky. Fruit-drier	280,242	June 26	1999	562	23	2489
Reid, Henry, London, county of Middlesex, England. Jogging apparatus for concrete and the like	273,606	Mar. 6	471	127	23	914
Reid, James W., Union City, Mich. Bundle-carrier for harvesters	271,119	Jan. 23	1593	458	23	322



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Reid, John, Brooklyn, assignor to J. L. Mott Iron Works, New York, N. Y. Wash-tub support.	271,516	Jan. 30	2107	606	23	420
Reid, John, Brooklyn, assignor to J. L. Mott Iron Works, New York, N. Y. Cistern for water-closets	280,243	June 26	2000	562	23	2489
Reid, John M., Montreal, Quebec, Canada. Metallic fence	274,820	Mar. 27	2020	562	23	1206
Reid, John T., Paige, Tex. Vehicle for cotton-pickers	273,137	Feb. 27	1990	560	23	810
Reid, John W. (See Fickett and Reid.)						
Reid, Joseph, Wyandotte, Kans. Refrigerating apparatus	281,793	July 24	1842	504	24	339
Reid, Robert, Philadelphia, Pa. Hoisting-machine	278,821	June 5	192	56	23	2155
Reid, Royal T. (See Torrence and Reid.)						
Reid, Samuel, Chicago, Ill. Lubricator	273,312	Mar. 6	89	27	23	849
Reid, Thomas, Walkerville, Ontario, Canada. Feeder for mill-rolls	279,982	June 26	1689	474	23	2433
Reid, William A., assignor to N. O. Nelson & Co., St. Louis, Mo. Packing for ice-machines.	275,269	Apr. 3	492	136	23	1310
Reidy, James, Pittsfield, Mass. Fire-escape	288,117	Nov. 6	404	114	25	578
Reidy, Maurice A., assignor of one-half to D. F. Flannery, Chicago, Ill. Metallic clasp	288,118	Nov. 6	406	114	25	578
Reiff, Gustavus N., Philadelphia, Pa. Elevator	275,080	Apr. 3	266	73	23	1271
Reiff, Gustavus N., Philadelphia, Pa. Hydraulic or other elevator	275,857	Apr. 17	1295	356	23	1462
Reiff, Gustavus N., Philadelphia, Pa. Hydraulic and other elevators	278,739	June 5	81	23, 24	23	2137
Reiff, William H., assignor of one-third to A. M. Seip, Jr., Philadelphia, Pa. Electric-wire insulator	274,821	Mar. 27	2020	562	23	1206
Reiff, William H., assignor of one-half to W. Haydon, Philadelphia, Pa. Burglar-alarm	284,980	Sept. 11	1002	232	24	1083
Reiff, William H., assignor of one-half to W. F. Duncan, Philadelphia, Pa. Detonating burglar-alarm	287,722	Oct. 30	2477	668	25	461
Reigart, James H. (See Merriman, Lewis, assignor.)						
Reilly, Henry J., U. S. Army. Lamp-stove	278,740	June 5	82	24	23	2138
Reilly, James, New York, N. Y. Casing for steam-pipes, &c.	282,368	July 31	2578	707	24	470
Reilly, John C. (See Root and Reilly.)						
Reilly, Patrick. (See Fox, Edward, assignor.)						
Reilly, Patrick, Mattoon, Ill. Car-truck	279,185	June 12	721	197	23	2256
Reilly, Patrick, Mattoon, Ill. Air-brake for cars and locomotives	290,269	Dec. 18	1113	313	25	1099
Reilly, John O., Warren Tavern, Pa. Sash-fastener	270,607	Jan. 16	966	279	23	206
Reimers, Jacob, Davenport, Iowa. Fanning apparatus	270,123	Jan. 2	342	100	23	70
Rein, Ernest, Milwaukee, Wis. Device for grinding and grooving mill-rollers	289,556	Dec. 4	231	64 65 66	25	927
Reinecke, John P., Pittsburg, Pa. Cover for oil-tanks	289,557	Dec. 4	233	66	25	927
Reinicke, Hermann, Cöthen, Anhalt, Germany. Pulp-strainer	287,164	Oct. 23	1749	479	25	337
Reiner, Isaiah H., Line Lexington, Pa. Harrow-tooth	282,223	July 31	2394	659	24	438
Reiners, Marcus G. (See Frakes and Reiners.)						
Reinl, John G., assignor to Pottier and Styms Manufacturing Company, New York, N. Y. Window-ventilator	287,055	Oct. 23	1616	445	25	312
Reiser, Christ, assignor to Reiser Steam Boiler Cleaner Company, (limited,) Prairie du Chien, Wis. Steam-boiler cleaner	272,770	Feb. 20	1465	420	23	717
Reiser Steam Boiler Cleaner Company. (See Reiser, Christ, assignor.)						
Reisert, Hans, Cologne-on-the-Rhine, Germany. Apparatus for lubricating bearings	287,963	Nov. 6	221	62, 63	25	546
Reiss, George T., assignor to Niles Tool Works, Hamilton, Ohio. Metal screw-machine	273,313	Mar. 6	92	27	23	849
Reiss, George T., assignor to Niles Tool Works, Hamilton, Ohio. Boring-mill attachment	274,517	Mar. 27	1667	463	23	1143
Reissig, Wilhelm, Darmstadt, Germany, assignor to C. Schmidt, New York, N. Y. Stamp-ing-ink	277,342	May 8	1032		23	1810
Reiter, Abraham, et al. (See Lugenbell, Peter, assignor.)						
Reiter & Co. (See Baird, James, assignor.)						
Reitz, Peter, et al. (See Engel, George, assignor.)						
Reixach, José. (See Lister and Reixach.)						
Reiling, Charles. (See Stanton and Reiling.)						
Remade, Leopold L., New York, N. Y. Micrometer-calipers	288,736	Nov. 20	1200	328	25	730
Rembert, Henry, Willis, Tex. Fire-place	279,433	June 12	1036	257	23	2307
Remington, Charles H. (See O'Hara and Remington.)						
Remington, John O., Hingham, assignor to Burr, Brown & Co., Boston, Mass. Tassel	277,609	May 15	1353	364 365	23	1869
Remington, Moses, and J. L. Riter, Brownsville, Ind. Clothes-ppunder	285,930	Oct. 2	196	55	25	38
Remms, Teodor, Dresden, Saxony, Germany. Match-box	283,143	Aug. 14	795	222	24	648
Remy, Marion I., Columbus, Ind. Ironing-machine	275,081	Apr. 3	267	73	23	1272
Remy, Noah T., Milton, Ind. Twine tension and take-up device for grain-binders	274,822	Mar. 27	2021	563	23	1206
Remy, Noah T., assignor of one-half to Dorsey Machine Company, Milton, Ind. Grain-binder	276,469	Apr. 24	2054	570	23	1602
Renchard, Francis J., Detroit, Mich. Lubricator	278,741	June 5	83	24	23	2138
Renchard, J. Vincent, Windsor, Ontario, Canada. Lubricator	273,158	Feb. 27	1991	560 561	23	810
Renchard, J. Vincent, Windsor, Ontario, Canada. Lubricator	275,707	Apr. 10	1090	297 298	23	1420
Renchard, J. Vincent, Windsor, Ontario, Canada. Lubricator	285,432	Sept. 25	1562	440	24	1194
Renchard, J. Vincent, Windsor, Ontario, Canada. Lubricator	288,665	Nov. 20	1104	303	25	715
Renchard, John J., Detroit, Mich. Oil-cup	278,742	June 5	84	24	23	2138
Renchard, Joseph V., Windsor, Ontario, Canada. Lubricator	273,314	Mar. 6	93	27, 28	23	849
Rend Rock Powder Company. (See Divine, Silas R., assignor.)						
Rend Rock Powder Company. (See Divine and Rand, assignors.)						
Rendle, Frank B., et al., executors. (See Rendle, William E.)						
Rendle, John E., et al., executors. (See Rendle, William E.)						
Rendle, William E., deceased, J. E. and F. B. Rendle, Westminster, England, and D. H. Wilson, Hyères, Var, France, executors. Construction of glazed roofs	270,337	Jan. 9	607	179	23	128
Renfro, John N., assignor of one-half to J. A. Headlee, Ebenezer, Mo. Churn	282,324	July 31	2394	659	24	438
Renfro, James K. P., Prentiss, Ga. Tool for cutting slots in rails	274,659	Mar. 27	1832	508	23	1173
Renick, Gaspar, and J. A. Curtis, Greencastle, Ind. Two-wheeled vehicle	279,809	June 19	1470	412	23	2389
Reniker, David, Wabash, Ind. Fence	277,930	May 22	1730	472	23	1943
Renner, Georg and P., and G. H. Knight, Cincinnati, Ohio. Malt-kiln	283,723	Aug. 21	1510	426 427	24	787
Renner, Peter. (See Hoff, Charles, assignor.)						
Renner, Peter. (See Renner and Knight.)						
Rennie, William. (See Carter and Rennie.)						
Renouf, George F., Battle Creek, Mich. Car-brake	279,018	June 5	495	134	23	2207
Rensch, Henry, Quincy, Ill. Fire-escape	281,136	July 10	982	275	24	180
Renshaw, David, Boston, Mass. Sectional steam-generator	274,821	Mar. 27	2023	563	23	1206
Renshaw, David, Boston, Mass. Sectional boiler	274,825	Mar. 27	2024	563	23	1207
Renshaw, David, Braintree, Mass. Spring bed-bottom	274,823	Mar. 27	2022	563	23	1206

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Renshaw, David, Braintree, Mass. Steam-radiator .....	274,826	Mar. 27	2025	564	23	1207
Renshaw, David, Braintree, Mass. Injector .....	274,968	Apr. 3	111	31	23	1244
Renshaw, David, Braintree, Mass. Utilizing the exhaust of engines .....	274,969	Apr. 3	113	32	23	1244
Renshaw, David, Braintree, Mass. Utilizing the exhaust of engines .....	274,970	Apr. 3	114	32	23	1244
Renshaw, David, Braintree, Mass. Utilizing the exhaust of engines .....	274,971	Apr. 3	115	32	23	1244
Renshaw, David, Braintree, Mass. Utilizing the exhaust of engines .....	274,972	Apr. 3	116	32	23	1245
Renshaw, David, Braintree, Mass. Utilizing the exhaust of engines .....	274,973	Apr. 3	116	33	23	1245
Renshaw, David, Braintree, Mass. Utilizing exhaust-steam .....	274,974	Apr. 3	117	33	23	1245
Renshaw, David, Braintree, Mass. Utilizing exhaust-steam .....	274,975	Apr. 3	118	33	23	1246
Renshaw, David, Braintree, Mass. Maintaining high pressure in superheaters .....	282,772	Aug. 7	359	101	24	563
Renshaw, David, Braintree, Mass. Utilizing exhaust-steam .....	282,773	Aug. 7	360	{ 101 102 }	24	563
Renshaw, David, Braintree, Mass. Maintaining pressure in superheaters .....	282,774	Aug. 7	361	102	24	563
Renshaw, David, Braintree, Mass. Maintaining pressure in superheaters .....	285,843	Oct. 2	75	22	25	15
Renshaw, David, Braintree, Mass. Utilizing exhaust .....	290,473	Dec. 18	1389	384	25	1147
Renshaw, David, assignor of one-third to E. Lally, Boston, Mass. Spring bed-bottom .....	271,517	Jan. 30	2108	606	23	420
Renton, George W., Brooklyn, assignor to G. E. Raymond, New York, N. Y. Boat-plug .....	275,270	Apr. 3	493	137	23	1310
Rentschler, Fredrick, San Francisco, Cal. Bed-lounge .....	287,165	Oct. 23	1751	480	25	338
Rentz, John, Quincy, Ill. Grinding-machine .....	282,225	July 31	2595	659	24	438
Renwick, Edward S., Millburn, N. J. Manufacturing starch, &c. ....	272,324	Feb. 13	910	255	23	610
Renwick, Edward S., Millburn, N. J. Thermostat for incubators .....	281,397	July 17	1319	{ 364 365 366 }	24	246
Renwick, Edward S., Millburn, N. J. Incubator .....	281,398	July 17	1321	{ 365 366 }	24	246
Renz, John E. (See Eberhard and Renz.)						
Renz, John E., Medina, Ohio. Gig-saddle .....	284,235	Sept. 4	101	27	24	921
Repass, William H., Martin's Station, assignor of one-half to A. Sult, Wytheville, Va. Nut-lock .....	270,124	Jan. 2	342	100	23	70
Replogle, Jacob M., Farragut, Iowa. Bail and driver for millstones .....	270,129	Jan. 30	1780	517	23	361
Requa, Elias B., Jersey City, N. J. Gas-burner .....	275,708	Apr. 10	1092	298	23	1421
Requa, Elias B., Jersey City, N. J. Gas-burner .....	275,709	Apr. 10	1094	299	23	1421
Requa, Elias B., Jersey City, N. J. Lamp .....	280,669	July 3	395	110	24	70
Requa, Ella L., New York, N. Y. Tablet for teaching penmanship .....	274,031	Mar. 13	1005	275	23	1014
Requa, Leonard F. (See Thomas, Joseph D., assignor.)						
Resley, Horace, Cumberland, Md. Bottle-stopper fastening .....	273,159	Feb. 27	1906	561	23	811
Resley, Horace, Cumberland, Md. Car-truck .....	279,434	June 12	1037	287	23	2308
Resor, John W., Jem, Mo. Chimney-sweeper .....	282,775	Aug. 7	362	102	24	564
Resseguie, James, assignor of one-fourth to L. Watson, Cleopatra, Mo. Corn-planter .....	274,382	Mar. 20	1462	400	23	1102
Retsloff, Otto C., Winnebago City, Minn. Pendulum .....	272,978	Feb. 27	1772	496	23	771
Reukauff, George C., et al. (See Donoghue, William, assignor.)						
Reuleaux, Franz, Berlin, Germany. Apparatus for starting, stopping, and reversing rotary motion .....	271,987	Feb. 6	495	133	23	526
Reuleaux, Franz, Berlin, Germany. Apparatus for starting, stopping, and reversing rotary motion .....	272,325	Feb. 13	913	255	23	611
Reusch, Carl. (See Reusch, Hermann, assignor.) (Reissue.)						
Reusch, Hermann, Dillingen-on-the-Saar, Prussia, Germany, assignor to C. Reusch, New York, N. Y. Plating iron and steel. (Reissue) .....	10,367	Aug. 14	1088		24	702
Reuther, Carl, Hennef, Prussia, Germany. Automatic weighing-machine .....	282,226	July 31	2296	{ 659 660 }	24	438
Reutlinger, Adolph. (See Stitzel, Frederick, assignor.)						
Rew, Henry C., Chicago, Ill. System of mains and pipes for the distribution of gas or other fluids .....	290,925	Dec. 25	1972	544	25	1255
Rew, Henry C., Chicago, Ill. Process of and apparatus for manufacturing gas .....	290,926	Dec. 25	1974	545	25	1255
Rew, Henry C., Chicago, Ill. Flue and tubular steam-generator .....	290,927	Dec. 25	1979	546	25	1256
Rew, Henry C., Chicago, Ill. Gas-purifier .....	290,928	Dec. 25	1981	546	25	1256
Rew, Henry C., Chicago, Ill. Gas-cooling apparatus .....	290,929	Dec. 25	1982	546	25	1256
Rew, Henry C., Chicago, Ill. Process of and apparatus for manufacturing fixed gas .....	290,930	Dec. 25	1983	{ 547 548 }	25	1257
Rex, A., et al. (See Hunter, George W., assignor.)						
Rex, Alfred C. (See Kyser and Rex.)						
Rex, Alfred C., Philadelphia, Pa. Ice pick or cutter .....	281,644	July 17	1630	445	24	297
Rexford, Philander, Syracuse, N. Y. Fire-grate .....	283,144	Aug. 14	796	222	24	648
Reynolds, Andrew J. (See Howe, William F., assignor.)						
Reynolds, Benjamin F., Verona, Pa. Sash-holder .....	291,003	Dec. 25	2090	576	25	1273
Reynolds Brothers. (See Vincent, William E., assignor.)						
Reynolds, Charles E., Philadelphia, Pa. Trunk-fastening .....	284,899	Sept. 11	900	254	24	1065
Reynolds, Christopher C., Prescott, Ariz. Ter. Phonograph .....	287,166	Oct. 23	1752	{ 480 481 }	25	338
Reynolds, Clark G., Prophetstown, Ill. Seed-corn hanger .....	285,159	Sept. 18	1238	348	24	1130
Reynolds & Co. (See Motley, Francis F., assignor.)						
Reynolds & Co. (See Reynolds, Henry, assignor.)						
Reynolds, David R., assignor of three-fourths to P. F. Cole, R. O. Curl, and W. A. Badger, Bellefontaine, Ohio. Show and storage case .....	274,032	Mar. 13	1005	275	23	1014
Reynolds, Edmund B., et al. (See Clarke, John N., assignor.)						
Reynolds, Eli H. (See Dederick, Levi, assignor.)						
Reynolds, Frank M., and G. C. Tewksbury, Newark, N. J. Elevator .....	280,670	July 3	398	111	24	71
Reynolds, George H., assignor of two-thirds to C. H. Delamater and G. H. Robinson, New York, N. Y. Air-compressing machinery .....	272,771	Feb. 20	1496	421	23	717
Reynolds, George H., assignor of two-thirds to C. H. Delamater and G. H. Robinson, New York, N. Y. Auxiliary steam-power for sailing-vessels .....	278,182	May 22	2040	{ 560 561 }	23	1997
Reynolds, George H., assignor of one-half to C. H. Delamater, G. H. Robinson, and W. Delamater, New York, N. Y. Valve for air and gas engines .....	278,270	May 22	2159	593	23	2016
Reynolds, George H., assignor of one-half to C. H. Delamater, G. H. Robinson, and W. Delamater, New York, N. Y. Gas-engine .....	284,061	Aug. 28	1945	543	24	875
Reynolds, George H., assignor of one-half to C. H. Delamater, G. H. Robinson, and W. Delamater, New York, N. Y. Gas-engine .....	284,328	Sept. 4	209	58	24	940
Reynolds, George H., assignor of one-half to C. H. Delamater, G. H. Robinson, and W. Delamater, New York, N. Y. Engine-governor .....	285,679	Sept. 25	1849	528	24	1248
Reynolds, George H., assignor of one-half to C. H. Delamater, G. H. Robinson, and W. Delamater, New York, N. Y. Gas-engine .....	287,578	Oct. 30	2284	619	25	444
Reynolds, Henry, assignor to Reynolds & Co., New Haven, Conn. Molding-machine .....	281,926	July 24	2003	549	24	368
Reynolds, Henry S., Brooklyn, assignor to Iron Clad Manufacturing Company, New York, N. Y. Coal-scuttle .....	279,592	June 12	1115	308	23	2320
Reynolds, Humphrey H., Minneapolis, Minn. Window-ventilator for railway-cars .....	275,271	Apr. 3	494	137	23	1310



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Reynolds, James H. (See Dénéchand and Reynolds.)						
Reynolds, John H. (See Shaw, Charles H., assignor.)						
Reynolds, John R., Jackson, Mich. Machine for cleaning grain	284,672	Sept. 11	629	178	24	1016
Reynolds, John M., Oswego, N. Y., assignor to J. H. Mandeville, trustee, Washington, D. C. Passenger-ticket	288,594	Nov. 13	1014	279	25	693
Reynolds, Jonathan, Summit, Miss. Seed-planter	286,068	Oct. 2	356	99	25	65
Reynolds, Josiah J., Corinth, Miss. Counter or table stool	283,512	Aug. 21	1263	354	24	740
Reynolds, Lewis G., Dayton, Ohio. Writing-paper tablet	289,933	Dec. 11	697	196	25	1015
Reynolds, Margaret, tatrix. (See Reynolds, William H.)						
Reynolds, Richard S. (See Cockell, Harvey, assignor.)						
Reynolds, Samuel F., Auburn, N. Y. Apparatus for filtering and refrigerating water	277,931	May 22	1731	472	23	1943
Reynolds, Stanley, and L. Sander, Rochester, N. Y.; said Sander assignor to said Reynolds. Fastener for burial-caskets	290,931	Dec. 25	1987	548	25	1257
Reynolds, William, 514 Oxford Street, county of Middlesex, England. Pad for the feet of horses	272,156	Feb. 13	711	195	23	575
Reynolds, William H., deceased; M. Reynolds, tatrix, New Orleans, La. Baling-press	286,846	Oct. 16	1345	368	25	259
Reynolds, William L. (See Burrige, Thomas H., assignor.)						
Reynolds, William R., Rahway, N. J., assignor to C. M. Thompson, Brooklyn, N. Y. Ornamental fence-wire	287,391	Oct. 23	2035	553	25	388
Rheubottom, James R., and F. M. Mack, Wadsworth, N. Y. Bustle	275,710	Apr. 10	1096	299	23	1421
Rhoades, Lewis H., Bay Centre, Wash. Ter. Anchor	270,484	Jan. 9	795	232	23	165
Rhoades, Lyman, New York, N. Y. Lock	271,271	Jan. 30	1781	517	23	362
Rhoades, Lyman, and J. P. Sipp, New York, N. Y. Key-hole guard	285,074	Sept. 18	1130	316	24	1112
Rhoades, Lyman, and J. P. Sipp, New York, N. Y. Key-hole guard	289,446	Dec. 4	88	25	25	902
Rhoads, Edgar K. (See Rhoads, Jacob, assignor.)						
Rhoads, Jacob, Watontown, assignor to himself and E. K. Rhoads, Mahanoy City, Pa. Removable lip for cups, bottles, &c.	280,515	July 3	217	57	24	39
Rhoads, John, Philadelphia, Pa. Car-brake hanger	290,356	Dec. 18	1223	343	25	1118
Rhode Island Telephone and Electric Company. (See Breckenridge, Henry W., assignor.)						
Rhodes, Alexander C. (See Cagle, Alexander W., assignor.)						
Rhodes, Alexander C., Little Rock, Ark. Show-box cover	278,743	June 5	85	25	23	2138
Rhodes, Benjamin, London, county of Middlesex, England. Composition of matter for resisting fire, water, and acids	278,046	May 22	1870	-----	23	1967
Rhodes, C. M. (See Wallace, William M., assignor.)						
Rhodes, John P. (See Smith and Rhodes.)						
Rhodes, Thomas B. (See Robinson, Abel W., assignor.)						
Rhodes, Thomas H., New York, N. Y. Push-button and circuit for lighting gas by electricity	276,235	Apr. 24	1812	505	23	1561
Rhodes, Thomas H., Brooklyn, N. Y. Electric cut-out	276,286	Apr. 24	1813	505	23	1561
Rhodes, Thomas H., Brooklyn, N. Y. Electric gas-lighting	277,610	May 15	1354	365	23	1870
Rhodes, William H., Chicago, Ill. Post-hole digger	281,137	July 10	983	275	24	180
Rhodes, William K., et al. (See Bowie, Olin R., assignor.)						
Rhule, Jacob, assignor of one-half to J. H. Jantzen, Pittsburg, Pa. Car-coupling	278,598	May 29	2583	705	23	2100
Rhyn, Henry, Cincinnati, Ohio. Pipe-tongs	286,847	Oct. 16	1346	368	25	239
Riblet, Samuel E., Gallon, Ohio. Mechanical advertising apparatus	290,474	Dec. 18	1390	384	25	1147
Ribon, Cerbeleon M., Mompos, Bolivar, United States of Colombia. Machine for the manufacture of pottery	282,369	July 31	2579	{ 707 } { 708 }	{ 24 }	{ 470 }
Rice, Alvah, assignor of one-half to S. Wheeler, Rochester, N. Y. Car-coupling	271,272	Jan. 30	1782	518	23	362
Rice, Alva C., Worcester, Mass. Safety attachment for elevators	277,343	May 8	1032	277	23	1810
Rice, Barton & Fales Machine and Iron Company. (See Barton, Charles S., assignor.)						
Rice, Bernard, Brooklyn, N. Y. Beer-chip	279,019	June 5	496	134	23	2208
Rice, Bernard, Brooklyn, N. Y. Beer-chip cutting and reaming machine	280,952	July 10	764	212	24	140
Rice, Bernard, Brooklyn, N. Y. Toy drum	286,069	Oct. 2	357	99	25	66
Rice, Bernard, Brooklyn, N. Y. Beer-chip	286,637	Oct. 16	1080	291	25	212
Rice, Charles S., Jr., Chicago, Ill. Disinfecting apparatus for water-closets	276,470	Apr. 24	2055	571	23	1602
Rice, Darius C., assignor to J. H. Stoddard and A. J. Lovejoy, Litchfield, Mich. Animal-poke	270,843	Jan. 16	1256	361	23	260
Rice, David H. (See Currier and Rice.)						
Rice, David H., Lowell, Mass. Spindle and support therefor	275,519	Apr. 10	858	232	23	1381
Rice, George E., Boston, Mass. Disinfectant	289,858	Dec. 11	611	-----	25	1000
Rice, George F., Worcester, Mass. Roll for roller-skates	277,661	Nov. 6	83	25	25	522
Rice, Henry F., Sutton, Mass. Pattern-chain bar for looms	283,816	Aug. 28	1634	460	24	820
Rice, Jacob E., Twin Lakes, Colo. Roasting and reducing furnace for gold and silver ores	275,272	Apr. 3	495	137	23	1310
Rice, James, Detroit, Mich. Device for increasing the organic action of the blood, or medical manipulator	285,160	Sept. 18	1239	348	24	1130
Rice, Joel F., assignor of two-thirds to W. H. Morrow and J. Block, Louisiana, Mo. Car-coupling	285,680	Sept. 25	1850	529	24	1248
Rice, John M., Springfield, Mass. Car-brake	280,244	June 26	2002	563	23	2489
Rice, John S., Cambridge, Mass. Sheet-metal can	278,271	May 22	2159	{ 593 } { 594 }	{ 23 }	{ 2017 }
Rice, R. Fredrick, assignor to himself and J. A. Reeder, Hartford, Conn. Tap-wrench	272,478	Feb. 20	1128	317	23	652
Rice, Truman H., et al. (See Baker, William H., assignor.)						
Rice, William C., Oakland, Iowa. Device for clearing railway-cuts of snow	284,900	Sept. 11	901	{ 254 } { 255 }	{ 24 }	{ 1065 }
Rice, William E., Worcester, Mass. Lubricant for wire	270,338	Jan. 9	609	-----	23	129
Rich, Augustus E., Fall River, Mass. Device for emptying bottles	289,447	Dec. 4	89	25	25	902
Rich, George W., Chicago, Ill. Piano-stool	275,413	Apr. 10	721	192	23	1358
Rich, George W., Chicago, Ill. Hammock	280,081	June 26	1814	510	23	2455
Rich, John W., Mechanicsburg, Pa. Indicator for type-writers or caligraphs	284,901	Sept. 11	903	255	24	1066
Rich, Lester M. (See Munger, Theodore C., assignor.)						
Richard, Jean E., New York, N. Y. Overstitching-machine	280,765	July 3	526	{ 147 } { 148 }	{ 24 }	{ 93 }
Richards, Arthur M., and E. Dinsley, Chicago, Ill. Car-seat	285,433	Sept. 25	1564	440	24	1194
Richards, Augustus, Sr., Willis, Tex. Stand and rack for exhibiting goods	279,810	June 19	1471	412	23	2329
Richards, Brown & Co., C. I. (See Moore, John, assignor.)						
Richards, Celius E., North Attleborough, Mass. Swivel-hook for ornamental chains	274,033	Mar. 13	1006	276	23	1014
Richards, Charles B., Philadelphia, Pa. Cut-off governor for steam-engines	290,113	Dec. 11	913	259	25	1056
Richards, Charles R. (See Orcutt and Richards.)						
Richards & Co. (See Cragin, Patrick H., assignor.)						
Richards, Elias, and A. Krieger, Salamanca, N. Y. Steam-cylinder cock	270,250	Jan. 9	502	148	23	108
Richards, Ervin E., et al. (See Fulton, John M., assignor.)						
Richards, Francis H., Cleveland, Ohio. Mechanism for converting motion	286,225	Oct. 9	541	149	25	110
Richards, Francis H., Springfield, Mass. Tapping and facing machine	277,611	May 15	1355	365	23	1870
Richards, Francis H., Springfield, Mass. Friction-clutch	283,145	Aug. 14	797	223	24	648

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Richards, Francis H., Springfield, Mass. Envelope-machine.....	284,483	Sept. 4	390	{ 108 109 110 }	24	970
Richards, Francis H., Springfield, Mass. Car-coupling .....	284,902	Sept. 11	904	{ 255 256 }	24	1066
Richards, Francis H., Springfield, Mass. Turning-lathe .....	285,931	Oct. 2	196	55	25	38
Richards, Francis H., Springfield, Mass. Driving mechanism for oscillating printing-presses .....	289,558	Dec. 4	234	66	25	927
Richards, Francis H., Springfield, Mass., assignor to J. Hayden Brass Company, Lorain, Ohio. Machine for finishing globe-valve bodies .....	281,138	July 10	984	{ 275 276 }	24	180
Richards, Francis H., Springfield, Mass., assignor to J. D. Cox, Jr., and F. F. Prentiss, Cleveland, Ohio. Machine for making twist-drills .....	286,150	Oct. 2	451	123	25	84
Richards, Henry C., Cincinnati, Ohio. Stringing pianos .....	280,953	July 10	765	212	24	140
Richards, James E., Cedar Keys, Fla. Watchman's electric time-detector .....	270,125	Jan. 2	343	101	23	70
Richards, James F. (See Martin and Richards.)						
Richards, James F., assignor of one-half to H. Badcock, Titusville, Pa. Compound for coating dry-sand molds and cores .....	276,628	May 1	105	-----	23	1645
Richards, John, San Francisco, Cal. Drilling-machine .....	287,326	Oct. 23	1958	535	25	374
Richards, John T., et al. (See Swanson, Nels, assignor.)						
Richards, Levi, Providence, R. I., assignor R. L. Moorhead, Brooklyn, N. Y. Jewelry-mounting .....	271,988	Feb. 6	497	134	23	526
Richards, Matthew H., Spencer, Iowa. Adjustable pumping and measuring machine .....	286,070	Oct. 2	358	99	25	66
Richards, Ransom. (See Jones and Richard B., assignor.)						
Richards, Robert H., Boston, Mass., and F. G. Coggin, Lake Linden, Mich. Ore and mineral separator .....	271,657	Feb. 6	87	24	23	455
Richards, Samuel, Philadelphia, Pa. Fire-shield .....	274,976	Apr. 3	119	33, 34	23	1246
Richards, Samuel, Philadelphia, Pa. Combined portable fire-arrester and fire-escape .....	274,977	Apr. 3	121	34	23	1246
Richards, Thomas C., Winsted, Conn. Securing knives and forks to handles .....	277,932	May 22	1733	472	23	1943
Richards, Thomas C., Winsted, Conn. Cornice-hook .....	283,280	Aug. 14	970	271	24	680
Richards, William N., Lyons, N. Y. Car-coupling .....	272,979	Feb. 7	1773	496	23	771
Richards, William P., Orange, N. J. Umbrella-case fastener .....	287,474	Oct. 30	2144	583	25	417
Richardson, Alistair M., Charleston, S. C. Automatic fan .....	288,119	Nov. 6	406	115	25	579
Richardson, Benjamin C., Detroit, Mich. Milk-cooler .....	286,331	Oct. 9	703	187	25	137
Richardson, Benjamin H., Milton, and B. P. Richardson, Boston, Mass., assignors to said B. P. Richardson. Folding table .....	290,932	Dec. 25	1988	548	25	1257
Richardson, Benjamin P. (See Richardson, Benjamin H. and B. P.)						
Richardson, Charles H. (See Moody, Nathan C., assignor.)						
Richardson, Dwight S., Brooklyn, N. Y. Radiator for furnaces .....	272,326	Feb. 13	916	255	23	611
Richardson, Dwight S., Brooklyn, N. Y. Radiator for furnaces .....	279,666	June 19	1313	365	23	2361
Richardson, Dwight S., Brooklyn, N. Y. Heating-drum .....	282,567	Aug. 7	113	34	24	520
Richardson, Edward M., assignor to himself and G. L. Mason, Laconia, N. H. Car-coupling .....	269,883	Jan. 2	69	21	23	16
Richardson, Francis M., assignor of one-half to J. F. Childers, Waddam's Grove, Ill. Churn .....	282,669	Aug. 7	232	67	24	540
Richardson, Frederick, Providence, R. I. Heel-plate for rubber boots and shoes .....	270,911	Jan. 23	1342	387	23	281
Richardson, Gamos, and G. Enderson, San José, Cal. Orchard-cultivator .....	279,277	June 12	823	228	23	2274
Richardson, George. (See Marvin, William, assignor.)						
Richardson, George W., Plano, Ill. Device for converting motion .....	288,739	Nov. 20	1202	329	25	730
Richardson, George W., Boston, Mass., assignor to Consolidated Safety Valve Company, Hartford, Conn. Safety-valve .....	282,146	Aug. 14	799	223	24	648
Richardson, George W., Boston, Mass., assignor to Consolidated Safety Valve Company, Hartford, Conn. Safety-valve .....	287,167	Oct. 23	1755	{ 481 482 }	25	338
Richardson, George W., Boston, Mass., assignor to Consolidated Safety Valve Company, Hartford, Conn. Safety-valve for gas, water, &c. .....	291,013	Dec. 25	2100	579	25	1275
Richardson, Henry B. (See Benham and Richardson.)						
Richardson, Henry M., Boston, Mass., assignor, by mesne assignments, to H. G. Parker, trustee. Child's carriage. (Reissue) .....	10,363	Aug. 7	556	157	24	600
Richardson, James. (See Flood and Richardson.)						
Richardson, James B. (See Allen and Richardson.)						
Richardson, James B. (See Allen, Silas J., assignor.)						
Richardson, James C., Lockland, Ohio. Insecticide mixture .....	273,805	Mar. 13	846	-----	23	987
Richardson, Jeremiah J., Brooklyn, N. Y. Heating-furnace .....	270,698	Jan. 16	1084	311	23	227
Richardson, John D., and F. L. Manchester, New York, N. Y. Dress-form .....	277,344	May 8	1034	277	23	1811
Richardson, John D., and F. L. Manchester, New York, N. Y. Tripod or standard .....	287,168	Oct. 23	1757	482	25	339
Richardson, John P., Cambridge, Mass. Safety-guard for elevator-hatchways .....	285,681	Sept. 25	1851	529	24	1248
Richardson, John P., Cambridge, assignor to Mason & Hamlin Organ and Piano Company, Boston, Mass. Stringing pianos .....	281,704	July 24	1842	504	24	339
Richardson, John S., Lowell, Mass. Picker-staff check for looms .....	279,597	June 19	1232	341	23	2347
Richardson, Jonathan B., Mountain View, Cal. Cartridge-loading machine .....	288,740	Nov. 20	1204	{ 329 330 }	25	731
Richardson, Leonard, Brooklyn, N. Y. Can .....	281,556	July 17	1517	416	24	279
Richardson, Marcus F. (See Freeman and Richardson.)						
Richardson, Reuben, Huntsville, Ohio. Chair .....	272,901	Feb. 27	1687	472	23	757
Richardson, Samuel C., et al. (See Mercer, John T., assignor.)						
Richardson, Samuel S., Happy Camp, Cal. Centrifugal pump and water-wheel .....	289,559	Dec. 4	235	67	25	928
Richardson, Samuel S., Happy Camp, Cal. Water-motor .....	289,560	Dec. 4	236	67	25	928
Richardson, Samuel T., et al. (See Blakeslee, Burton E., assignor.)						
Richardson, Samuel T., Baltimore, assignor of one-half to J. H. Shepherd, Cambridge, Md. Hoisting-gin .....	280,329	June 26	2111	592	23	2508
Richardson, Wilber E., Marinette, Wis. Traction-engine .....	278,822	June 5	194	{ 56 57 58 }	23	2156
Richardson, William H., San Francisco, Cal. Smoke-burning attachment for stoves, &c. .....	281,399	July 17	1324	366	24	246
Richardson, William J., Brooklyn, N. Y. Fare-register and alarm .....	276,713	May 1	234	59	23	1664
Richardson, William S., Newton, assignor to C. J. Blake, trustee, Boston, Mass. Fastening for gloves .....	276,714	May 1	238	60	23	1665
Richardson, William W., Indianapolis, Ind. Saw-handle .....	275,414	Apr. 10	722	192	23	1359
Richardson, William W., Indianapolis, Ind. Saw-handle .....	286,638	Oct. 16	1081	291	25	212
Richey, Hiram. (See Williams and Richey.)						
Richman, Albert B. (See Murphlin, Joseph, assignor.)						
Richmond, Alvan S., assignor to L. T. Sheffield, New York, N. Y. Artificial denture .....	277,933	May 22	1733	473	23	1943
Richmond, Cassius M., New York, N. Y. Preparing and treating teeth .....	277,935	May 22	1736	-----	23	1944
Richmond, Cassius M., assignor to Richmond Tooth Crown Company, New York, N. Y. Artificial denture .....	277,934	May 22	1735	473	23	1943



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Richmond, Cassius M., assignor to Richmond Tooth Crown Company, New York, N. Y.	277,936	May 22	1736	473	23	1944
Artificial denture						
Richmond, Cassius M., assignor to Richmond Tooth Crown Company, New York, N. Y.	277,937	May 22	1736	474	23	1944
Artificial tooth						
Richmond, Cassius M., assignor to Richmond Tooth Crown Company, New York, N. Y.	277,938	May 22	1737	474	23	1944
Artificial denture						
Richmond, Cassius M., assignor to Richmond Tooth Crown Company, New York, N. Y.	277,939	May 22	1738	474	23	1944
Artificial denture						
Richmond, Cassius M., assignor to Richmond Tooth Crown Company, New York, N. Y.	277,940	May 22	1738	474	23	1944
Tooth-crown						
Richmond, Cassius M., assignor to Richmond Tooth Crown Company, New York, N. Y.	277,941	May 22	1739	475	23	1944
Artificial denture						
Richmond, Cassius M., assignor to Richmond Tooth Crown Company, New York, N. Y.	277,942	May 22	1740	475	23	1944
Artificial denture						
Richmond, Cassius M., assignor to Richmond Tooth Crown Company, New York, N. Y.	277,943	May 22	1741	475	23	1944
Preparing roots of teeth for reception of artificial dentures						
Richmond, Cassius M., New York, N. Y., assignor to Richmond Tooth Crown Company.	282,119	July 31	2263	620	24	416
Artificial denture						
Richmond Caster Company. (See Osborn, Harrison, assignor.)						
Richmond City Mill Works. (See Walters, Charles F., assignor.)						
Richmond, H. Ward, et al. (See Vaughan, Henry W., assignor.)						
Richmond, J. B., et al. (See Fuller, Willard M., assignor.)						
Richmond, John F., Albany, N. Y. Ironing-table.	289,561	Dec. 4	237	67	25	928
Richmond, John T. (See Birnbaum and Richmond, assignors.)						
Richmond, Rome B., Macon, Ill. Pendant-ring for watches.	289,141	Nov. 27	1688	469	25	826
Richmond Tooth Crown Company. (See Richmond, Cassius M., assignor.)						
Richmond, Wilbur F., Strawberry Point, Iowa. Bob-sled	290,112	Dec. 11	912	259	25	1056
Richmond, William. (See Holley, Ralph F., assignor.)						
Richter, Bruno, New York, N. Y. Neckscarf.	284,484	Sept. 4	393	110	24	971
Richter, Charles, Camden, N. J. Incandescent lamp.	279,811	June 19	1472	413	23	2389
Richter, Charles, Camden, N. J. Electric-arc lamp.	283,662	Aug. 21	1428	400	24	772
Richter, Friedrich, Milwaukee, Wis. Beer-cooler	270,844	Jan. 16	1256	362	23	260
Richter, Joseph, Cincinnati, Ohio. Straight-way valve.	273,607	Mar. 6	472	127	23	915
Richter, Paul, New York, N. Y. Sizing and filling for cotton cloth and other fabrics.	278,183	May 22	2041		23	1997
Richter, Paul, New York, N. Y. Frame for stretching and drying window-shades.	278,184	May 22	2042	561	23	1997
Richter, Paul, Potsdam, Prussia, Germany. Device for lighting petroleum or gas lamps.	282,227	July 31	2398	600	24	439
Richter, Paul, assignor to W. Reckersdres, Philadelphia, Pa. Confectionery	279,812	June 19	1473	413	23	2389
Richter, Rudolph. (See Eberley and Richter.)						
Rickards, Harry B. (See Rickards, William, assignor.)						
Rickards, William, assignor to H. B. Rickards, Franklin, Pa. Necktie-holder	274,827	Mar. 27	2026	564	23	1207
Rickel, Tremont W., assignor of one-half to G. Isenhardt, Casey, Iowa. Combined match-lighter and cigar-cutter.	281,298	July 17	1198	331	24	225
Rickel, Tremont W., and G. A. Carpenter, Carey, Iowa; said Rickel assignor to said Carpenter. Combined stove-pipe damper and cleaner.	287,964	Nov. 6	222	63	25	546
Ricker, George F., Cambridgeport, Mass. Carpet-beating machine.	274,224	Mar. 20	1261	348	23	1067
Ricker, Reuben H., Boston, Mass. Mechanical toy.	271,273	Jan. 30	1783	518	23	362
Ricker, Thomas W., Boston, Mass. Fire-escape	279,186	June 12	723	197	23	2257
Ricker, Wentworth G., Rochester, N. Y. Hay-carrier	277,345	Sept. 11	906	256	24	1066
Rickerson, Sherman B., Grand Rapids, Mich. Roller-mill.	278,272	May 22	2161	594	23	2017
Rickerson, Sherman B., Grand Rapids, Mich. Roller-mill.	278,273	May 22	2162	594	23	2017
Rickerson, Sherman B., Grand Rapids, Mich. Roller-mill.	278,274	May 22	2163	595	23	2017
Rickerson, Sherman B., Grand Rapids, Mich. Roller-mill.	278,274	May 22	2163	595	23	2017
Rickerson, Sherman B., Coopersville, assignor to O. E. Brown Manufacturing Company, Grand Rapids, Mich. Roller-mill.	271,518	Jan. 30	2109	607	23	420
Ricketts, Joel R., Strafford, Mo. Device for converting motion.	277,345	May 8	1035	278	23	1811
Ricketts, Palmer C., Troy, N. Y. Railway-car electrical-circuit coupler.	281,730	July 24	1755	476	24	323
Rickey, Joseph, Kaukaee, Ill. Sulky-plow.	276,193	Apr. 24	1701	470	23	1542
Rickman, James P., and J. B. Thompson, New Cross, county of Kent, England. Manufacture of ammonia and its salts.	278,823	June 5	199	58	23	2157
Riddell, Jacob. (See Landis and Riddell.)						
Ridenour, John, Mount Vernon, Ind. Straw-carrier.	278,457	May 29	2424	660	23	2072
Rider, Ignatius G., W. H. Snyder, and A. O. Frick, Waynesborough, Pa. Traction-engine.	277,784	May 15	1553	423	23	1907
Rider, Joseph, Chicago, Ill. Noiseless slate.	278,744	June 5	86	25	23	2138
Ridge, Thomas D. (See Patee and Ridge.)						
Ridgway, Charles L., assignor of one-half to L. L. Rowe, Boston, Mass. Heating-stove.	281,795	July 24	1844	504	24	340
Ridgway, Francis W., administratrix. (See Ridgway, Job H.)						
Ridgway, Job H., deceased, Philadelphia, Pa., F. W. Ridgway, administratrix. Refrigerating-chamber for railway-cars, &c.	270,126	Jan. 2	348	101	23	71
Ridgway, Thomas S., et al. (See Griest, John M., assignor.)						
Ridgway, William H., Coatesville, Pa. Elevator.	276,076	Apr. 17	1549	427	23	1508
Ridgway, William H., Coatesville, Pa. Railway coaling-station.	276,077	Apr. 17	1550	428	23	1508
Ridout, Moses T., Lakeside, Minn. Harvester.	279,106	June 5	619	169	23	2228
Rieger, John L., Sandusky, Ohio. Awning.	272,772	Feb. 20	1499	422	23	718
Riegler, Alexander, Cincinnati, Ohio. Check-valve.	277,509	May 15	1230	331	23	1850
Riegler, Alexander, Cincinnati, Ohio. Combined steam-boiler and crucible-furnace.	280,954	July 10	766	212	24	140
Riegler, Alexander, Cincinnati, Ohio. Combined metallurgical furnace and water-heater.	280,955	July 10	767	212	24	140
Riehl, Justus. (See Good, Robert J., assignor.)						
Riemer, Friedrich. (See Miller and Riemer.)						
Rieppel, John, Renovo, Pa. Drilling machine.	280,956	July 10	767	213	24	141
Ries, Elias E., Brooklyn, N. Y. Automatic alarm device for railway-crossings.	282,776	Aug. 7	363	103	24	564
Ries, Elias E., New York, N. Y. Suspension-hook for boots and shoes.	283,418	Aug. 21	1146	324	24	720
Riesenberg, Frank W. (See Hatch and Riesenberg.)						
Rigby, Joseph, and S. S. McHugh, Ottawa, Kans. Car-coupling.	286,848	Oct. 16	1347	369	25	259
Rigby, Nicholas L., Topeka, Kans. assignor of one-half to J. D. Pryor. Churn and butter-worker.	274,383	Mar. 20	1463	401	23	1102
Rigdon, Isaac, Cincinnati, Ohio. Scale-beam.	271,274	Jan. 30	1784	518	23	362
Rigg, James W., Mount Carmel Precinct, Ill. Fence.	286,487	Oct. 9	880	238	25	170
Riggin, William M., assignor of one-half to T. B. Jones, Madisonville, Ky. Lifting-jack.	276,471	Apr. 24	2056	571	23	1602
Riggen, Edmund K., Oswego, N. Y. Car-wheel.	289,142	Nov. 27	1688	469	25	826
Rigney, John T., Baltimore, Md. Railway-switch.	275,711	Apr. 10	1097	300	23	1422
Rigny, Alfred, New York, N. Y. Bottling-faucet.	288,859	Nov. 20	1342	369	25	756

*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Rigny, Alfred, New York, N. Y. Bottling device.....	289,714	Dec. 4	435	122	25	962
Ribl, John A., Philadelphia, Pa. Saw-tiling machine.....	290,357	Dec. 18	1224	344	25	1118
Rikard, Henry C., Monroeville, Ala. Cultivator.....	284,062	Aug. 28	1948	544	24	875
Rikeman, Walter F., Cambridge, Mass. Composition for covering piano-keys, &c.....	271,120	Jan. 23	1595	459	23	322
Riker, Carroll L., Brooklyn, N. Y. Combined boiler and steam vacuum-pump.....	287,579	Oct. 30	2289	619	25	445
Riker, Samuel T., Port Chester, N. Y. Bolt and nut package.....	282,370	July 31	2579	708	24	470
Rile, John L., Brooklyn, assignor to A. L. Shipman, New York, N. Y. Machine for gumming paper.....	284,236	Sept. 4	102	28	24	921
Riley, Frederic G., London, England. Corking-machine.....	279,813	June 19	1473	413 414	23	2389
Riley, James, New York, N. Y. Fire-escape ladder.....	276,715	May 1	239	60	23	1665
Riley, John A., and C. S. Freer, New York, N. Y. Ear-ring, bracelet, &c.....	271,121	Jan. 23	1596	459	23	322
Riley, John A., and C. S. Freer, New York, N. Y. Ear-ring.....	271,122	Jan. 23	1597	459	23	322
Riley, John M., Newark, N. J. Journal-box for grinding and polishing lathes.....	271,519	Jan. 30	2110	607	23	420
Riley, John M., Newark, N. J. Fastening for dog-collars.....	277,785	May 15	1556	423	23	1907
Riley, Phillip, Sr., assignor of one-half to P. Disbrow, Marion, Iowa. Fence-post.....	272,157	Feb. 13	712	195	23	575
Riley, William, assignor to himself and P. H. Gillen, New York, N. Y. Tobacco-box.....	275,944	Apr. 17	1395	384	23	1481
Rinderknecht, Charles, assignor of one-half to A. J. Malone, Indianapolis, Ind. Automatic grain-shovel mechanism.....	270,485	Jan. 9	795	232	23	165
Rindberg, Joseph, Richmond, Va. Show-box for hats.....	290,475	Dec. 18	1391	324	25	1147
Rinehart, Thomas M., assignor to himself, F. Winter, and A. Goodwin, Pittsburg, Pa. Rotary engine.....	280,766	July 3	530	149	24	94
Rinehart, William D., Chicago, Ill. Device for operating shovels by power.....	284,485	Sept. 4	394	110 111	24	971
Rines, William E., Arlington, Mass. Sash-fastener.....	280,400	July 3	75	20	24	16
Ring, Aaron, Malden, Mass. Lamp filler and indicator.....	279,278	June 12	824	228	23	2274
Ring, Johann, Milwaukee, Wis. Plow.....	277,786	May 15	1557	424	23	1907
Ring, John H., and J. A. Bradshaw, assignors of part interest to C. Callahan, J. H. Morrison, and J. H. Pindor, Lowell, Mass. Machine for making metallic cartridge-shells.....	286,151	Oct. 2	453	123	25	84
Ringgen, St. Louis, Mo. Washer.....	271,275	Jan. 30	2186	.....	23	362
Ringo, Alvin L., Chicago, Ill. Court file-case.....	274,384	Mar. 20	1464	401	23	1102
Rinkleff, Frank. (See Kromer and Rinkleff.)						
Rinnann, Gustave O., Cincinnati, Ohio. Process of and apparatus for separating ammonia from its solution in the manufacture of ice, &c.....	287,056	Oct. 23	1617	445	25	312
Rintelman, August, assignor of one-half to S. S. Stout and H. G. Underwood, Milwaukee, Wis. Folding stool.....	282,371	July 31	2580	708	24	470
Riotte, Eugene N., New York, N. Y. Obtaining precious metals from ores by amalgamation.....	289,781	Dec. 4	506	140	25	974
Ripcozinski, Joseph, and C. Tisch, Jr., Wausau, Wis. Fire-escape.....	280,957	July 10	768	213	24	141
Ripley, Daniel C. (See Brockunier and Ripley.)						
Ripley, Daniel C., Pittsburg, Pa. Glass caster-stand and mold.....	278,745	June 5	86	25	23	2139
Ripley, Daniel C., Pittsburg, Pa. Manufacture of glass signal-globes.....	278,746	June 5	87	25	23	2139
Ripley, Daniel C., Pittsburg, Pa. Glass caster stand and mold. (Reissue).....	10,397	Oct. 23	2052	558	25	391
Ripley, Daniel C., Pittsburg, Pa. Glass caster.....	289,027	Nov. 27	1554	428	25	802
Ripley, George. (See Pearson, Henry E. C., assignor.)						
Ripley, George H. (See Pendleton, John H., assignor.)						
Ripley, Paschal P., West Randolph, Vt. Fire-escape.....	279,814	June 19	1476	414	23	2390
Ripley, William T., Rutland, Vt. Automatic sand and water feeding device for stone-sawing machines.....	286,071	Oct. 2	359	100	25	66
Ripplien, Adolph, assignor to W. M. Griscom, M. and W. Harbster, Reading, Pa. Apple-parer.....	270,845	Jan. 16	1258	362	23	261
Ripplien, Adolph, assignor to W. M. Griscom, M. and W. Harbster, Reading, Pa. Apple-parer.....	281,559	July 17	1521	417	24	279
Rische, August, et al. (See Weller, Wance, and Roesch, assignors.)						
Risdon, William B., Trenton, N. J., assignor to American Saw Company, New York, N. Y. Insertible saw-tooth.....	289,715	Dec. 4	436	122	25	962
Rishel, George P., Hornellsville, N. Y. Vulcanizing and celluloid apparatus.....	287,723	Oct. 30	2478	668	25	481
Rishel, W. H. (See Stody, Jacob, assignor.)						
Rishel, Caleb M., assignor of one-half to J. A. Green, Woodbury, N. J. Railway-signal.....	283,281	Aug. 14	971	271	24	680
Rison, John L. (See White, Addison, assignor.)						
Rison, Martin L., Clarksville, Tenn. Motor.....	287,777	Oct. 30	2557	688	25	495
Rissey, John, and W. J. Horton, Halifax, Nova Scotia, Canada. Horse-detacher.....	288,365	Nov. 13	731	198 199	25	642
Ritch, Milton M., Laurinburg, N. C. Plow.....	270,846	Jan. 16	1259	362	23	261
Ritchel, Charles F., Bridgeport, Conn., assignor to S. S. & G. D. Tallman, New York, N. Y. Toy jumping animal.....	280,330	June 26	2112	592	23	2508
Ritchel, Charles F., Bridgeport, Conn., assignor to Unexcelled Fireworks Company, New York, N. Y. Toy animal.....	289,562	Dec. 4	238	67	25	928
Ritchie, Edward S., Brookline, Mass. Reflector for street-lamps.....	270,339	Jan. 9	610	179	23	129
Ritchie, James, Detroit, Mich. Smoke-stack.....	276,716	May 1	140	61	23	1666
Ritchie, James, assignor to himself and W. H. D. Newth, Detroit, Mich. Grate-bar.....	272,773	Feb. 20	1499	422	23	718
Ritchie, John, assignor to J. N. Manning and G. Mehring, Chicago, Ill. Smoke-burning furnace.....	271,989	Feb. 6	498	134	23	526
Ritchie, Matthew L., New York, N. Y. Die or swage.....	279,020	June 5	497	135	23	2208
Riter, John L. (See Remington and Riter.)						
Riter, John L., Brownsville, Ind. Seeding-machine.....	274,518	Mar. 27	1668	463	23	1143
Rittenhouse, Nicholas M., Baltimore, Md. Telegraph-cable.....	272,774	Feb. 20	1500	422	23	718
Rittenhouse, Nicholas M., and M. W. Locke, Baltimore, Md. Underground-telegraph line.....	276,472	Apr. 24	2056	571	23	1603
Ritter, Andrew, Jr., assignor of two-thirds to A. F. Noble and J. C. Pollock, Chicago, Ill. Steam-boiler furnace.....	290,270	Dec. 18	1114	313	25	1099
Ritter, Henry M., Covington, Ky. Caster.....	282,777	Aug. 7	364	103	24	564
Ritter, Isaac R. (See Bernhart and Ritter.)						
Rittig, Joseph, Camden, N. J. Galvanic belt.....	276,078	Apr. 17	1552	428	23	1509
Rittweger, John F., Johnstown, Pa. Recuperator gas-furnace.....	289,308	Nov. 27	1884	525	25	864
Ritty, James, and J. Birch, Dayton, assignors to J. H. Eckert, Cincinnati, Ohio. Cash register and indicator.....	271,363	Jan. 30	1911	553	23	385
Ritzert, Henry, et al. (See Muller, Antone, assignor.)						
Ritzmann, William, Bridgeport, Conn. Corset.....	273,393	Mar. 6	201	54	23	868
Rivera, James B., Baltimore, Md. Confection-grinding apparatus.....	288,860	Nov. 20	1343	369	25	757
Rivers, Thomas L. (See Wallace, William R., assignor.)						
Rivers, Thomas L., assignor of one-third to E. M. Shepherd, Mount Vernon, Ill. Hinge.....	276,540	Apr. 24	2142	596	23	1617
Rix, Benjamin F., assignor of one-third to M. H. Kipp, Kalamazoo, Mich. Harrow.....	287,965	Nov. 6	223	63	25	546
Rix, Edward A. (See Olsen, Gustav, assignor.)						
Rix, Edward A., San Francisco, Cal. Horse-power.....	271,123	Jan. 23	1599	459 460	23	322
Rix, Hale, San Francisco, Cal. Sinkers for fishing-tackle.....	285,075	Sept. 18	1131	316	24	1112



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Roach, John, San Francisco, Cal. Plummert-lamp .....	287,560	Oct. 30	2293	620	25	446
Roach, Samuel M., Savannah, Ga. Artificial tooth-crown .....	288,492	Nov. 13	894	243	25	671
Roat, Edwin, assignor of one-half to H. Hamlin, Buffalo, N. Y. Feed-drier .....	275,858	Apr. 17	1297	357	23	1463
Robb, David W., Amherst, Nova Scotia, Canada. Heating-furnace .....	270,127	Jan. 2	352	102	23	72
Robb, James A., San José, Cal. Feed mechanism for lath-sawing machines .....	288,493	Nov. 13	894	243	25	671
Robb, James A., San Francisco, Cal. Edger .....	290,358	Dec. 18	1225,	{ 344 345 }	25	1118
Robb, William. (See Lieberman and Robb.)						
Robbins & Appleton. (See Fitch, Ezra C., assignor.)						
Robbins & Appleton. (See Searling, James E., assignor.)						
Robbins, C. H., <i>et al.</i> (See Coram, John C., assignor.)						
Robbins, Edwin A., Boston, Mass. Cuff-holder .....	277,612	May 15	1357	365	23	1870
Robbins, Eugene H., Pittsfield, Mass. Pipe-wrench .....	282,372	July 31	2581	708	24	470
Robbins, Fabius, assignor of two-thirds to T. F. Jones and F. Playter, Walnut, Kans. Nut-lock .....	282,927	Aug. 7	533	151	24	595
Robbins, Frederic. (See Taleott, Albert L., assignor.)						
Robbins, John A. (See Weathers, James, assignor.)						
Robbins, Moses M., Centreville, Ind. Coffee and peanut roasting attachment for stoves .....	274,225	Mar. 20	1263	348	23	1067
Robbins, Nathaniel, 2d, West Harwich, Mass. Artificial tooth .....	279,187	June 12	723	198	23	2257
Robbins, Sylvan B., Lawrenceburg, Ind. Harvester-rake .....	271,124	Jan. 23	1600	460	23	323
Robbins, Sylvan B., Lawrenceburg, Ind. Harvester-reel .....	271,125	Jan. 23	1601	460	23	323
Robbins, Sylvan B., Lawrenceburg, Ind. Grain-binder for harvesters .....	271,126	Jan. 23	1602	{ 460 461 }	23	323
Robbins, Sylvan B., Lawrenceburg, Ind. Cutter-bar for harvesters .....	271,127	Jan. 23	1604	461	23	323
Robbins, William O., New York, N. Y. Ejector for wells .....	277,346	May 8	1036	278	23	1811
Roberge, David, New York, N. Y. Toe-weight .....	279,667	June 19	1314	365	23	2361
Roberts, Benjamin F., Leon, Iowa. Adjustable and portable shelving .....	277,510	May 15	1231	332	23	1850
Roberts, Benjamin F., assignor of one-half to J. A. Ray and H. Thomas, Leon, Iowa. Tire-tightener .....	273,608	Mar. 6	473	127	23	915
Roberts, Charles, <i>et al.</i> (See Leake, Lewis C., assignor.)						
Roberts, Charles E., assignor to Crane Brothers Manufacturing Company, Chicago, Ill. Machine for threading bung-bushes .....	277,160	May 8	823	{ 217 218 }	23	1773
Roberts, Charles H., and C. J. Stevens, Montour, Iowa. Spring-caster .....	281,299	July 17	1199	331	24	226
Roberts, Charles H. J., Florence, Ala. Pea-separator .....	282,373	July 31	2582	709	24	470
Roberts, Cyrus. (See Roberts and Schafer, assignors.)						
Roberts, Cyrus, Three Rivers, Mich. Combined corn husker, sheller, and separator .....	278,824	June 5	201	58, 59	23	2157
Roberts, David S., Boston, Mass. Oil-feeder .....	272,980	Feb. 27	1774	496	23	771
Roberts, Dick, R., New Madison, Ohio. Lifting-jack .....	286,488	Oct. 9	881	239	25	171
Roberts, Edward C., Broadford, Va. Furniture-drawer .....	288,661	Nov. 20	1344	369	25	757
Roberts, Fabian J., assignor of one-fourth to H. A. Weber, Detroit, Mich. Car-axle box .....	289,934	Dec. 11	698	196	25	1015
Roberts, George A., and C. Schafer, assignors to C. Roberts, Three Rivers, Mich. Thrashing-machine .....	277,347	May 8	1037	278	23	1811
Roberts, George S., assignor to J. A. Lang, Meredith Village, N. H. Plow-jointer .....	287,778	Oct. 30	2558	688	25	495
Roberts, Henry. (See Crich, Fredrick, assignor.)						
Roberts, Henry, Hartford, Conn. Apparatus for stretching woven-wire fabrics upon mattress-frames .....	274,142	Mar. 20	1153	318	23	1047
Roberts, Henry, Hartford, Conn. Bed-bottom .....	275,523	Apr. 10	865	234	23	1382
Roberts, Henry, Hartford, Conn. Woven-wire seat .....	276,881	May 1	447	120	23	1705
Roberts, Henry, Hartford, Conn. Woven-wire seat .....	279,598	June 19	1233	342	23	2347
Roberts, Henry, Pittsburg, Pa. Wiping metal-coated wire .....	275,520	Apr. 10	860	{ 232 233 }	23	1381
Roberts, Henry, Pittsburg, Pa. Apparatus for feeding wire to metal-coating baths .....	275,521	Apr. 10	862	233	23	1381
Roberts, Henry, Pittsburg, Pa. Annealing-pot for annealing wire .....	275,522	Apr. 10	864	233	23	1382
Roberts, Henry, Pittsburg, Pa. Dynamo-electric machine .....	276,194	Apr. 24	1703	470	23	1542
Roberts, Henry, Pittsburg, Pa. Wire-reel .....	286,639	Oct. 16	1061	291	25	212
Roberts, Henry, and F. Crich, Pittsburg, Pa. Compound for wiping wire .....	275,415	Apr. 10	723	231	23	1359
Roberts, Henry P., Jamestown, assignor of one-half to C. M. Chamberlain, Seneca Falls, N. Y. Combined rocking-chair and fan .....	278,047	May 22	1871	512	23	1967
Roberts, Homer J., Orland, Ind. Vehicle-tongue .....	278,275	May 22	2164	596	23	2017
Roberts, Irving H. (See Plummer, Abner A., assignor.)						
Roberts, Isaiah L., Jacksonville, Fla. Extracting metals .....	284,068	Aug. 28	1948	544	24	875
Roberts, James D., Boston, Mass. Bottle-filling apparatus .....	279,668	June 19	1315	365	23	2362
Roberts, Joab S., Boulder Valley, Mont. Ter. Sled-shoe .....	275,945	Apr. 17	1395	384	23	1481
Roberts, Job M., Pana, Ill. Check-roller for corn-planters .....	283,817	Aug. 28	1635	460	24	820
Roberts, John G., Idaho Springs, Colo. Ore-washer .....	285,307	Sept. 18	1402	396	24	1161
Roberts, John H., <i>et al.</i> (See Cameron, James W., assignor.)						
Roberts, John H., Providence, R. I. Candy-cooler .....	289,859	Dec. 11	611	170	25	1000
Roberts, John J., Shongelo, Miss. Car-coupling .....	271,990	Feb. 6	498	134	23	526
Roberts, John J., Reading, Pa. Rolling-mill .....	276,629	May 1	106	28	23	1645
Roberts, Leonidas A., Monticello, Va. Belt-fastener .....	286,072	Oct. 2	362	100	25	66
Roberts, Levi H., Paris, Ill. Car-axle and box .....	278,048	May 22	1872	512	23	1968
Roberts, Milton O., Worcester, Pa. Milk-cooler .....	273,764	Mar. 13	685	184	23	959
Roberts, Robert, New York, N. Y. Boat-detaching apparatus .....	288,862	Nov. 20	1345	369	25	757
Roberts, Robert R., New Orleans, La., assignor one-half to M. J. Wine, Washington, D. C. Treating vegetable matter .....	279,435	June 12	1038	{ 287 288 }	23	2308
Roberts, Russell W., <i>et al.</i> (See Williams, William, assignor.)						
Roberts, Thomas H., Port Huron, Mich. Tube-welding machine .....	284,329	Sept. 4	211	58	24	940
Roberts, William, Canton, Mass. Knitting-machine .....	284,673	Sept. 11	630	{ 178 179 }	24	1017
Roberts, William H., <i>et al.</i> (See Evans, Thomas, assignor.)						
Roberts, William H., Davenport Centre, N. Y. Butter-package .....	276,882	May 1	448	120	23	1705
Roberts, William H., Davenport Centre, N. Y. Fastening for butter-packages .....	286,073	Oct. 2	363	100	25	66
Roberts, William S., Bolivar, N. Y. Barbed fence .....	276,883	May 1	449	120	23	1705
Robertshaw, James. (See Furness and Robertshaw.)						
Robertson, Alexander W., Westham, county of Essex, England. Surface-condenser .....	281,927	July 24	2005	549	24	368
Robertson, Archibald J. (See Simonds, Gustavus B., assignor.)						
Robertson, C. F. (See Patton, William P., assignor.)						
Robertson, Fred Y. (See Vance, William W., assignor.)						
Robertson, George F., Taylorsville, Ky. Station-indicator .....	279,436	June 12	1039	288	23	2308
Robertson, James. (See Wrigley and Robertson.)						
Robertson, James D., Salisbury, Mass. Spring shackle-link .....	290,271	Dec. 18	1116	314	25	1099
Robertson, James H., New York, N. Y. Electric telephone .....	276,630	May 1	107	29	23	1645
Robertson, James H., Brooklyn, N. Y. Electric telephone .....	276,631	May 1	109	29	23	1646
Robertson, James H., Brooklyn, N. Y. Electric-telephone transmitter .....	276,632	May 1	110	29	23	1646

*Alphabetical list of patentees—Continued.*

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Robertson, James H., Brooklyn, N. Y. Speaking-telephone.....	289,309	Nov. 27	1885	525	25	864
Robertson, John, Pottsville, Pa. Extract of meat.....	283,147	Aug. 14	801	.....	24	649
Robertson, John, Brooklyn, assignor to Rothe & Lips, New York, N. Y. Apparatus for covering telegraph-cables.....	275,859	Apr. 17	1299	357	23	1463
Robertson, John H., New York, N. Y. Traction-rope railway.....	289,563	Dec. 4	239	68	25	928
Robertson, John R., Selma, Ala. Gate.....	290,476	Dec. 18	1392	385	25	1147
Robertson, Nathaniel, and H. C. Doll, Denver, Colo. Combined whip and rein holder.....	285,161	Sept. 18	1239	348	24	1130
Robertson, Richard L., and O. S. Burdett, New Orleans, La. Car-truck.....	270,985	Jan. 23	1433	415	23	296
Robertson, Richard L., Jr., New Orleans, La. Awning for decks of vessels.....	273,315	Mar. 6	95	28	23	850
Robertson, Robert D., Columbia, Tenn. Hymn and music book.....	286,152	Oct. 2	455	124	25	85
Robertson, William A. (See McMillan and Robertson.)						
Robertson, William B., Jr., San Francisco, Cal. Process of and apparatus for obtaining boracic acid from borates.....	274,660	Mar. 27	1832	509	23	1173
Robertson, William H. (See Holt, Gardner L., assignor.)						
Robeson, Daniel S., <i>et al.</i> (See Egan, Charles, assignor.)						
Robie, Henry W., Portsmouth, and W. H. Lyons, Berkley, Va. Utilizing the exhaust of steam-pumps.....	256,074	Oct. 2	363	101	25	67
Robinet, Jules, Suippes, France. Irrigating apparatus.....	289,448	Dec. 4	90	26	25	902
Robinsins, Francis. (See Ingersoll, Monroe, assignor.)						
Robinson, Abel W., assignor to himself and T. B. Rhodes, Anna, Ill. Car-coupling.....	280,516	July 3	218	58	24	39
Robinson, Alba R. P., North Walpole, N. H. Rotary egg-preserver.....	271,658	Feb. 6	88	24	23	455
Robinson, Albert S., assignor to A. M. Robinson, Albany, N. Y. Device for securing legs to tables.....	280,401	July 3	76	21	24	16
Robinson, Alfred. (See Kent, Alexander W., assignor.)						
Robinson, Alfred S., assignor to Wilmington Dental Manufacturing Company, Wilmington, Del. Sample-card of artificial teeth.....	290,933	Dec. 25	1989	549	25	1258
Robinson, Almon, Lewiston, Me. Heating-case for fruit-jars.....	277,944	May 22	1743	475	23	1945
Robinson, Anna M. (See Robinson, Albert S., assignor.)						
Robinson, Benjamin F., New York, N. Y. Holding ring and frame for embroidering-machines.....	274,034	Mar. 13	1007	276	23	1014
Robinson, Charles K., assignor to L. and N. L. Hotchkiss, Lyons, N. Y. Vehicle-reach.....	271,520	Jan. 30	2111	607	23	420
Robinson, Cheals L., San Francisco, Cal. Remedy for ague.....	275,524	Apr. 10	866	.....	23	1382
Robinson, Clark. (See Parker and Robinson.)						
Robinson, Clark, Ean Claire, Wis. Extension-table.....	270,128	Jan. 2	353	{ 102 103 }	} 23	72
Robinson, D. F. (See Jackson, Charles A., assignor.)						
Robinson, Edgar. (See Dean, Charles W., assignor.)						
Robinson, Edgar, Cincinnati, Ohio. Coffee pot or urn.....	276,473	Apr. 24	2053	571	23	1603
Robinson, Emri. (See Arthur, Joseph A., assignor.)						
Robinson, Francis W. (See Sherry and Robinson.)						
Robinson, Frank, <i>et al.</i> (See Schreiber, Charles W., assignor.)						
Robinson, George E., <i>et al.</i> (See Arend, John J., assignor.)						
Robinson, George H., <i>et al.</i> (See Miller, James, assignor.)						
Robinson, George H., <i>et al.</i> (See Reynolds, George H., assignor.)						
Robinson, Henry A., Foxcroft, Me. Metallized rubber compound.....	284,760	Sept. 11	744	.....	24	1036
Robinson, James R., Cambridge, Mass. Safety-seam for steam-boilers.....	282,120	July 31	2263	620	24	416
Robinson, Job, Baldwin City, Kans. Gate.....	282,374	July 31	2583	709	24	471
Robinson, Joel, La Grande, Oreg. Foot-warmer.....	271,364	Jan. 30	1914	553	23	385
Robinson, John, Ottumwa, Iowa. Vehicle-seat.....	283,922	Aug. 28	1754	495	24	841
Robinson, John A. (See Dimock and Robinson.)						
Robinson, John T., Hyde Park, Mass. Machine for cutting paper-board.....	273,394	Mar. 6	203	55	23	868
Robinson, Macedon J., deceased, M. E. Robinson, Waldo, Fla., administratrix. Device for fitting stove-pipes.....	278,599	May 29	2584	705	23	2100
Robinson, Martha E., administratrix. (See Robinson, Macedon J.)						
Robinson, Orton H., Manistee, Mich. Rotary engine.....	281,796	July 24	1846	505	24	340
Robinson, Randolph O., Glidden, Iowa. Carpet-stretcher.....	283,818	Aug. 28	1636	461	24	820
Robinson, Richard F., Richmond, Va. Brick.....	285,308	Sept. 18	1404	397	24	1161
Robinson, Robert, Brooklyn, N. Y. Faucet.....	274,385	Mar. 20	1465	402	23	1102
Robinson, Sarah C., Chicago, Ill. Doll.....	283,513	Aug. 21	1264	354	24	740
Robinson, Thomas C., Boston, Mass. Trimming attachment for sewing-machines.....	286,153	Oct. 2	456	124	25	85
Robinson, Thomas C., Boston, assignor to himself and E. B. Welch, Cambridge, Mass. Trimming attachment for sewing-machines.....	277,787	May 15	1557	424	23	1907
Robinson, Thomas C., Boston, assignor to himself and E. B. Welch, Cambridge, Mass. Trimming attachment for sewing-machines.....	278,825	June 5	203	59	23	2158
Robinson, Thomas C., Boston, assignor to himself and E. B. Welch, Cambridge, Mass. Trimming mechanism for sewing-machines.....	286,164	Oct. 2	467	{ 128 129 }	} 25	87
Robinson, William. (See Briggs and Robinson.)						
Robinson, William, Chicago, Ill. Crystallizing grape-sugar.....	270,699	Jan. 16	1085	.....	23	227
Robinson, William, Boston, Mass. Pedicycle.....	278,185	May 22	2044	562	23	1997
Robinson, William A., Nankin, assignor to Nichols, Shepard & Company, Battle Creek, Mich. Grain-separator for thrashing-machines.....	274,386	Mar. 20	1466	402	23	1102
Robinson, William B. (See Gangee, Sampson, assignor.)						
Robinson, William J., Boston, Mass. Machine for ornamenting wood.....	283,664	Aug. 21	1431	401	24	772
Robinson, William M., Petersburg, Va. Yarn-tension device for ring-spinning frames.....	283,663	Aug. 21	1429	400	24	772
Robison, Charles H., Chicago, Ill. Apparatus for rendering fats.....	287,862	Nov. 6	84	25	25	522
Robison, Joseph A., New Washington, Ind. Treadle.....	283,514	Aug. 21	1265	354	24	740
Robson, James, Birmingham, county of Warwick, England. Gas-engine.....	278,600	May 29	2565	706	23	2100
Robson, Robert S., Cambridgeport, Mass. Machine for cutting printers' rules.....	271,204	Jan. 23	1700	491	23	339
Robson, Robert S., Cambridgeport, assignor, by mesne assignments, to himself and J. Loughrey, East Cambridge, Mass. Dating-stamp.....	279,815	June 19	1477	414	23	2390
Roby, Luther A., and S. T. Wellman, Cleveland, Ohio. Car-wheel.....	284,330	Sept. 4	211	59	24	940
Rochat, Ernst. (See Horne, George W., assignor.)						
Rochat, François. (See Crepin and Rochat.)						
Roche, Edward P., Bath, Me. Chafe-iron for vehicles.....	279,816	June 19	1478	415	23	2390
Roche, James, assignor to Eagle Lock Company, Terryville, Conn. Lock.....	250,517	July 3	219	58	24	39
Rochette, Cleophas, St. Sauveur, Quebec, Canada. Forming heel-stiffeners for boots or shoes.....	276,717	May 1	241	61	23	1666
Rochford, William H. (See Winghart and Rochford.)						
Rochow, Ferdinand, Brooklyn, N. Y. Balanced slide-valve.....	270,986	Jan. 23	1439	415	23	296
Rock, Frederick, assignor of one-half to W. F. Hitchcock, Homer, N. Y. Reversing-gear for steam-engines.....	273,609	Mar. 6	474	128	23	915
Rockafellow, John W., Stockton, and P. T. B. Nevius; said Nevius assignor to G. Nevius, Flemington, N. J. Combined fruit-basket and cover.....	284,064	Aug. 28	1950	544	24	875
Rockey, Richard M., Nora, Ill. Top for milk-cans.....	277,613	May 15	1357	366	23	1870
Rockfellow, Andrews, assignor of one-half to A. H. Cartiss, Eden, N. Y. Can-filling apparatus.....	287,725	Oct. 30	2480	669	25	481



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Rockwell, Frank L., Chicago, Ill. Double faucet .....	284,237	Sept. 4	104	28, 29	24	922
Rockwell, George M., Woonsocket, R. I. Dress form or stand. (Reissne) .....	10,334	May 29	2683	735	23	2117
Rockwell, George M., Woonsocket, R. I. Dress form or stand .....	272,479	Feb. 20	1129	317	23	652
Rockwell, Lucius A. (See Fowler and Rockwell.)						
Rockwell, Thomas H. (See Spielman, William, assignor.)						
Rocour, Georges, Liege, Belgium. Treating phosphatic slage for manure, &c. ....	284,674	Sept. 11	634	.....	24	1017
Rodden, William H., Toronto, Ontario, Canada. Stile for wire fences .....	286,226	Oct. 9	542	149	25	110
Roddy, Andrew, <i>et al.</i> (See Vincent, John, Jr., assignor.)						
Rodebaugh, Charles D., Winslow, Ill. Spring-bed .....	279,188	June 12	724	198	23	2257
Rodenbort, Peter, Quincy, Ill. Corn-planter .....	286,557	Oct. 9	971	261	25	186
Rodgers, Alexander. (See Moe, Gilbert, assignor.)						
Rodgers, James L. (See Hartley and Rodgers.)						
Rodgers, John, San Francisco, Cal. Invalid-settee .....	283,515	Aug. 21	1266	354	24	740
Rodgers, Ranzil H., Dallas, Tex. Awning-bracket .....	283,023	Aug. 14	658	186	24	624
Rodgers, Willis H. (See Morris and Rodgers.)						
Rodman, James A., Lebanon, Tex. Hollow auger .....	286,964	Oct. 16	1492	410	25	283
Rodman, John B., and J. D. Bingham, Fort Leavenworth, Kans. Argand candle .....	284,466	Sept. 4	396	111	24	971
Rodman, William R., New Burnside, Ill. Glass-cutting frame .....	270,847	Jan. 16	1260	363	23	261
Rodney, Caesar A., Wilmington, Del. Composite washer .....	271,365	Jan. 30	1915	553	23	385
Roe, William L. (See Short and Roe.)						
Roehling, Washington A., Brooklyn, N. Y. Rope-driving machinery .....	270,129	Jan. 2	354	103	23	72
Roeder, Ferdinand, Frankfort-on-the-Main, Germany. Frame for portable looking-glasses .....	270,130	Jan. 2	355	104	23	72
Roehl, Carl, assignor of one-half to C. F. Klenze, Davenport, Iowa. Adjustable hame .....	285,644	Oct. 2	76	23	25	16
Roehl, Carl, assignor of one-half to C. F. Klenze, Davenport, Iowa. Hame .....	289,028	Nov. 27	1554	429	25	802
Roelofs, Anthony, Philadelphia, Pa. Car-blind .....	275,712	Apr. 10	1098	300	23	1422
Roelofs, Anthony, Philadelphia, Pa. Toy .....	282,778	Aug. 7	365	103	24	564
Roemer, Nicholas, Quincy, Ill. Printers's galley .....	287,581	Oct. 30	2394	620	25	446
Roemer, William, Newark, N. J. Catch for bag-frames, &c. ....	272,902	Feb. 27	1688	472	23	757
Roesch, George. (See Weller, Wance, and Roesch.)						
Roesch, George R. (See Weller and Roesch.)						
Roessing, Bernhard, Friedrichshutte, Upper Silesia, Germany. Cnpelling-furnace .....	289,143	Nov. 27	1689	469	25	826
Rogan, Daniel H., assignor of three-fourths to F. Lillibridge, Cedar Rapids, Iowa. Sew- ing-machine .....	284,065	Aug. 28	1951	{ 544 } { 545 }	24	876
Rogan, David S., Burnet, Tex. Cotton-gin .....	280,082	June 26	1815	511	23	2456
Rogers, Amos. (See Stearns, Oscar S., assignor.)						
Rogers, Arthur, Barnesville, Ohio. Post-hole digger .....	283,282	Aug. 14	973	271	24	681
Rogers & Bros., C. (See Donovan, George L., assignor.)						
Rogers & Bros., C. (See Rogers, Gilbert, assignor.)						
Rogers, Charles D., Providence, R. I. Making barbed fence-wire .....	290,272	Dec. 18	1117	314	25	1099
Rogers, Charles L., and G. W. Wolf, Baltimore, Md. Milk-bucket .....	287,726	Oct. 30	2482	669	25	482
Rogers, Charles W., Baltimore, Md. Machine for rounding leather .....	283,024	Aug. 14	659	186	24	625
Rogers, Davenport, Galion, Ohio. Self heating and separating still .....	284,331	Sept. 4	212	59	24	940
Rogers, Davenport, Galion, Ohio. Process of and apparatus for reducing the gravity of pe- troleum-oil .....	284,332	Sept. 4	214	59, 60	24	940
Rogers, David C., Greenfield, Mass. Mitering-machine .....	272,903	Feb. 27	1689	473	23	757
Rogers, Edwin, Brookline, Mass. Fire-alarm telegraph .....	285,076	Sept. 18	1132	316	24	1112
Rogers, Ethan, Cohoes, N. Y. Machine for making axes .....	275,273	Apr. 3	497	{ 137 } { 138 }	23	1311
Rogers, Gilbert, assignor to C. Rogers & Bros., Meriden, Conn. Coffin-screw .....	277,348	May 8	1039	278	23	1812
Rogers, Harrison, <i>et al.</i> (See Secor, William H., assignor.)						
Rogers, Harry, New York, N. Y. Furnace-grate .....	283,419	Aug. 21	1148	{ 324 } { 325 }	24	720
Rogers, Hattie, Polo, Ill. Vegetable-grater .....	284,487	Sept. 4	397	111	24	971
Rogers, Hiram D., New York, N. Y. Electric conductor .....	281,223	July 10	1093	303	24	201
Rogers, Hugh, Washington, Ind. Revolving horse hay-rake .....	282,375	July 31	2584	709	24	471
Rogers, J. Harris, Washington, D. C. Automatic telegraph .....	277,349	May 8	1039	279	23	1812
Rogers, J. Harris, New York, N. Y. Telephone .....	281,560	July 17	1523	418	24	279
Rogers, James H., assignor of one-half to F. Hume and L. G. Hine, Washington, D. C. Telephone transmitter and receiver .....	269,884	Jan. 2	70	21	23	16
Rogers, James H., New York, N. Y., assignor to American Electro Gas Telephone Com- pany, of New Jersey. Sound-transmitting apparatus .....	287,169	Oct. 23	1758	{ 482 } { 483 }	25	339
Rogers, James H., Washington, D. C., assignor, by mesne assignments, to American Elec- tro Gas Telephone Company, of New Jersey. Apparatus for telephonic communication .....	288,366	Nov. 13	732	199	25	642
Rogers, James W., New York, N. Y. Electric conductor .....	279,129	June 12	726	199	23	2257
Rogers, James W., New York, N. Y. Electric conductor or cable .....	280,518	July 3	221	58, 59	24	40
Rogers, James W., New York, N. Y. Automatic telegraph .....	283,665	Aug. 21	1433	401	24	773
Rogers, John F. (See Wellman, Emilius A., assignor.)						
Rogers, Joseph, Hanover Square, county of Middlesex, England. Lens for signal lamps and lanterns .....	282,376	July 31	2585	710	24	471
Rogers, Lebbens H. (See Shaw, William A., assignor.)						
Rogers, Michael J., Cincinnati, Ohio, assignor to T. T. Haydock. Dash-board fastening .....	284,575	Sept. 4	508	142	24	989
Rogers, Richard V., and J. M. Allen, Larkinsville, Ala. Rock-drill .....	274,035	Mar. 13	1008	276	23	1015
Rogers, T. Mellon, assignor of one-half to S. F. M. Tasker, Philadelphia, Pa. Pulverizing- machine .....	276,145	Apr. 17	1641	452	23	1524
Rogers, Warner, Cincinnati, Ohio. Shoe .....	284,066	Aug. 28	1953	545	24	876
Rogers, Warren S., Westport, Conn. Button .....	280,767	July 3	531	149	24	94
Rogers, Will. W., <i>et al.</i> (See Martin, John C., assignor.)						
Rogers, William, Hartford, Conn. Salt-cellar .....	270,131	Jan. 2	356	104	23	73
Rogers, William, and T. A. Maher, New Orleans, La. Ice-cream freezer .....	278,276	May 22	2165	596	23	2017
Rogers, William H., Hartford, Conn. Heat-obstructing mixture .....	282,779	Aug. 7	366	103	24	564
Rogers, William H. H., Brooklyn, N. Y. Paper box .....	272,327	Feb. 13	917	256	23	611
Rohan, John, St. Louis, Mo. Riveting-machine .....	274,143	Mar. 20	1154	318	23	1047
Rohde, Conrad H., Humboldt Park, Ill. Combined clutch and brake .....	278,601	May 29	2587	706	23	2100
Rohe, William H., Crete, Ill. Box-cover .....	277,061	May 8	693	180	23	1751
Rohmer, Léon, Rambervillers, France. Bag-holder .....	280,114	Dec. 11	914	{ 259 } { 260 }	25	1056
Rohn, Christian, Hartford, Conn. Gas-engine .....	280,083	June 26	1816	{ 511 } { 512 }	23	2456
Rohne, Charles, and J. Moenke, Hoboken, N. J. Dumping-car .....	277,350	May 8	1042	{ 279 } { 280 }	23	1812
Rohrer, Henry, <i>et al.</i> (See Inglis, Charles A., assignor.)						
Rohrer, John B., Philadelphia, Pa. Combined crib, chair, and commode .....	276,633	May 1	110	29	23	1646
Rohrman, Joseph B. (See Wright, Caleb, assignor.)						
Rohrman, Joseph B., Philadelphia, Pa. Sheet-metal box .....	284,981	Sept. 11	1002	282	24	1084

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Roland, Albert C., and A. Harper, Albuquerque, N. Mex. Ter. Car-brake.....	274,144	Mar. 20	1155	318	23	1047
Rolfe, Albert H., Baldwinsville, Mass. Abrasive wheel.....	277,062	May 8	693	181	23	1751
Rolland, Jean B., Paris, France. Traveler for ring-spinning frames.....	275,946	Apr. 17	1396	385	23	1481
Rolland, Jean B. L., Jr. (See Coté, N. Joseph, assignor.)						
Rollins, Alpheus. (See Wildey and Rollins.)						
Rollins, Edward K., assignor to Hunt Brothers & Company, (limited,) Scranton, Pa. Min- er's lamp.....	279,503	June 12	1115	308	23	2320
Rollins, Frank C., Weld, Me. Horseshoe.....	286,640	Oct. 16	1083	292	25	212
Rollins, John B. (See Glazier, George W., assignor.)						
Rollins, John O., Chico, Cal. Plow.....	273,316	Mar. 6	96	28	23	850
Rollins, Samuel G., Boston, Mass. Apparatus for roasting and amalgamating ores.....	290,802	Dec. 25	1826	504	25	1230
Rolph, Henry E. (See Bier and Rolph.)						
Rolston, Rosewell G. (See Linn, Samuel H., assignor.)						
Romack, John M., et al. (See Fry, John, assignor.)						
Romadka, Anthony V., Wauwatosa, Wis. Trunk-fastener.....	282,780	Aug. 7	366	104	24	564
Romadka, Anthony V., Wauwatosa, Wis. Trunk-caster.....	289,716	Dec. 4	437	122	25	963
Romaine, David, assignor of one-half to N. H. Steward, Philadelphia, Pa. Expansion-cover for bolts.....	272,328	Feb. 13	918	256	23	611
Romans, John W., Chelsea, Mass., assignor of one-half to J. W. McClellan, Valparaiso, Ind. Center-square and bevel.....	271,128	Jan. 23	1605	461	23	323
Romine, Malcolm J., and D. P. Lee, Nevada, Mo. Post-hole auger.....	283,283	Aug. 14	973	272	24	681
Rominger, George S., assignor to American Buttonhole, Overseaming and Sewing Machine Company, Philadelphia, Pa. Compensating-journal.....	276,287	Apr. 24	1814	505	23	1561
Romkey, Frank C., Burlington, Iowa. Harrow.....	286,154	Oct. 2	457	124	25	85
Romkey, John H., Burlington, Iowa. Harrow.....	279,437	June 12	1040	288	23	2308
Rondebush, Hezekiah, et al. (See Anderson, David H., assignor.)						
Ronner, John H. J. (See Cary, Joseph C., assignor.)						
Rood, A. E., et al. (See Shepler, Pius L., assignor.)						
Rood, Alphonso E., et al. (See Jewett, Nathan, assignor.)						
Rood, Albert O., Syracuse, assignor to V. P. Travers, New York, N. Y. Hammock and making the body of the same.....	275,161	May 8	826	218	23	1773
Rood, H. W., et al. (See Smith, Alfred B., assignor.)						
Rooney, Henry F., Randolph, assignor to C. A. Shaw, Boston, Mass. Edge-trimmer for boots and shoes.....	280,958	July 10	769	213	24	141
Rooney, John B. (See Johnston, Samuel L., assignor.)						
Rooney, Mary. (See Luscomb, James E., assignor.)						
Rooney, Patrick, Charlton, Iowa. Straddle-row cultivator.....	270,251	Jan. 9	503	148	23	109
Roop, Henry O., Carrollton, Ga. Plow.....	288,666	Nov. 20	1106	303	25	715
Roorbach, William L., Philadelphia, Pa. Bottle-stopper.....	272,775	Feb. 20	1501	422	23	718
Roos, August, New York, N. Y. Filter.....	278,186	May 22	2045	562	23	1998
Roosevelt, Hilborne L., New York, N. Y. Overshoe.....	277,614	May 15	1358	366	23	1870
Root, Andrus P., Deansville, N. Y. Twine-setter for vines.....	283,516	Aug. 21	1267	355	24	740
Root, Gardner B., Amherst, Wis. Feeder for grinding rolls.....	287,724	Oct. 30	2479	668	25	481
Root, George W. (See Smyth, David M., assignor.)						
Root, Henry, San Francisco, Cal. Cable railway.....	285,514	Sept. 25	1654	465	24	1211
Root, Henry, San Francisco, Cal. Gripping and carrying apparatus for cable railways.....	286,163	Oct. 2	466	127	25	87
Root, Howard C., and J. C. Reilly, assignors of one-third to S. W. Thome, Philadelphia, Pa. Device for suspending electric cables.....	278,277	May 22	2166	596	23	2018
Root, James, Black's Station, Cal. Hopper for grain-separators.....	284,333	Sept. 4	216	60	24	941
Root, John B., Port Chester, N. Y. Machine for making spiral-jointed metallic pipe.....	271,740	Feb. 6	183	50, 51	23	472
Root, John B., Port Chester, N. Y. Pump.....	289,402	July 3	77	21	24	16
Root, John B., Port Chester, N. Y. Machine for making spirally-jointed metal pipe.....	280,403	July 3	78	21	24	17
Root, John B., Port Chester, N. Y. Device for feeding rivets.....	280,404	July 3	80	22	24	17
Root, John B., Port Chester, N. Y. Machine for shaping and riveting spiral pipes.....	283,923	Aug. 28	1755	495	24	841
Root, John B., Port Chester, N. Y. Construction of sheet-metal pipe-sections.....	283,924	Aug. 28	1757	496	24	842
Root, John B., Port Chester, N. Y. Pneumatic compressor.....	283,925	Aug. 28	1758	496	24	842
Root, William A., Montreal, Quebec, Canada. Machine for forming staples.....	277,615	May 15	1359	366	23	1871
Root, William A., New York, N. Y., assignor to Washburn & Moen Manufacturing Com- pany, Worcester, Mass., and I. L. Ellwood, De Kalb, Ill. Barbed wire.....	281,300	July 17	1200	332	24	226
Roovers, Alexander. (See Roovers, Alfred A.)						
Roovers, Alfred A., New York, N. Y. Electric cane.....	287,170	Oct. 23	1760	483	25	339
Rorebeck, Henry, Parma, assignor to C. E. Coates, Spencerport, N. Y. Halter.....	288,595	Nov. 13	1016	279	25	694
Rose, Allen W., and C. A. Cheever, New York, N. Y., assignors to said Cheever, trustee. Electric speaking-telephone.....	272,329	Feb. 13	919	256	23	611
Rose, Andrew L., Torrington, Conn. Pipe fitting and threading machine.....	284,904	Sept. 11	909	256	24	1067
Rose, Charles, et al. (See Runk, Jacob L., assignor.)						
Rose, Elmore E., Springfield, Mass. Bit-brace fastening.....	275,860	Apr. 17	1300	357	23	1463
Rose, George W. (See Rose, William J. and G. W.)						
Rose, Henry, Prairie du Sac, Wis. Table-leg fastening.....	275,274	Apr. 3	500	138	23	1311
Rose, Henry W., Westerly, R. I. Automatic feeding device.....	250,084	June 26	1820	512	23	2456
Rose, Ira, Salinas, Cal. Lifting-jack.....	288,367	Nov. 13	734	199	25	643
Rose, Jeffrey H., Brooklyn, N. Y. Device for opening and closing skylights.....	270,340	Jan. 9	611	170	23	129
Rose, John H., Norwalk, Conn. Toy pistol.....	287,562	Oct. 30	2295	621	25	446
Rose, John J., Elmwood, Ill. Whip-holder.....	289,310	Nov. 27	1886	525	25	864
Rose, Joseph P. (See Beddow, George, assignor.)						
Rose, Joshua. (See Colebrook, Cemer T., assignor.)						
Rose, Joshua, New York, N. Y. Tube cutter and expander.....	286,227	Oct. 9	543	149	25	110
Rose, Reuben M., Brooklyn, N. Y. Dial and reading-disk for fare-recorders.....	281,301	July 17	1200	332	24	226
Rose, Reuben M., Brooklyn, N. Y. Fare register and recorder.....	281,302	July 17	1202	332	24	226
Rose, Rufus E., Kissimmee, Fla. Dredging and excavating machine.....	279,599	June 19	1233	342	23	2347
Rose, William H., Baltimore, Md. Spring clasp-loop for neck-wear.....	283,284	Aug. 14	974	272	24	681
Rose, William J. and G. W., Horseheads, N. Y. Vehicle-spring.....	290,934	Dec. 25	1990	549	25	1258
Rose, William P., Irwin, Colo. Artificial stone.....	279,817	June 19	1480	23	23	2391
Rosebrook, Frank, Elmhurst, N. Y. Electric regulator and alarm for incubators.....	271,991	Feb. 6	499	134	23	527
Rosebrooks, John M., assignor to W. A. Wood Mowing and Reaping Machine Company, Hoosick Falls, N. Y. Apparatus for adjusting harvester-reels.....	270,341	Jan. 9	612	180	23	129
Rosbruch, Abner M., Toronto, Ontario, Canada. Galvanic battery.....	271,992	Feb. 6	502	135	23	527
Rosbruch, Abner M., Toronto, Ontario, Canada, assignor to W. Hubbard, Elgin, Ill. Mechanical speaking-telegraph.....	270,848	Jan. 16	1260	363	23	261
Rosenberg & Co., I. (See Rosenberg, Seymour H., assignor.)						
Rosenberg, Seymour H., assignor to I. Rosenberg & Co., New Haven, Conn. Corset.....	274,387	Mar. 20	1467	402	23	1102



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Rosenfield, William W., New York, N. Y. Pneumatic lubricator	285,162	Sept. 18	1240	348	24	1130
Rosenfield, William W., assignor to J. Aron, New York, N. Y. Railway-car gate	288,494	Nov. 13	896	244	25	671
Rosenkranz, Adam. (See Stitt, Lowbridge, and Rosenkranz.)						
Rosenstar, Anderson, New York, N. Y. Chimney-top	281,645	July 17	1630	445	24	297
Rosensteel, Rufus C., Allegheny, Pa. Metallic keg	291,004	Dec. 25	2091	576	25	1273
Rosenstock, Moritz, New York, N. Y. Hoop-skirt	288,863	Nov. 20	1347	370	25	757
Rosentreter, Frank L., assignor to himself and G. Haasenfug, Cleveland, Ohio. Sash-holder	282,928	Aug. 7	534	151	24	595
Rosier, Thomas R., San José, Cal. Fanning-mill	282,568	Aug. 7	114	34	24	520
Rosine, Conrad, Chicago, Ill. Steam pump	287,863	Nov. 6	86	25	25	523
Rosquist, George, Brooklyn, N. Y. Counting apparatus for rotary printing-presses	277,945	May 22	1744	476	23	1945
Ross, Alexander, <i>et al.</i> (See Tupper, Hardy E. W., and J. A., assignors.)						
Ross, C. Hansen, assignor of one-half to L. O. Dauchy, Chicago, Ill. Illuminating-tiling for vaults, &c.	270,132	Jan. 2	357	104	23	73
Ross, Charles W., <i>et al.</i> (See Tupper, Hardy E. W., and J. A., assignors.)						
Ross, Christian H., assignor of one-half to L. O. Dauchy, Chicago, Ill. Vault-cover fastening	283,517	Aug. 21	1268	355	24	741
Ross, Elmore W., Fulton, N. Y. Gearing	275,861	Apr. 17	1301	358	23	1463
Ross, Elmore W., Fulton, N. Y. Endless carrier and elevator	278,049	May 22	1873	512	23	1968
Ross, Elmore W., Fulton, N. Y. Machine for cutting fiber	287,392	Oct. 23	2036	553	25	388
Ross, Eugene E., Lynchburg, Va. Nut-lock	286,849	Oct. 16	1347	369	25	259
Ross, George, assignor to Ross Valve Company, Troy, N. Y. Fluid-pressure regulator	285,163	Sept. 18	1242	349	24	1130
Ross, George B., Buffalo, N. Y. Centrifugal oiler	288,667	Nov. 20	1107	304	25	715
Ross, George W., Bluffdale, Ill. Steam-plow	281,140	July 10	989	276	24	181
Ross, Gilbert M., and D. Grant, Virginia City, Nev. Diamond-drill and well sinking or boring safety-machine	284,067	Aug. 28	1955	545	24	876
Ross, H. N. (See Poling, Totten, assignor.)						
Ross, Henry W., and J. F. Bliss, Springfield, Mass. Ironing-board clamp	275,275	Apr. 3	501	138	23	1311
Ross, Isaac M., and J. W., South Carrollton, Ky. Combined bail ear and lock	275,416	Apr. 10	724	193	23	1359
Ross, James, El Paso, Ill. Device for handling drain-tiles	287,727	Oct. 30	2483	669	25	482
Ross, James K., Springfield, Ohio. Letter-box bell	269,961	Jan. 2	165	48	23	35
Ross, James S., Nashville, Tenn., assignor of one-half to W. Nichols, Boston, Mass. Break-key attachment for magneto-electric generators	290,709	Dec. 25	1707	470	25	1209
Ross, John M., Bath, N. Y. Sliding shears	272,388	Feb. 13	1006	282	23	626
Ross, John W., Santa Clara, Cal. Provision-safe or kitchen-cabinet	273,395	Mar. 6	204	55	23	868
Ross, Joseph W. (See Ross, Isaac M., and J. W.)						
Ross, Lyon P., Rockford, Ill. Cabinet-desk	272,776	Feb. 20	1502	423	23	718
Ross, Lyon P., Rockford, Ill. Cabinet folding desk	272,777	Feb. 20	1504	423	23	719
Ross, Lyon P., Rockford, Ill. Desk	272,475	Oct. 30	2145	583	25	417
Ross, Mary B., New York, N. Y. Mantua-making	273,160	Feb. 27	1997	561	23	811
Ross, Nathaniel E., Versailles, Ohio. Ditching-machine	270,987	Jan. 23	1440	415	23	296
Ross, Noble G., Chicago, Ill. Machine for making barbed wire	273,765	Mar. 13	687	185	23	959
Ross, Robert, Vergennes, Vt. Machine for forging horseshoe-nails	277,063	May 8	695	181	23	1751
Ross, Robert M., Utica, N. Y. Dental-drill hand-piece	281,139	July 10	988	276	24	181
Ross, Robert M., Utica, N. Y., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental-drill hand-piece. (Reissue)	10,423	Dec. 11	1011	284	25	1073
Ross, Robert M., and E. J. Klinck, Utica, N. Y. Fan for dental engines	290,359	Dec. 18	1227	345	25	1119
Ross Valve Company. (See Ross, George, assignor.)						
Ross, William B., Lyons, N. Y. Endless cable gearing	286,228	Oct. 9	544	149	25	110
Rousseau, David, New York, N. Y. Electric gas-lighting burner	285,682	Sept. 25	1853	529	24	1248
Rosser, Thomas, Bellaire, Ohio. Grate	288,864	Nov. 20	1348	370	25	758
Rossi, Augusto J., <i>et al.</i> , trustees. (See Marchand, Charles, assignor.)						
Rossi, James C., Perth Amboy, N. J. Production of cold	284,068	Aug. 28	1956	545	24	876
Rossiter, John H., assignor to New Haven Clock Company, New Haven, Conn. Machine for ornamenting metal surfaces	282,377	July 31	2586	710	24	471
Rössler, Richard, <i>et al.</i> (See Seymour and Bannigan, assignors.)						
Rössler, Franz. (See Rössler, Heinrich, assignor.)						
Rössler, Heinrich, Frankfurt-on-the-Main, Germany, assignor to F. Rössler, Brooklyn, N. Y. Making cupric sulphate	286,735	Oct. 16	1205	325	25	234
Rote, Charles V., assignor of seven-eighths to J. W. Holman, R. M. Agnew, Lancaster, H. Hice, Beaver, Pa., and M. D. Harter, Mansfield, Ohio. Automatic car-brake	274,388	Mar. 20	1467	403	23	1102
Rote, Charles V., assignor of seven-eighths to J. W. Holman, R. M. Agnew, Lancaster, H. Hice, Beaver, Pa., and M. D. Harter, Mansfield, Ohio. Automatic car-brake	274,389	Mar. 20	1469	403	23	1103
Roth, Annie. (See Roth, Henry, assignor.)						
Roth, Frank J., assignor of one-half to J. Kauffman, Cincinnati, Ohio. Steam-engine	271,741	Feb. 6	186	51	23	472
Roth, George, Irvington, assignor to himself, P. Lowentraut, and M. L. Roth, Newark, N. J. Hat-curling machine	278,458	May 29	2424	661	23	2072
Roth, Henry, assignor to A. Roth, New York, N. Y. Reflector and signal frame for car-lamps	278,602	May 29	2588	706	23	2100
Roth, Ludwig, Wetzlar, Prussia, Germany. Manufacture of cement	270,608	Jan. 16	967		23	206
Roth, Martina L., <i>et al.</i> (See Roth, George, assignor.)						
Roth, McMahon & Co. (See De Tammel, Martin, assignor.)						
Rothbarth, John C., Buffalo, N. Y. Punching and riveting anvil	277,511	May 15	1232	332	23	1851
Rothe & Lips. (See Robertson, John, assignor.)						
Rothman, John R., Canton, Ill. Adjustable ditch-cleaner	272,087	Feb. 13	627	170	23	560
Rothrock, Oscar, Beech Creek, Pa. Locomotive	277,428	May 8	1128	303	23	1826
Rothrock, Oscar, Beech Creek, Pa. Safety device for locomotive-pilots	280,959	July 10	771	214	24	141
Rothschild, James, Newark, N. J. Inlaid metal-work for jewelry, &c.	281,928	July 24	2006	550	24	368
Rothschild, Joseph, Greenville, Ohio. Sewing and dressing case	272,981	Feb. 27	1775	497	23	771
Rothschild, Maier, Shamokin, Pa. Tunneling-machine	287,728	Oct. 30	2483	669	25	482
Rothschild, Victor H. (See Borchardt, Albert, assignor.)						
Rothweiler, William J. (See Wais, Christian, assignor.)						
Rounds, Harley M., Clear Lake, Iowa. Roller reduction-machine for flour-mills	271,742	Feb. 6	187	52	23	473
Rounds, Sterling T. (See Auer, Albert B., assignor.)						
Rouse, Jasper A., East Berkshire, Vt. Horse-power speed-regulator	272,330	Feb. 13	921	256	23	612
Rouse, Jasper A., East Berkshire, Vt. Horse-power speed-regulator	287,327	Oct. 23	1959	535	25	375
Rouse Manufacturing Company, R. R. (See Sanders, John E., assignor.)						
Rouse, Robert A., Levee township, Pike county, Ill. Clevis	286,075	Oct. 2	364	101	25	67
Rouse, Roswell R. (See Jones, Harry, assignor.)						
Rouse, Roswell R. (See Sanders, John E., assignor.)						
Roush, Philip, and C. P. Tener, Russell's Station, Ohio. Flood-fence	275,713	Apr. 10	1099	300	23	1422

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Roussan, Hyacinthe, and M. G. De Barbeyrac, Paris, France. Rectifying alcohol and other crude spirits	272,585	Feb. 20	1264	.....	23	676
Rousseau, David, New York, N. Y. Automatic circuit-opener	279,107	June 5	622	170	23	2229
Rousseau, Etienne E. H., Paris, France. Apparatus for utilizing the force of fluids, air, and water	276,079	Apr. 17	1553	429	23	1509
Rousseau, Necter. (See Brennan and Rousseau.)						
Rousseau, Necter, assignor of one-half to J. W. Brennan, Chicago, Ill. Insulator	259,449	Dec. 4	91	26	25	903
Roux, François. (See Vernay and Roux.)						
Rowan, Thomas, London, England. Method of and apparatus for ventilating buildings, ships, vessels, railway-carriages, &c.	272,158	Feb. 13	713	196	23	575
Rowan, Thomas, London, England. Chimney or flue	283,025	Aug. 14	660	186	24	625
Rowan, Thomas, London, England. Ventilating and apparatus therefor	283,148	Aug. 14	801	224	24	649
Rowan, Thomas, London, England. Warming and ventilating and apparatus therefor	283,149	Aug. 14	803	224	24	649
Rowan, Thomas, London, England. Apparatus for ventilating sewers and drains	284,761	Sept. 11	746	207	24	1036
Rowan, William, Belfast, Ireland. Piston	273,161	Feb. 27	1998	562	23	811
Rowden, James W., administrator. (See Crismon and Whitaker.)						
Rowe, Cyrenius, Wales, N. Y., assignor of one-half to E. T. Allen, Philadelphia, Pa. Traction-engine	271,129	Jan. 23	1606	461	23	324
Rowe, Edward T., assignor to New England Patent Fire Escape Company, Boston, Mass. Fire-escape	283,666	Aug. 21	1435	402	24	773
Rowe, Enoch J., R. Holmes, and J. Dawson, Eureka, Cal. Churn	271,130	Jan. 23	1607	462	23	324
Rowe, John, Davenport, Iowa. Base-burning steam-boiler	286,076	Oct. 2	365	101	25	07
Rowe, L. L. (See Ridgway, Charles L., assignor.)						
Rowe, Philip C., Boston, Mass. Pulley for use in connection with awnings, &c.	274,036	Mar. 13	1009	276	23	1015
Rowe, William, assignor to himself and J. A. Clarke, Haverhill, Mass. Door-lock	277,616	May 15	1360	366	23	1871
Rowe, William N., Washington, D. C. Separable button	279,279	June 12	825	229	23	2274
Rowell, Guilford D., Appleton, Wis. Hoisting-carrier	271,276	Jan. 30	1786	518 519	23	362
Rowell, Guilford D., Appleton, Wis. Seed-bar tooth	287,171	Oct. 23	1761	483	25	339
Rowell, Guilford D., Appleton, Wis. Reversible cultivator-tooth	287,172	Oct. 23	1762	483	25	340
Rowland, Charles, Quincy, Ill. Calculating device	284,576	Sept. 4	508	142 143	24	990
Rowland, Henry A., Baltimore, Md. Casting brass and other metals	272,089	Feb. 13	628	171	23	560
Rowland, Henry A., Baltimore, Md. Apparatus for grinding screws	272,480	Feb. 20	1130	317	23	652
Rowland, James L., New York, N. Y. Composition to be used in the manufacture of artificial stone	288,262	Nov. 13	588	.....	25	619
Rowlee, Torrence. (See Shepard, Edson E., assignor.)						
Rowlett, Oliver B., assignor of one-half to R. C. Ogborn, Richmond, Ind. Device for purifying air	283,724	Aug. 21	1512	427	24	788
Roy, Bartholomew, St. Clair, Mich. Chain-propeller	272,159	Feb. 13	714	196	23	575
Roy, Bozil S., Worcester, Mass. Card-grinding machine	276,884	May 1	449	120 121	23	1705
Roy, Bozil S., Worcester, Mass. Lubricating-eccentric	276,885	May 1	451	121	23	1706
Roy, John, New Orleans, La. Pile-driver	278,603	May 29	2559	707	23	2101
Roy, John C., Wheeling, W. Va. Horse bay-rake	275,789	Apr. 10	1201	329	23	1439
Royal, George, Davenport, Iowa. Railway-track cleaner	287,583	Oct. 30	2296	621	25	446
Rozeau, Alphonse A., Le Mans, France. Machine for the manufacture of candles	269,885	Jan. 2	71	22	23	16
Royer, Wesley, Mount Joy, Pa. Shaft-carrier	279,883	June 19	1563	437	23	2405
Royle, John J., Manchester, county of Lancaster, England. Pipe-coupling for drop-lights	286,229	Oct. 9	545	150	25	110
Royle, John, Jr., and V. Paterson, N. J. Spindle and filer for spinning-machines	271,521	Jan. 30	2111	607	23	421
Royle, Vernon. (See Royle, John, Jr., and V.)						
Rubarts, Oren, Albany, Oreg. Saddle-horn	279,438	June 12	1041	289	23	2309
Rubber and Celluloid Harness Trimming Company. (See Lockwood, David C., assignor.)						
Rubelin, Joseph, Como, Italy, assignor to W. Meister, New York, N. Y. Treating silk preparatory to dyeing and weaving	270,557	Jan. 9	899	.....	23	185
Rubens, Morris. (See Vehring, Charles, assignor.)						
Rubin, Max, Philadelphia, Pa. Shawl-strap	289,564	Dec. 4	243	68	25	930
Rudd, Frederick H., Helbron, Nebr. Car-coupling	289,782	Dec. 4	507	140	25	974
Rudd, Halsey H. (See Aurand, Balera J., assignor.)						
Ruddell, George, New York, N. Y. Platform-elevator	278,050	May 22	1875	513	23	1968
Ruddell, Hiram F. (See White and Ruddell.)						
Ruddock, Charles A., Benson, and N. S. Ruddock, Granite Falls, Minn. Bundle-separating attachment for self-binding harvesters	270,486	Jan. 9	797	233	23	165
Ruddock, Nathan S. (See Ruddock, Charles A. and N. S.)						
Rude Brothers Manufacturing Company. (See Rude, Squire B., G. W., and J. R., assignors.)						
Rude Brothers Manufacturing Company. (See Rude and Swope, assignors.)						
Rude, George W. (See Rude, Squire B., G. W., and J. R.)						
Rude, George W., J. R., and S. B., and H. G. Swope, assignors to Rude Brothers Manufacturing Company, Liberty, Ind. Walking grain-drill	274,661	Mar. 27	1834	509 510	23	1173
Rude, John R. (See Rude, Squire B., G. W., and J. R.)						
Rude, John R. (See Rude and Swope.)						
Rude, John R., and H. G. Swope, Liberty, Ind. Grain-drill	274,662	Mar. 27	1836	510 511	23	1174
Rude, John R., and H. G. Swope, assignors to Rude Brothers Manufacturing Company, Liberty, Ind. Grain-drill	276,474	Apr. 24	2059	572	23	1603
Rude, John R., and H. G. Swope, assignors to Rude Brothers Manufacturing Company, Liberty, Ind. Seeding-machine	285,845	Oct. 2	78	23, 24	25	16
Rude, Squire B. (See Rude and Swope.)						
Rude, Squire B., G. W., and J. R., assignors to Rude Brothers Manufacturing Company, Liberty, Ind. Grain-drill	275,862	Apr. 17	1302	358	23	1464
Rudolph, Alexander, assignor of two-thirds to J. A. Becsey and T. J. Welsh, San Francisco, Cal. Window-sash	276,886	May 1	452	121	23	1706
Rudolph, Alexander, assignor of two-thirds to J. A. Becsey and T. J. Welsh, San Francisco, Cal. Window-sash	276,887	May 1	453	122	23	1706
Rudolph, Christian, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Manufacture of cinnamic acid	276,888	May 1	455	.....	23	1706
Rudolph, Christian, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Material for the manufacture of metamethyl indigo	276,889	May 1	445	.....	23	1706
Rudolph, Christian, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Manufacture of metamethyl indigo	276,890	May 1	456	.....	23	1706
Rudolph, William, Sr., St. Louis, Mo. Breast-chain for harness	282,011	July 24	2103	576	24	384
Rudolphi, John, Stockholm, Sweden. Lubricator	282,781	Aug. 7	367	104	24	565
Ruebel, Charles A. E., Chillicothe, Ohio. Burglar-proof safe	271,131	Jan. 23	1608	462	23	324
Ruebsamen, Jacob, Decatur, Ill. Wardrobe-bedstead	274,226	Mar. 20	1263	349	23	1067



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Rueckert, John R., and R. A. Hall, Baltimore, Md. Faucet	288,865	Nov. 20	1349	370	25	758
Rueger, Charles C., San Francisco, Cal. Ore-concentrator	287,173	Oct. 23	1763	484	25	340
Ruemelin, Gustav, Milwaukee, Wis. Tan-vat	276,634	May 1	111	30	23	1646
Ruf, Guy. (See Morgan, Ruf, and Davis.)						
Rufe, John J., Doylestown, Pa. Governor for mechanical powers	276,080	Apr. 17	1556	429	23	1509
Ruff, Emille, et al. (See Schunk, Henry, assignor.)						
Ruffani, Paul, Dresden, Saxony, Germany. Card-holder	286,332	Oct. 9	704	187	25	138
Ruffin, Marie C. A., Paris, France. Centrifugal machine for separating solid and liquid matters	289,565	Dec. 4	244	69	25	930
Ruffner, Daniel B., et al. (See Dunn, William, assignor.)						
Ruger & Co., James W., et al. (See Keller and Myers, assignors.)						
Ruger, James W., et al. (See Keller and Myers, assignors.)						
Rugg, Harvey. (See Halligan and Rugg.)						
Rugland, Samuel C., San Francisco, Cal. Tailor's measure	282,670	Aug. 7	234	68	24	540
Ruggles, Horatio N., et al. (See Elliott, Charles W., assignor.)						
Ruggles, Robert B., Windsor, assignor of one-half to J. P. Cellard and J. M. Lester, Hartford, Conn. Beer-pump	272,089	Feb. 13	628	171	23	560
Ruhlmann, Henry A., Grand Rapids, Mich. Packing-box	277,788	May 15	1559	424	23	1907
Ruka, John, Escobol, Wis. Wagon-brake	285,077	Sept. 18	1135	317	24	1113
Rumbaugh, David J., and J. S. Brandt, Cridersville, Ohio. Car-coupling	273,896	Mar. 13	846	229	23	987
Rumble, William, assignor to W. C. Andrews and W. P. Shinn, New York, N. Y. Machine for making wood-screws	283,420	Aug. 21	1150	325	24	720
Rumely, John, assignor to M. Rumely, La Porte, Ind. Threshing-machine	277,512	May 15	1233	332	23	1851
Rumely, Meinrad. (See Rumely, John, assignor.)						
Rumely, William N., La Porte, Ind. Road-engine	273,396	Mar. 6	205	55	23	869
Rumely, William N., La Porte, Ind. Traction-engine	280,519	July 3	223	59	24	40
Rumely, William N., La Porte, Ind. Traction-engine	284,238	Sept. 4	106	29	24	922
Rumely, William N., La Porte, Ind. Threshing-machine separator	284,675	Sept. 11	635	180	24	1017
Rumely, William N., La Porte, Ind. Traction-engine	284,676	Sept. 11	636	180	24	1017
Rummel, Louis C., and E. J. Fiedler, Ledbetter, Tex. Self-packing cotton-press	285,765	Sept. 25	1967	557	24	1267
Rummelmeyer, Ernst. (See Wetzel, Charles H., assignor.)						
Rumill, John A., Salina, Kans. Grain-header	289,144	Nov. 27	1692	469	25	826
Rumsay, Lewis M., St. Louis, Mo. Chain-pump bucket	271,522	Jan. 30	2112	608	23	421
Rumsey, Albert R., Cleveland, Ohio. Striking-bag for exercising	291,015	Dec. 25	2102	579	25	1275
Rumsey, Charles B., assignor of two-thirds to C. A. Skinner and G. D. Daniels, Homer, N. Y. Positive shuttle-motion for looms	280,960	July 10	772	214	24	142
Rundback, Joseph, assignor to D. Block, New York, N. Y. Commode	281,203	July 10	1073	295	24	196
Rundle, George H. (See Rundle, John T., assignor.)						
Rundle, John T., assignor to G. H. Rundle, Palmyra, Wis. Hay elevator and carrier	280,865	July 10	654	184	24	122
Rundlett, Charles, Farmingdale, assignor of one-half to E. D. Haley, Gardiner, Me. Machine for lowering ice, &c.	275,863	Apr. 17	1303	358	23	1464
Rundlett, James C., Cape Elizabeth, Me. Egg rack and holder	283,285	Aug. 14	974	272	24	681
Runge, Frederick W., San Francisco, Cal. Spring-balance counter-scale	289,450	Dec. 4	92	26, 27	25	903
Runk, Jacob L., assignor of four-fifths to A. Watts, C. Rose, W. S. Forman, and J. A. Watts, Nashville, Ill. Sulky-plow	282,929	Aug. 7	535	151	24	595
Runstetter, Andrew. (See Runstetter, Michael and A.)						
Runstetter, Andrew and M., assignors to Farmers Friend Manufacturing Company, Dayton, Ohio. Grain-drill	287,779	Oct. 30	2559	689	25	495
Runstetter, Andrew, and J. A. Marlay, assignors to Farmer's Friend Manufacturing Company, Dayton, Ohio. Check-row attachment for corn-planters	282,012	July 24	2103	576	24	384
Runstetter, Andrew and M., assignors to Farmers Friend Manufacturing Company, Dayton, Ohio. Grain-drill	285,363	Sept. 18	1469	414	24	1172
Runstetter, Michael. (See Runstetter, Andrew and M.)						
Runstetter, Michael and A., assignors to Farmers Friend Manufacturing Company, Dayton, Ohio. Corn-planter	281,204	July 10	1074	295	24	196
Rupert, William W., Pottstown, Pa. Planescope	279,439	June 12	1042	286	23	2309
Rupertus, John K. (See Grannan, Louis, assignor.)						
Rüs, Jacob A., et al. (See Nicolaisen, Eberhardt, assignor.)						
Rushforth, William H., Camden, N. J. Car-signal	282,569	Aug. 7	115	34	24	520
Rushforth, William H., Camden, N. J. Car-signal	282,570	Aug. 7	116	35	24	520
Rushlow, Romeo L., West Mitchell, Iowa. Machine for handling yarn in the dye-vat	279,884	June 19	1563	437	23	2405
Rusler, William A., New Way, Ohio. Hinged tongue	287,328	Oct. 23	1961	535	25	375
Rushing, Joseph F., and E. E. Odell, Lawrence, Pa. Sewing-needle	278,450	May 29	2425	661	23	2072
Russ, James H., Providence, R. I. Balanced spring-roller	277,429	May 8	1131	305	23	1827
Russ, James H., Providence, R. I. Combined window-shade weight and pull	280,768	July 3	533	149	24	94
Russell, Albert, and F. Curtis, Newburyport, Mass. Ship's pump	274,145	Mar. 20	1156	318	23	1047
Russell, Albert, and F. Curtis, Newburyport, Mass. Ship's pump. (Reissue.)	10,418	Dec. 4	524	145	25	977
Russell, Alvin, Bombay, N. Y. Anti-friction journal-box	283,421	Aug. 21	1155	326	24	720
Russell, Andrew H. (See Livermore and Russell.)						
Russell, Benjamin O., Denver, Colo. Roasting and smelting furnace	290,115	Dec. 11	916	260	25	1056
Russell Charles E. (See Cameron and Russell.)						
Russell, Charles E., Ravenna, Ohio. Bobbin-winder for sewing-machines	280,961	July 10	774	215	24	142
Russell, Charles S., Philadelphia Pa. Magnetic plaster	272,904	Feb. 27	1690	473	23	757
Russell, David J., New Bedford, Mass. Dumping-wagon	276,475	Apr. 24	2060	572	23	1603
Russell, Edward H., Park City, Utah Ter. Purifying soda-ash	271,366	Jan. 30	1916		23	385
Russell, Edwin G. (See Trites, John S., assignor.)						
Russell & Erwin Manufacturing Company. (See Doelittle, William E. and D. E., assignors.)						
Russell & Erwin Manufacturing Company. (See Lyons, Thomas, assignor.)						
Russell & Erwin Manufacturing Company. (See Smith, Charles H., assignor.)						
Russell & Erwin Manufacturing Company. (See Sparks, William E., assignor.)						
Russell, Frederick W., London, England. Withdrawing corks or bungs from bottles, casks, &c.	273,897	Mar. 13	847	230	23	987
Russell, George, assignor to himself and J. S. Kuhn, McKeesport, Pa. Manufacture of sheet-metal fenders	286,489	Oct. 9	882	239	25	171
Russell, George, assignor to himself and J. S. Kuhn, McKeesport, Pa. Manufacture of sheet-metal fenders	286,490	Oct. 9	883	239	25	171
Russell, George, and R. W. Gordon, McKeesport, assignor to E. C. Converse, Pittsburg, Pa. Pipe-coupling	284,146	Aug. 28	2060	571	24	894
Russell, George W. (See Smith, Richard, assignor.)						
Russell, Helen A., Brooklyn, N. Y. Game-counter	278,747	June 5	88	26	23	139

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Russell, Henry T., Chicago, Ill. Spike.....	278,604	May 29	2590	707	23	2101
Russell, Ira W., Storm Lake, Iowa. Windmill.....	270,487	Jan. 9	798	233	23	166
Russell, J. H., <i>et al.</i> (See Ware, Charles L., assignor.)						
Russell, Jay E., San Francisco, Cal. Hydraulic mining-machine.....	273,397	Mar. 6	206	55	23	869
Russell, John, Berlin, Pa. Middlings-purifier.....	284,488	Sept. 4	398	111	24	971
Russell, John, Berlin, Pa. Grain-cleaner.....	284,489	Sept. 4	399	112	24	972
Russell, John, Berlin, Pa. Grain-separator.....	284,490	Sept. 4	401	112	24	972
Russell, John E., <i>et al.</i> (See Goodridge, James F., assignor.)						
Russell, John M., assignor of one-half to R. M. Mann, Garrison, Kans. Automatic fire-lighter.....	284,677	Sept. 11	637	180	24	1018
Russell, John W., South Hadley Falls, assignor to Valley Machine Company, East Hampton, Mass. Steam-actuated valve.....	283,359	Aug. 14	1075	302	24	700
Russell, Philip G., Washington, D. C. Hand for time-pieces.....	290,116	Dec. 11	919	261	25	1057
Russell, Samuel, Apperton Villa, Staines, county of Middlesex, England, assignor to James & Kirtland, New York, N. Y. Self-feeding fire-grate.....	275,525	Apr. 10	866	234	23	1382
Russell, Thomas B., Fort Valley, Ga. Dish, &c.....	284,239	Sept. 4	107	39	24	922
Russell, William K., Big Valley, Tex. Cotton chopper and scraper.....	281,205	July 10	1076	296	24	197
Russmann, Claus, Hamburg, Germany. Steam boiler or generator.....	271,523	Jan. 30	2113	608	23	421
Rust, Arthur E. (See Rust, Solon R. and A. E.)						
Rust, Ephraim H., Boston, Mass. Material for covering heated surfaces.....	283,819	Aug. 28	1637	461	24	820
Rust, Ephraim H., Boston, Mass. Plastic cement mixture for fire-proof and other structures.....	280,451	Dec. 4	93		25	903
Rust, Halbert, Jeffersonville, Ind. Draw-bar for cars.....	287,966	Nov. 6	224	63	25	546
Rust, Samuel. (See Wright and Rust.)						
Rust, Solon R., Pine Meadows, assignor to Meriden Patent Novelty Company, Meriden, Conn. Metal toy-plane.....	282,468	July 31	2705	{ 743 } { 744 }	{ 24 } { 25 }	491 446
Rust, Solon R. and A. E., Pine Meadow, Conn. Plane.....	287,584	Oct. 30	2297	621	25	446
Rust, Solon R. and A. E., Pine Meadow, assignors to Meriden Patent Novelty Company, Meriden, Conn. Bench-plane.....	279,885	June 19	1564	438	23	2405
Rust, Solon R. and A. E., Pine Meadow, assignors to said Solon R. Rust, H. B. and J. C. Beach, Meriden, Conn. Joiner's plane.....	288,866	Nov. 20	1350	370	25	758
Rutenick, Albert, New York, N. Y. Coffee pot and filter.....	272,481	Feb. 20	1131	318	23	632
Rutherford, Robert W., Brenham, assignor to I. P. Kibbe, Victoria, Tex. Combined agricultural implement.....	284,982	Sept. 11	1003	283	24	1084
Rutherford, William. (See Laird, John, Jr., assignor.)						
Rutter, James W., Wakefield, Mass. Rowing-gear.....	282,121	July 31	2264	621	24	416
Rutter, Levi, Newmantown, Pa. Refrigerator-car.....	283,150	Aug. 14	804	225	24	649
Ruttman, Carl, Jersey City, N. J. Watch-regulator.....	289,359	Nov. 27	1948	541	25	875
Rutz, Edward. (See Carson, Robert J., assignor.)						
Rutz, Edward, Springfield, Ill. Fence-post.....	279,440	June 12	1044	289	23	2309
Ryan, Amos P., Waynesburg, Pa. Bosom-board.....	287,329	Oct. 23	1961	535	25	375
Ryan, J. Tyler, assignor of one-half to L. Snider's Sons, Hamilton, Ohio. Making paper of imperfections.....	281,400	July 17	1325		24	246
Ryan, J. Tyler, assignor of one-half to L. Snider's Sons, Hamilton, Ohio. Making paper of imperfections.....	283,026	Aug. 14	662		24	625
Ryan, John C., Detroit, Mich. Skylight.....	286,558	Oct. 9	972	261	25	187
Ryan, John D., and P. Laue, East Saginaw, Mich. Saw-tab.....	288,867	Nov. 20	1351	371	25	758
Ryan, Lawrence C., Hawkinsville, Ga. Water-wheel.....	287,330	Oct. 23	1962	536	25	375
Ryan, Patrick, assignor of two-thirds to W. H. Kelly and R. J. Morrison, New York, N. Y. Street-sweeping machine.....	271,993	Feb. 6	504	136	23	527
Ryan, Patrick W., Marlborough, Mass. Shingling-bracket.....	285,164	Sept. 18	1243	349	24	1131
Ryan, Thomas, Syracuse, N. Y. Tool for mortising metals.....	280,866	July 10	656	185	24	122
Ryan, Thomas K., St. Louis, Mo. Straining-machine.....	277,789	May 15	1560	425	23	1908
Ryan, William H., Belton, Tex. Boring and tenoning machine.....	276,479	Apr. 24	2061	572	23	1603
Ryder, Charles M., Chester, Pa. Casting attachment for open-hearth steel-melting furnaces.....	277,850	May 15	1630	444	23	1920
Ryder, Charles M., Chester, Pa. Open-hearth steel-melting furnace.....	287,864	Nov. 6	87	26	25	523
Ryder, James F. (See Finn, John L., assignor.)						
Ryder, Martin H., Stamford, Conn. Hat or bonnet.....	280,331	June 26	2113	592	23	2508
Ryder, Martin H., Stamford, Conn. Machine for blocking hats.....	283,820	Aug. 28	1637	461	24	820
Ryder, Martin H., assignor of one-half to E. A. White, Stamford, Conn. Machine for sewing strands of braid.....	287,393	Oct. 23	2040	{ 554 } { 555 }	{ 25 } { 25 }	388 388
Ryder, Martin H., assignor of two-thirds to E. A. White, Stamford, and A. Solmans, South Norwalk, Conn. Hat-curling machine.....	287,865	Nov. 6	89	27	25	523
Ryder, Martin H., Stamford, Conn., assignor to Willcox & Gibbs Sewing Machine Company, of New York. Wiring brims of hats and bonnets.....	288,596	Nov. 13	1017	279	25	694
Ryder, Seth B. (See Leach, Jesse L., assignor.)						
Ryder, Seth B., Elizabeth, N. J. Carpet-cleaner.....	286,965	Oct. 16	1493	410	25	283
Ryland, S. P., Jr., <i>et al.</i> (See Earl, Henry W., assignor.)						
Rylands, Dan. (See Codd and Rylands.)						
Ryno, John L., Farmer Village, N. Y. Neck-yoke center.....	291,005	Dec. 25	2092	576	25	1273
Ryrie, Robert A., assignor of one-half to H. C. Burrichter, Camden, N. J. Drive-well point.....	279,600	June 19	1235	342	23	2348
Ryther, William H., Somonauk, Ill. Rotary for use in connection with windmills.....	278,748	June 5	89	26	23	2139
Sabine, Joseph F. (See Matthey and Sabine.)						
Sachs, Heinrich, Washington, D. C. Tricycle.....	290,117	Dec. 11	922	262	25	1057
Sachs, Joseph J., Woodlawn, Sunbury-on-Thames, county of Middlesex, England. Production of surfaces for printing, &c.....	274,519	Mar. 27	1668		23	1143
Sackett, Alfred M., Clinton, Ill. Stop for check-row wires.....	284,240	Sept. 4	108	29	24	922
Sackett, Augustine, New York, N. Y. Roofing or sheathing paper.....	278,278	May 22	2167	597	23	2018
Sackett, Charles E., Morristown, N. J. Combined plow and pulverizer.....	279,818	June 19	1481	415	23	2391
Sackett, Charles E., Morristown, N. J. Tilling-machine.....	279,819	June 19	1482	415	23	2391
Sackett, Edward S., Brooklyn, N. Y. Game.....	275,526	Apr. 10	867	234	23	1382
Sackett, George L., West Springfield, Mass. Lighting device for lanterns. (Reissue).....	10,416	Dec. 4	522	144	25	977
Sackett, Joseph S., Plattsburg, N. Y. Ruffling attachment for sewing-machines.....	270,558	Jan. 9	900	260	23	185
Sackett, Joseph S., Plattsburg, N. Y. Combined plaiting and scalloping device.....	279,820	June 19	1483	416	23	2391
Sackett, Joseph S., assignor of one-half to J. Halliwell, New Haven, Conn. Mechanical movement.....	279,441	June 12	1045	289	23	2309
Sackett, Joseph S., assignor of one-half to J. Halliwell, New Haven, Conn. Sewing-machine attachment.....	284,069	Aug. 28	1958	546	24	877
Sackett, Joseph S., assignor of one-half to J. Halliwell, New Haven, Conn. Mechanical movement.....	284,491	Sept. 4	402	113	24	972
Sackett, Joseph S., assignor of one-half to J. Halliwell, New Haven, Conn. Ruffling attachment for sewing-machines.....	287,174	Oct. 23	1765	484	25	340
Sackett, Joseph S., assignor of one-half to J. Halliwell, New Haven, Conn. Tuck-marker.....	288,120	Nov. 6	407	115	25	579
Sackett, Joseph S., assignor of one-half to J. Halliwell, New Haven, Conn. Ruffling attachment for sewing-machines.....	290,477	Dec. 18	1393	385	25	1148



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Sackett, Joseph S., assignor of one-half to J. Halliwell, New Haven, Conn. Ruffling attachment for sewing-machines	290,478	Dec. 18	1394	385	25	1148
Sackett, Joseph S., assignor of one-half to J. Halliwell, New Haven, Conn. Combined binder and folder for sewing-machines	290,479	Dec. 18	1397	386	25	1148
Sackett, Joseph S., assignor of one-half to J. Halliwell, New Haven, Conn. Tuck-marker for sewing-machines	290,480	Dec. 18	1397	386	25	1148
Sackett, Sherman G., Denver, Colo. Smelting-furnace	278,279	May 22	2168	597	23	2018
Sadler, James J., McBride's, Mich. Horizontal guide for saws	277,351	May 8	1043	280	23	1812
Sadler, John. (See Nash and Sadler.)						
Safford, Joseph A., Boston, Mass. Apparatus for skiving boot and shoe tips	289,145	Nov. 27	1693	470	25	827
Safford, Mark, Boston, assignor to himself and F. S. Frost, Arlington, Mass. Friction supporting device for mirrors, transoms, &c.	278,364	May 29	2310	631	23	2052
Sage, Carlton E. (See Hall, Edward, assignor.)						
Sage, Eugene, assignor of one-half to H. H. McConnell, Jacksborough, Tex. Clamp	279,601	June 19	1235	343	23	2348
Sage, Isaac, Pleasantville, N. J. Rain-protector for chimneys and roofs	280,085	June 26	1820	512	23	2456
Sage, Philip. (See Knowlton and Sage.)						
Sager, Fred J., Marysville, Ohio. Surveyor's steel chain-tape and reel	279,190	June 12	726	199	23	2257
Sager, Rockwood. (See Skinner, Henry M., assignor.)						
Sahlein, Belle M., San Francisco, Cal. Box-cover attachment	290,481	Dec. 18	1400	386	25	1149
Sahlstrom, August, Stockholm, Wis. Lamp-chimney cleaner	282,782	Aug. 7	369	104	24	585
Sailer, John M., Portland, Mich. Punching and shearing machine	271,277	Jan. 30	1789	519	23	363
Saint Requier, Henry F., Asnières, France. Apparatus for the reduction of grain	277,790	May 15	1561	425	23	1908
Saker, Fred. (See Williams and Saker.)						
Saladee, Cyrus W., Torrington, Conn. Two-wheeled vehicle	270,700	Jan. 16	1087	311	23	227
Saladee, Cyrus W., Torrington, Conn. Vehicle	272,331	Feb. 13	922	257	23	612
Saladee, Cyrus W., Torrington, Conn. Side-spring vehicle	274,390	Mar. 20	1474	405	23	1104
Saladee, Cyrus W., Torrington, Conn. Vehicle-spring	275,417	Apr. 10	725	193	23	1359
Saladee, Cyrus W., Torrington, Conn. Spring-shackle	277,162	May 8	828	218	23	1774
Saladee, Cyrus W., Torrington, Conn. Vehicle-spring	277,561	July 17	1524	418	24	280
Saladee, Cyrus W., Torrington, Conn. Two-wheeled vehicle	282,378	July 31	2587	{ 710 711 }	{ 24 24 }	{ 471 471 }
Salbrenx, Charles. (See Gros and Salbrenx.)						
Sale, Thomas M., Morgantfield, Ky. Bed-slat clamp	288,668	Nov. 20	1108	304	25	715
Sales, William B., Fort Atkinson, Wis. Carriage-top	273,766	Mar. 13	690	185	23	960
Salisbury, Charles H., De Kalb, Ill. Metallic fence	272,482	Feb. 20	1133	318	23	653
Salisbury, Dexter. (See Goodrich, Perry F., assignor.)						
Salisbury, George P., and C. W. Foster, New Haven, Conn. Feed-water regulator for steam-boilers	284,762	Sept. 11	747	207	24	1037
Salisbury, Levi E., Providence, R. I. Knitting-machine	284,905	Sept. 11	909	{ 256 257 }	{ 24 24 }	{ 1067 1067 }
Salisbury, Levi E., Providence, R. I. Knitting-machine needle	287,175	Oct. 23	1768	485	25	340
Sallot, Victor A., Fort Wayne, Ind. Vehicle-hub	288,121	Nov. 6	409	115	25	579
Salm, Maximilian J., assignor of one-half to L. Limbert, Hanau, Germany. Engraving-machine	274,391	Mar. 20	1475	405	23	1104
Salom, Eusebio, New Orleans, La. Elevator	285,309	Sept. 18	1404	397	24	1161
Salomon, Etienne, assignor of one-half to E. Armant, Montreal, Quebec, Canada. Punching and cutting machine	272,332	Feb. 13	923	257	23	612
Salomon, Rudolph G., Newark, N. J. Hat and other head-wear	287,176	Oct. 23	1769	485	25	341
Saltsman, George, assignor of one-half to W. A. Gerken, Bloomington, Ill. Spark-arrester	279,021	June 5	497	135	23	2208
Saltsman, George H., Salineville, Ohio. Corn-planter and fertilizer combined	277,513	May 15	1234	332	23	1851
Salvadge, Robert. (See Fuller and Salvadge.)						
Sames, Peter, Rockford, Ill. Wagon-box	278,365	May 29	2310	632	23	2052
Sammis, Lewis W. (See Bunce and Sammis.)						
Sammons, Jacob S., New York, N. Y. Sash-fastener	271,367	Jan. 30	1916	554	23	385
Sammons, Jacob S., New York, N. Y. Store-stool	277,514	May 15	1235	333	23	1851
Sammons, Jacob S., assignor to United States Pneumatic Copying Press Company, New York, N. Y. Copying-press	277,946	May 22	1746	476	23	1945
Sammons, Thomas J., assignor to himself and E. B. Clark, Chicago, Ill. Polishing wooden rings	280,520	July 3	224	59	24	40
Sample, Levi R., Marseilles, assignor of one-half to J. Smith, Chicago, Ill. Folding ironing table	282,469	July 31	2705	744	24	491
Sampsel, John E. (See Mechem, Oliver H., assignor.)						
Sampson, General W., Washington township, Keokuk county, Iowa. Locking-nut	289,146	Nov. 27	1694	470	25	827
Sampson, Joseph C. (See Hurd, Lorenzo D., assignor.)						
Samuel, Edward, Philadelphia, Pa. Conduit for traction-rope railways	281,562	July 17	1525	418	24	280
Samuel, Edward, Philadelphia, Pa. Conduit for traction-rope railways	282,783	Aug. 7	370	105	24	565
Samuel, Leopold S., Newark, N. J. Card for book-marks and for advertising mediums	289,566	Dec. 4	246	69	25	930
Sanborn, Albert A., Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Collar or cuff of celluloid	288,955	Nov. 20	1460	403	25	779
Sanborn, Albion I., San Francisco, Cal. Wood-turning lathe	271,368	Jan. 30	1917	554	23	385
Sanborn, Albion I., San Francisco, Cal. Cutter for wood-working machines	282,671	Aug. 7	235	68	24	540
Sanborn, Gustavus B., Bristol, N. H. Split pulley	275,947	Apr. 17	1397	385	23	1482
Sanborn, Joseph W., Kingston, N. H. Joint for boat-knees, &c	287,057	Oct. 23	1618	446	25	312
Sanborne, Rufus H. (See Boone, Alonzo T., assignor.)						
Sande, Albert N., assignor of one-half to O. Hanson, Chicago, Ill. Fire-escape	286,850	Oct. 16	1348	369	25	259
Sander, Leo. (See Reynolds and Sander.)						
Sanders, Amos. (See Henderson and Sanders.)						
Sanders, Eliza. (See Kinn, Friedrich, assignor.)						
Sanders, Eliza. (See Sanders, Louis, assignor.)						
Sanders, Euclid. (See Lewis and Sanders.)						
Sanders, John E., assignor to R. R. Rouse Manufacturing Company, Indianapolis, Ind. Die-plate	277,163	May 8	828	219	23	1774
Sanders, John E., assignor of one-half to R. R. Rouse, Indianapolis, Ind. Pipe-threading machine	286,333	Oct. 9	705	{ 187 188 }	{ 25 25 }	{ 138 138 }
Sanders, Louis, assignor to E. Sanders, New York, N. Y. Bag or satchel	288,495	Nov. 13	898	244	25	671
Sanders, Michael F., Green Garden, Ill. Bundle holder and dropper for grain-binders	273,317	Mar. 6	97	29	23	850
Sanders, Newell, Chattanooga, Tenn. Evaporating-pan	281,563	July 17	1526	{ 418 419 }	{ 24 24 }	{ 280 280 }
Sanders, Newell, Chattanooga, Tenn. Bolt for plows	281,564	July 17	1527	419	24	280
Sanders, William H., Frankfort, Ill. Device for handling, &c., tombstones and monuments	279,191	June 12	728	199	23	2257
Sanderson, Charles M., assignor of one-half to G. N. Goodspeed, Winchendon, Mass. Rotary engine	273,162	Feb. 27	1999	562	23	811
Sanderson, Frederick, Friend, Nebr. Cloth-measuring machine	272,483	Feb. 20	1133	318	23	653

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Sanderson, Henry S., New York, N. Y., and E. B. Simmons, Jersey City, N. J. Picture-exhibitor	279,504	June 12	1116	308	23	2320
Sanderson, J. Gardner, Scranton, Pa. Insulating electrical conductors	276,891	May 1	457	122	23	1707
Sanderson, James G. (See Crane and Sanderson.)						
Sanderson, Richard W. B. (See Ashbury, Sumner, Lees, and Sanderson.)						
Sanderson, Richard W. B., <i>et al.</i> (See Sumner, Herbert, assignor.)						
Sanderson, Robert N., Ashtabula, Ohio. Device for attaching hoisting-buckets to belts	271,743	Feb. 6	190	53	23	473
Sandford, James A. (See Burdick and Sandford.)						
Sandford, William, Joliet, Ill. Portable drill	287,866	Nov. 6	92	27, 28	25	524
Sandland, Capron & Co. (See Lettré, Philipp, assignor.)						
Sandling, Nelson P., Indianapolis, Ind. Coat	284,070	Aug. 28	1959	546	24	877
Sands, James H., Houston, Tex. Combination-level	279,443	June 12	1046	290	23	2309
Sands, Thomas, Nashua, N. H. Ice-cream freezer	275,418	Apr. 10	726	193	23	1359
Sandusky Plow Company. (See Smith and Lockwood, assignors.)						
Sandwich, Walter D., Montgomery, Ala. Car-coupling	275,948	Apr. 17	1398	365	23	1482
Sanford, Aaron C., assignor of one-half to G. W. Sanford, New Haven, Conn. Clock-bell	279,022	June 5	498	135	23	2208
Sanford, Albert, Oshkosh, Wis. Grapple	283,422	Aug. 21	1155	327	24	721
Sanford, Charles E., Brooklyn, N. Y. Watchman's register	285,932	Oct. 2	198	56	25	38
Sanford, Gelston, Brooklyn, and S. P. Smith, assignors to Sanford Universal Fibre Company, New York, N. Y. Machine for obtaining or treating fibers, &c.	280,671	July 3	400	111	24	71
Sanford, Gelston, Brooklyn, N. Y., assignor, by mesne assignments, to International Fibre and Juice Extracting Company of New York. Machine for reducing substances and extracting juices	285,165	Sept. 18	1245	349	24	1131
Sanford, Gelston, Brooklyn, N. Y., assignor, by mesne assignments, to International Fibre and Juice Extracting Company of New York. Machine for reducing substances and extracting juices	285,166	Sept. 18	1246	349, 350	24	1131
Sanford, George W. (See Sanford, Aaron C., assignor.)						
Sanford, James M. (See Tilley and Sanford.)						
Sanford, O. B., <i>et al.</i> (See Held, August S., assignor.)						
Sanford Universal Fibre Company. (See Sanford and Smith, assignors.)						
Sangster, William. (See Williams and Sangster.)						
Sanguinetti, Charles A. (See Bang and Sanguinetti.)						
Sankey, Eben B. (See Peace and Sankey.)						
Sanlville, Marc E. and R. Laligant, Quincé, France. Manufacture of explosive compounds	281,565	July 17	1527	-----	24	280
Sanley, William R., Wellington, Ohio. Belt-shifter	285,683	Sept. 25	1855	529	24	1249
Sargeant, Abraham V. (See Brant, John D., Jr., assignor.)						
Sargeant, E. Eugene, Newark, N. J. Bridle-bit	289,452	Dec. 4	94	27	25	903
Sargeant, Samuel S., Newark, N. J. Harness-buckle	285,434	Sept. 25	1565	441	24	1194
Sargent, Adelbert F., Geneseo, Ill. Two-wheeled vehicle	273,610	Mar. 6	476	123	23	915
Sargent, Allan C. (See Sargent, Frederick G. and A. C.)						
Sargent & Co. (See Bradford, Purmort, assignor.)						
Sargent & Co. (See Pullman, Herbert S., assignor.)						
Sargent & Co. (See Sargent, Edward R., assignor.)						
Sargent & Co. (See Sargent, George H., assignor.)						
Sargent & Co. (See Scranton, Worthington, assignor.)						
Sargent & Co. (See Tanner, Alfred B., assignor.)						
Sargent, Edward R., assignor to Sargent & Co., New Haven, Conn. Casket-lid catch	272,333	Feb. 13	936	257	23	613
Sargent, Frederick G., Granitville, Mass. Burring-machine	270,988	Jan. 23	1441	415	23	297
Sargent, Frederick G. and A. C., Granitville, Mass. Plate-holder for photographers' cameras	289,029	Nov. 27	1555	429	25	802
Sargent, George F., New York, N. Y. Invalid-bedstead	274,392	Mar. 20	1477	406	23	1104
Sargent, George H., New York, N. Y., assignor to Sargent & Co., New Haven, Conn. Hasphook	290,119	Dec. 11	925	263	25	1058
Sargent, James, <i>et al.</i> (See Pfaudler, John M., assignor.) (Reissue.)						
Sargent, James, Rochester, N. Y. Apparatus for fermenting and clarifying beer, wine, &c.	276,635	May 1	112	30	23	1646
Sargent, James, Rochester, N. Y. Lock-faucet	286,077	Oct. 2	366	101	25	67
Sargent, John Q. A., Manchester, N. H. Invalid-bedstead	270,912	Jan. 23	1343	387	23	281
Sargent, Joseph B., New Haven, Conn. Coffin-ornament	200,118	Dec. 11	924	262	25	1058
Sargent, Joseph F., assignor of one-half to H. W. Mason, Worcester, Mass. Brush for bronzing and for other purposes	274,978	Apr. 3	122	34	23	1247
Sargent, Samuel R., Terre Haute, Ind. Sewing-machine	284,071	Aug. 28	1960	546	24	877
Sargent, Samuel R., Terre Haute, Ind. Sewing-machine	287,867	Nov. 6	93	28	25	524
Sargent, Samuel R., Terre Haute, Ind. Sewing-machine	287,868	Nov. 6	95	29	25	524
Sargent, Samuel R., Terre Haute, Ind. Sewing-machine	287,869	Nov. 6	97	29	25	525
Sargent, Willard E., Newark, N. J. Making tubes from celluloid and other plastic material	270,342	Jan. 9	614	180	23	130
Sargood, George, and F. L. Hemmer, East Arlington, Vt. Journal-box	276,195	Apr. 24	1704	470	23	1542
Sarlis, Rutus, and V. C. Holland, Gainesville, Tex. Permutation-lock	276,081	Apr. 17	1557	429	23	1509
Sarlis, Rutus, and V. C. Holland, Gainesville, Tex. Permutation-lock	276,477	Apr. 24	2062	572	23	1603
Sarre, Heinrich, <i>et al.</i> (See Brandl, Gotthard, assignor.)						
Sater, Hans H., Dubuque, Iowa. Cultivator	276,718	May 1	242	61	23	1666
Sater, Hans H., Dubuque, Iowa. Cultivator	278,366	May 29	2311	632	23	2052
Satraug, Oley A., Rothsay, Minn. Clod-crusher	281,303	July 17	1204	333	24	226
Sattler, Henry, Rock Hill, Mo. Wheel-plow	285,766	Sept. 25	1969	558	24	1267
Saunders, Ellison, <i>et al.</i> (See Lauten, Frank H., assignor.)						
Saunders, Ira J., Union City, Mich. Fastener for shoes, &c.	282,571	Aug. 7	118	35	24	521
Saunders, Luther A., and J. S. Funkhouser, Mount Crawford, Va. Gate-latch	275,082	Apr. 3	268	73	23	1272
Saunders, William L., Jersey City, N. J. Drilling apparatus	270,488	Jan. 9	798	233	23	166
Saunders, John H., Trenton, N. J. Carburetor	288,868	Nov. 20	1351	371	25	758
Sauer, Elias, and M. Haller, Cincinnati, Ohio. Device for cooling beer	289,717	Dec. 4	437	122	25	963
Sauter, Charles, assignor to C. O. Dryden and N. Palmer, Baltimore, Md. Crystallizing-pan for rock-candy	272,905	Feb. 27	1690	473	23	757
Sauter, Edward, Hartford, Conn. Caliper-gage	285,684	Sept. 25	1856	530	24	1249
Savage, Alfred, Salem, Oreg. Cord grasper and cutter for grain-binders	274,828	Mar. 27	2027	564	23	1207
Savage, Alonzo H., Ashtabula, Ohio. Button	272,566	Feb. 20	1265	352	23	676
Savage, John P., Scotland Neck, N. C. Dumping-wagon	281,141	July 10	991	277	24	181
Savage, John T., and J. Love, Rockford, Ill. Dumping-platform. (Reissue)	10,389	Oct. 2	470	129	25	88
Savitz, Charles J., Allentown, Pa. Fire-escape	288,122	Nov. 6	409	116	25	579
Savoie, Joseph, St. Marcel, Quebec, assignor to E. and L. Brisson, St. Germain de Grantham, Canada. Door-lock	281,142	July 10	991	277	24	182
Savoie-Keller, Alexandre, Locle, Switzerland. Stem-winding watch	274,613	Mar. 27	1782	495	23	1163
Sawtell, La Fayette, Lena, assignor of three-fourths to A. P. Johnson and W. Sawtell, Morseville, Ill. Fire-escape	287,058	Oct. 23	1619	446	25	313
Sawtell, Wilson, <i>et al.</i> (See Sawtell, La Fayette, assignor.)						
Sawyer, Allen J., C. Woodbury, and E. Lane, Oldtown, Me. Lantern	281,797	July 24	1847	505	24	340



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Sawyer, Benjamin F., Rome, assignor to American Bag Company, Atlanta, Ga. Bag-machine	271,922	Feb. 6	412	{ 111 112 113 }	23	513
Sawyer, Charles H. (See Vanstone, Samuel, assignor.)						
Sawyer, Francis A., Boston, Mass. Carriage-step	287,870	Nov. 6	100	29, 30	25	525
Sawyer, Lodowick L. (See Buckley and Sawyer.)						
Sawyer, Lodowick L., Meriden, Conn. Spring-roller for curtains	287,729	Oct. 30	2485	670	25	482
Sawyer, Lodowick L., Meriden, Conn. Spring-roller for curtains	288,123	Nov. 6	410	116	25	579
Sawyer, James, Freeburg, Ill., assignor of one-half to W. De Bolt, St. Louis, Mo. Mine air-regulator	283,286	Aug. 14	976	272	24	682
Sawyer Spindle Company. (See Birkenhead, John, assignor.) (Reissue.)						
Sawyer Spindle Company. (See Gray, James R., assignor.)						
Sawyer, Sylvanus, Fitchburg, Mass. Watch-maker's lathe	280,867	July 10	657	185	24	123
Sawyer, Sylvester, assignor to J. Hay, Sr., and J. Hay, Jr., Woodstock, Ontario, Canada. Machine for scraping and splitting rattan	294,241	Sept. 4	108	30	24	923
Sawyer, Walter H., Fort Valley, Ga. Cotton cleaner and condenser	286,334	Oct. 9	706	188	25	138
Sawyer, Willard W., Springfield, Mass. Hand stamp	287,177	Oct. 23	1769	485	25	341
Sawyer, William A., Danversport, assignor of two-fifths to A. B. Clafin, Newtonville, Mass. Machine for measuring the area of surfaces	269,962	Jan. 2	167	48	23	35
Sawyer, William A., Danversport, assignor of two-fifths to A. B. Clafin, Newtonville, Mass. Machine for measuring the areas of surfaces	286,078	Oct. 2	368	102	25	67
Sawyer, William H., Providence, R. I. Electric cable	280,521	July 3	225	59	24	40
Sawyer, William H., assignor of one-half to E. F. Phillips, Providence, R. I. Automatic electric-circuit opener	279,023	June 5	499	136	23	2208
Saxe, John L., Waterbury, Conn. Riveting-machine	287,730	Oct. 30	2487	670	25	482
Saxton, Edward H. (See Thompson, Robert W., assignor.)						
Sayers, Henry, et al. (See Yerby and Stilson, assignors.)						
Sayers, James, et al. (See Yerby and Stilson, assignors.)						
Sayles, Myron A., Wichita, Kans. Device for converting motion	271,132	Jan. 23	1609	462	23	324
Sayles, Myron A., and T. J. Brook, Wichita, Kans. Combined water-supply and wind-mill regulator	271,133	Jan. 23	1610	463	23	324
Sayre, Lewis G., Mount Healthy, Ohio. Two-wheeled vehicle	281,304	July 17	1204	333	24	226
Scanlan, Charles A., assignor of one-third to J. G. Smith, Charleston, S. C. Rock-breaker and dredger	290,482	Dec. 18	1400	{ 386 387 }	25	1149
Scanlan, John, Poughkeepsie, assignor to himself and D. Hoyt, Albany, N. Y. Car-door fastening	269,963	Jan. 2	168	49	23	35
Scanlan, Mortimer, and J. T. Hough, Chicago, Ill. Portable grain elevator and weigher	271,134	Jan. 23	1610	463	23	325
Searffe, William, Brooklyn, N. Y. Car-door track	283,151	Aug. 14	805	225	24	649
Scates, George R., Knoxville, Tenn. Furnace	270,989	Jan. 23	1442	416	23	297
Scates, George R., Knoxville, Tenn. Machine for forming coffee-pot spouts and the like	279,602	June 19	1237	343	23	2348
Scates, Walter, et al. (See Griest, John M., assignor.)						
Scattergood, Charles F., Albany, N. Y. Starching goods	284,983	Sept. 11	1004	283	24	1084
Schaaf, Albert E., Buffalo, N. Y. Ball-bearing for bicycles	287,476	Oct. 30	2146	583	25	417
Schaaff, Charles H., Alexandria, Va. Car-coupling	278,605	May 29	2591	{ 707 708 }	23	2101
Schaap, Alexander K., Richmond, Va. Mask for base-ball catchers	287,331	Oct. 23	1963	536	25	375
Schaefer, Henry P., Schuylburg, Tex. Feed-governor for cotton-gins	289,718	Dec. 4	439	123	25	963
Schaefer, Louis W., Brooklyn, N. Y. Car-lamp	285,364	Sept. 18	1474	414	24	1172
Schaefer, William. (See Cabell, Milton S., assignor.)						
Schaeffer & Budenberg. (See Grödelbach, Paul, assignor.)						
Schaeffer, Lester A., assignor of two-thirds to W. A. Halteman and W. G. Olwin, Dayton, Ohio. Hand-rake	289,567	Dec. 4	247	69	25	930
Schaepfi, Julius, assignor of two-thirds to E. S. Wayne and J. B. Holman, Cincinnati, Ohio. Safety center-pinion for watches	286,851	Oct. 16	1349	369	25	260
Schaepfi, Julius, assignor of two-thirds to E. S. Wayne and J. B. Holman, Cincinnati, Ohio. Stem-winding watch	286,852	Oct. 16	1350	370	25	260
Schaer, Arnold, Phenix, R. I. Evener for railway-heads	287,585	Oct. 30	2298	{ 621 622 }	25	447
Schafer, Christian. (See Roberts and Schafer.)						
Schafer, Joseph D., De Soto, assignor to Excelsior Manufacturing Company, St. Louis, Mo. Can-soldering apparatus	283,821	Aug. 28	1638	461	24	821
Schafer, May S., Chicago, Ill. Pattern for cutting dress-patterns	287,731	Oct. 30	2491	{ 670 671 }	25	483
Schaefer & Budenberg. (See Prüssmann, Carl H., assignor.)						
Schaefer, Jacob, and A. Spanier, Dyer, Ind. End-gate	279,444	June 12	1047	290	23	2310
Schaefer, John T., Rochester, N. Y. Car-buffer	278,606	May 29	2593	708	23	2101
Schadert, John L., assignor of one-half to T. Martin, Washington, D. C. Eaves-trough	274,393	Mar. 20	1479	406	23	1104
Schafhaus, Jean, New York, N. Y. Swimming beer-cooler	280,405	July 3	81	22	24	17
Schall, George A. (See Henrv, John J., assignor.)						
Schannuel, Henry. (See Wagner, Michael, assignor.)						
Schanze, George, and J. B. Weigman, Baltimore, Md. Adhesive paste	274,979	Apr. 3	123		23	1247
Scharf, Gregory H., Toledo, Ohio. Machine for forming tag-holders	292,027	Aug. 14	662	186	24	625
Scharfenberg, Ednard, Streator, Ill. Beer pump and preserver	271,659	Feb. 6	89	24	23	456
Scharnweber, August, Davenport, Iowa. Washing-machine	271,369	Jan. 30	1918	{ 554 555 }	23	386
Scharnweber, William, Jefferson, assignor of one-half to A. Horner, Chicago, Ill. Fastening for car-doors	270,252	Jan. 9	504	148	23	109
Scharnweber, William, Jefferson, assignor of one-half to F. K. Bowes, Chicago, Ill. Car-seal	280,086	June 26	1821	513	23	2457
Scharringhausen, Lewis B., Des Plaines, Ill. Trace-loop for harness	273,163	Feb. 27	2000	563	23	812
Schaub, Adolph. (See Facer and Schaub.)						
Schaub, Louis. (See Scott, Schaub, and Fearhake.)						
Schauman, Fridolf, Landskrona, Sweden. Permanent way for railways	279,280	June 12	826	229	23	2275
Schawartz, Moses. (See Thoens, Bernhard, assignor.)						
Scheff, Andrew, Cleveland, Ohio. Washing-machine	273,611	Mar. 6	477	128	23	916
Scheibler, Adolf. (See Scheibler, Samuel and A.)						
Scheibler, Carl, Berlin, Germany. Obtaining phosphatic fertilizers from basic iron slag	279,445	June 12	1048		23	2310
Scheibler, Carl, Berlin, Germany. Separating sugar from molasses, sirups, &c	279,446	June 12	1050		23	2310
Scheibler, Samuel and A., Memphis, Tenn. Extracting oil from cotton-seed	281,566	July 17	1529		24	280
Schellenberger, Charles G., Terre Haute, Ind., assignor to himself and C. Geiger, Streator, Ill. Watch-maker's pliers	273,612	Mar. 6	478	128	23	916
Schelp, Fred, Jr., Ballwin, Mo. Spring for two-wheeled vehicles	285,167	Sept. 18	1248	350	24	1132
Schenck, Robert C., et al. (See Wiard, Norman, assignor.)						
Schenk, Frederik. (See Zeltner and Schenk.)						
Scherer, Andrew G. (See Hall, Lewis, assignor.)						
Scherer, Cass B., Cicero, Ind. Band-cutter and feeder	289,030	Nov. 27	1556	{ 429 430 }	25	802

*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Scherer, William, W. Moll, and J. A. Marsh, Cleveland, Ohio; said Scherer and Moll assignors to said Marsh. Vapor-burner .....	270,253	Jan. 9	506	140	23	109
Scheiff, Eduard, Wendisch Buchholz, Prussia, Germany. Preserving milk .....	277,352	May 8	1044	.....	23	1812
Scherling, Conrad, Guttenberg, Iowa. Bridle-bit .....	290,803	Dec. 25	1827	504	25	1230
Scherling, Rudolph C., assignor of one-half to St. Nicholas Toy Company, Chicago, Ill. Backbone-coupling for bicycles .....	285,685	Sept. 25	1857	530	24	1249
Schermerhorn, Abram L., et al. (See Burns and Buckman, assignors.) (Reissue.) Schermerhorn, Herschel A., assignor to W. L. Colton, Waterman, A. L. Baker, and W. Egermann, Aurora, Ill. Neck-yoke .....	275,714	Apr. 10	1100	300	23	1422
Schertz, B. F. (See Koch, Henry, assignor.) Schener, Simon, New York, N. Y. Satchel .....	273,398	Mar. 6	207	56	23	869
Schiele & Co., Louis. (See Strouse, Isaac, assignor.) Schifferle, Fridolin, St. Louis, Mo. Culinary vessel .....	271,744	Feb. 6	191	53	23	473
Schifferle, Fridolin, St. Louis, Mo. Culinary vessel .....	271,745	Feb. 6	192	53	23	473
Schild, George F., Vallejo, Cal. Caisson-gate .....	277,178	Oct. 23	1771	{ 485 } 486	25	341
Schiller, Charles, Baltimore, Md. Apparatus for treating offal .....	287,967	Nov. 6	224	64	25	546
Schiller, Charles J., assignor to American Brake Company, St. Louis, Mo. Locomotive-brake .....	283,028	Aug. 14	663	187	24	625
Schiller, John G., assignor of one-half to J. W. Smith, Youngstown, Ohio. Car-brake .....	282,672	Aug. 7	235	68	24	540
Schilling, John, and A. A. Massar, Pomeroy, Ohio. Door-lock .....	289,031	Nov. 27	1558	430	25	803
Schilling, Nicolaus H. and H. Bunte, Munich, Bavaria, assignors to Stettiner Chamotte-fabrik Actiengesellschaft, Stettin, Germany. Gas-generator stove .....	274,829	Mar. 27	2028	{ 564 } 565	23	1207
Schilling, William, New Orleans, La. Hand-loom .....	276,478	Apr. 24	2063	573	23	1604
Schilling, William, assignor to D. Campbell and W. Hughes, Philadelphia, Pa. Screw .....	272,778	Feb. 20	1505	424	23	719
Schillinger, John J., New York, N. Y. Mold for casting building-blocks .....	277,791	May 15	1562	{ 425 } 426	23	1908
Schlimansky, Otto, Oak Harbor, Ohio. Wagon-standard .....	286,335	Oct. 9	707	188	25	138
Schimmel, Gustavus R., Detroit, Mich. Tooth-pick package .....	281,731	July 24	1756	476	24	323
Schiucke, August. (See Cornell and Schincke.) Schindler, Adolf, Schweidnitz, Prussia, Germany. Lantern .....	284,072	Aug. 28	1961	546	24	877
Schindler, Herman H. (See Meyer, Ernest F., assignor.) Schindler, Jacob, Koeltztown, Mo. Harrow .....	289,800	Dec. 11	612	170	25	1001
Schinke, Carl, assignor to St. Louis Iron and Machine Works, St. Louis, Mo. Valve-gear for steam-engines .....	280,672	July 3	402	112	24	71
Schinke, Carl, assignor to St. Louis Iron and Machine Works, St. Louis, Mo. Wrench .....	280,673	July 3	403	112	24	71
Schirer, August, assignor of one-half to O. Bruns, Milwaukee, Wis. Salve .....	273,613	Mar. 6	479	.....	23	916
Schiaffi, Jean P. A., Soleure, Switzerland. Electric clock .....	288,496	Nov. 13	898	244	25	672
Schlechte, Louis, St. Louis, Mo. Shutter-fastener .....	273,164	Feb. 27	2001	563	23	812
Schlechter, Gustavus A., Reading, Pa. Suspension-hook .....	285,435	Sept. 25	1566	441	24	1194
Schlegel, John, et al. (See Nies, Phillip, assignor.) Schleicher, Adolph W., Philadelphia, Pa. Lathe-slide-feeding device .....	274,394	Mar. 20	1480	406	23	1104
Schleier, Clara A., Brooklyn, N. Y. Stocking-protector .....	280,522	July 3	226	60	24	40
Schleissner, Morris, New York, N. Y. Picture-exhibitor .....	281,143	July 10	992	277	24	182
Schlesinger & Co., Leo. (See Carr, Sydney H., assignor.) Schlesinger & Co., Leo. (See Lesson, Philip, assignor.) Schlesinger, Sigmund. (See Pike and Schlesinger.) Schlickeyseu, Carl F., Berlin, Germany. Brick-molding machine .....	275,715	Apr. 10	1100	301	23	1422
Schlinck, Heinrich, Ludwigshafen-on-the-Rhine, Germany. Purifying fatty oils and fats .....	278,187	May 22	2046	.....	23	1998
Schloerb, Theodore, et al. (See Miller, Charles C., assignor.) Schlosser, E. Frank, Hoboken, N. J. Galvanic battery .....	282,784	Aug. 7	371	105	24	565
Schlott, John H. (See Moran, William J., assignor.) Schlottbross, Richard, Vienna, Austria-Hungary. Photographic exposing apparatus .....	284,073	Aug. 28	1962	547	24	877
Schluter, Adolph H., San Francisco, Cal. Lighting device for lamps .....	270,849	Jan. 16	1261	363	23	261
Schluter, Frederick, New York, N. Y. Game-table .....	290,360	Dec. 18	1228	345	25	1119
Schluter, Rudolph, assignor of one-half to O. Wessell, New York, N. Y. Gas-retort furnace .....	275,276	Apr. 3	502	{ 138 } 139	23	1312
Schmachtenberger, Ottomer, assignor of one-half to E. Summers, Marshall, Ill. Machine for pointing fence-pickets .....	273,614	Mar. 6	480	129	23	916
Schmadel, John. (See Kitt and Schmadel.) Schmelter, John, assignor of one-fourth to M. Stolz, Detroit, Mich. Car-axle box .....	280,087	June 26	1822	513	23	2457
Schmetzer, Louis, Rothenburg-on-the-Tauber, Bavaria, Germany. Velocipede .....	271,524	Jan. 30	2114	608	23	421
Schmetzer, Louis, Rothenburg-on-the-Tauber, Bavaria, Germany. Carriage-top .....	272,779	Feb. 20	1505	424	23	719
Schmetzer, Louis, Rothenburg-on-the-Tauber, Bavaria, Germany. Carriage-top .....	276,288	Apr. 24	1815	505	23	1561
Schmetzer, Louis, Rothenburg-on-the-Tauber, Bavaria, Germany. Child's chair .....	278,826	June 5	204	60	23	2158
Schmid, Albert, Zurich, Switzerland. Fluid-meter .....	288,869	Nov. 20	1353	{ 371 } 372	25	758
Schmid, Michael. (See Moeller and Schmid.) Schmid, William, Brooklyn, assignor to E. & H. T. Anthony & Co., New York, N. Y. Photographic camera .....	270,133	Jan. 2	358	104	23	73
Schmidt, Augustus E. (See Hatch, Anson, assignor.) Schmidt, Chris, assignor to M. Schmidt, Burlington, Iowa. Meat-chopper .....	271,135	Jan. 23	1612	464	23	325
Schmidt, Christian, assignor of three-fourths to F. Liesenhoff, A. Silberman, and J. Stocker, Mansburg, Ohio. Sickle-bar for harvesters .....	281,923	Feb. 6	416	113	23	513
Schmidt, Christian A., New York, N. Y. Rotating sample-stand .....	278,870	Nov. 20	1355	372	25	759
Schmidt, Constantin. (See Reissig, Wilhelm, assignor.) Schmidt, Erwin, Leipzig, Saxony, Germany. Turning chair .....	286,641	Oct. 16	1083	292	25	212
Schmidt, Frederick, New York, N. Y. Wardrobe-bedstead .....	281,144	July 10	993	277	24	182
Schmidt, Friedrich E., Brooklyn, N. Y. Button-hole sewing-machine .....	272,160	Feb. 13	715	{ 196 } 197	23	575
Schmidt, Friedrich E., Brooklyn, N. Y. Button-hole sewing-machine .....	273,318	Mar. 6	97	29	23	850
Schmidt, Hermann, Berlin, Germany. Ironing-machine .....	289,148	Nov. 27	1696	{ 470 } 471	25	827
Schmidt, Hugo, Chicago, Ill. Show-rack for watches .....	270,134	Jan. 2	360	105	23	73
Schmidt, John C., Westfield, Mass. Manufacture of whips .....	281,305	July 17	1206	333	24	227
Schmidt, Max, and C. Rahsskopf, San Francisco, Cal. Automatic hanging-up attachment for label-varnishing machines .....	278,607	May 29	2594	708	23	2102
Schmidt, Mollie. (See Schmidt, Chris, assignor.) Schmidt, Oscar, et al. (See Kraker, Michael, assignor.) Schmiedtzinsky, Carl. (See Dieckmann and Schmiedtzinsky.) Schmitt, Bernard, New York, N. Y. Glove-sewing machine .....	270,343	Jan. 9	615	{ 180 } 181	23	130
Schmitt, Bertha, Brooklyn, N. Y. Window-guard .....	276,082	Apr. 17	1558	429	23	1509
Schmitt, Emile, Cincinnati, Ohio. Method of and apparatus for manufacturing fermented liquors .....	277,065	May 8	701	182	23	1752
Schmitt, Jacob, East Cleveland, Ohio. Fastening for wagon end-gates .....	285,078	Sept. 18	1135	317	24	1113



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Schmittknecht, John, New York, N. Y. Fire-escape .....	289,568	Dec. 4	248	70	25	931
Schmitz, Edward, Winsted, Conn. Vegetable grinder and slicer .....	290,120	Dec. 11	926	263	25	1058
Schmitz, Frank, and J. Mills, Cornell, Ill. Paper-file .....	283,667	Aug. 21	1437	402	24	773
Schmitz, Theodore H., assignor to H. D. Justi, Philadelphia, Pa. Conspidor-holder .....	277,353	May 8	1044	280	23	1812
Schmoele, Henry, Philadelphia, Pa. Music-roll .....	272,090	Feb. 13	629	171	23	560
Schmoele, Henry, Philadelphia, Pa. Button-fastener .....	272,587	Feb. 20	1266	353	23	676
Schmolz, William, San Francisco, Cal. Fan-wheel .....	279,603	June 19	1238	343	23	2348
Schmolz, William, San Francisco, Cal. Ventilator .....	287,477	Oct. 30	2147	584	25	418
Schmolz, William, San Francisco, Cal. Fruit-drier .....	288,124	Nov. 6	412	116	25	580
Schneebeil, Gustav A., New Philadelphia, Ohio. Blasting-cartridge .....	273,399	Mar. 6	208	56	23	869
Schneer, Isaac, New York, N. Y. Shirt .....	274,520	Mar. 27	1670	463	23	1143
Schneer, Isaac, New York, N. Y. Jacket .....	274,521	Mar. 27	1670	464	23	1143
Schneible, Joseph, assignor of one-half to P. B. Mathiason, St. Louis, Mo. Glue cutting and spreading machine .....	282,930	Aug. 7	536	151	24	596
Schneider, Bennett B. (See Dettre, Wilhelm, assignor.)						
Schneider, Frank, Syracuse, N. Y. Measure and weigher combined .....	281,567	July 17	1529	419	24	280
Schneider, Henry H., assignor to himself and W. Bertsch, Port Clinton, Ohio. Rocking attachment for chairs .....	277,617	May 15	1362	367	23	1871
Schneider, John C., Hudson, Wis. Thrashing-machine .....	274,395	Mar. 20	1480	407	23	1105
Schneider, John H., Middletown, Conn. Boot or shoe tree .....	270,850	Jan. 16	1262	363	23	261
Schneider, John H., Middletown, Conn. Boot and shoe tree .....	288,185	Nov. 6	483	134	25	501
Schneider, Philipp, Hamburg, Germany. Copying-press .....	271,525	Jan. 30	2116	608	23	421
Schneider, George O., Ansonia, Conn. Button-press .....	286,079	Oct. 2	369	102	25	68
Schmier, Anthony, and S. R. Smith, Cincinnati, Ohio. Steam-engine .....	276,479	Apr. 24	2064	573	23	1604
Schnitzler, Emma. (See Strösiguth and Schneitzler.)						
Schoch, Caspar, Truckee, Cal. Saw-mill carriage .....	274,227	Mar. 20	1265	349	23	1067
Schoch, Caspar, Truckee, Cal. Extension-shank for bits .....	281,568	July 17	1530	419	24	280
Schoch, David A., and H. W. Bolender, Orangeville, Ill. Churn .....	279,447	June 12	1051	290	23	2310
Schock, Benedict, Cincinnati, Ohio. Bung and vent-tube for kegs .....	275,790	Apr. 10	1203	329	23	1439
Schoellkopf & Co. (See Hoffman, William M., assignor.)						
Schoenberg, Gabriel N., Boulogne, near Paris, France. Friction-clutch .....	277,066	May 8	702	183	23	1752
Schoenfeld, David, <i>et al.</i> (See Wurth, Charles N., assignor.)						
Schoenfeld, Louis, assignor of one-half to G. Busse, St. Louis, Mo. Toy .....	271,278	Jan. 30	1790	519	23	363
Schoenfeld, Max, <i>et al.</i> (See Wurth, Charles N., assignor.)						
Schoenhof, Jacob, New York, N. Y. Fannier and bustle .....	273,165	Feb. 27	2002	563	23	812
Schoening, Charles J., Chicago, Ill. Tea-kettle .....	283,287	Aug. 14	977	273	24	682
Schoeninger, Adolph, Chicago, Ill. Crutch .....	288,368	Nov. 13	735	199	25	643
Schoenthaler, John C. (See Beringhans, Edmund O., assignor.)						
Schoenthaler, John C., St. Louis, Mo. Packing-box for bottles .....	276,289	Apr. 24	1816	506	23	1562
Schoettel, Edward A., Brooklyn, N. Y. Telephone-transmitter .....	271,924	Feb. 6	417	113	23	513
Schofield, George. (See Mason, Smalley, and Schofield.)						
Schofield, Henry. (See Marsden and Schofield.)						
Schofield, James, New York, N. Y. Speed-accelerator .....	282,228	July 31	2339	660	24	439
Schofield, John, South River, N. J. Signal-car for railway-trains .....	280,523	July 3	226	60	24	40
Schofield, Richard, assignor to J. Penman, Paris, Ontario, Canada. Knitting stockings .....	288,186	Nov. 6	484	134	25	592
Schofield, Silas C. (See Shaver and Schofield.)						
Schofield, Silas C., Freeport, Ill. Grinding-mill .....	283,518	Aug. 21	1269	355	24	741
Schofield, Silas C., assignor to Freeport Machine Company, Freeport, Ill. Grinding-mill .....	273,334	Feb. 13	927	258	23	613
Scholes, Richard J., <i>et al.</i> (See Wohlrich, Louis J., assignor.)						
Scholl, Michael, San Francisco, Cal. Fire-escape .....	284,763	Sept. 11	748	207	24	1037
Scholl, Nicholas, Chillicothe, Ohio. Ironing-stand .....	272,906	Feb. 27	1691	473	23	757
Schollhorn & Tiesing Manufacturing Company. (See Doyle, John J., assignor.)						
Schön, Chr. A. W. (See Leiffgen, George, assignor.)						
Schönheyder, William, Shepherd's Bush, London England. Device for fastening drawing-paper to drawing-boards .....	284,334	Sept. 4	216	60	24	941
Schönheyder, William A. G., Shepherd's Bush, county of Middlesex, England. Stove .....	270,135	Jan. 2	360	105	23	73
Schoonhoff, Bernard H., Cape Girardeau, Mo. Shoal-indicator for ships .....	275,864	Apr. 17	1304	358	23	1464
Schoof, Bruno, Wiesbaden, Prussia, Germany. Closet-paper holder .....	282,785	Aug. 7	372	105	24	565
Schooley, Andrew, Litchfield, N. Y. Crosscut-saw frame .....	286,966	Oct. 16	1494	411	25	284
Schoonmaker, Elon, assignor to Jumbo Patent Glove Company, Littleton, N. H. Glove and mitten .....	289,792	Dec. 4	519	144	25	976
Schoonmaker, James W., assignor of one-half to W. E. Milbank, Albany, N. Y. Permutation-lock .....	272,922	Feb. 27	1776	497	23	771
Schoonover, Leander W., and J. Afferbach, Perth Amboy, N. J. Revolving car-signal .....	279,821	June 19	1485	416	23	2391
Schorr, John W., St. Louis, Mo. Apparatus for cooling beer, &c .....	274,830	Mar. 27	2030	565	23	1208
Schott, Anton, Franklin Grove, Ill. Cultivator .....	283,926	Aug. 28	1760	497	24	842
Schott, Emil, assignor to L. & S. Sternberger, Philadelphia, Pa. Machine for cutting shirt-bosoms .....	271,925	Feb. 6	417	113	23	513
Schott, Julius. (See Armour and Schott.)						
Schrack, Christian H., New York, N. Y. Plumber's portable furnace .....	280,245	June 26	2003	563	23	2489
Schrack, John. (See Collins, Charles R., assignor.)						
Schrag, Philip, New York, assignor to E. Faber, Port Richmond, N. Y. Point-protecting attachment to lead or crayon holders .....	271,136	Jan. 23	1613	464	23	325
Schrag, Philip, New York, assignor to E. Faber, Port Richmond, N. Y. Lead and crayon holder .....	271,926	Feb. 6	418	114	23	514
Schrag, Philip, New York, assignor to E. Faber, Port Richmond, N. Y. Pen-holder .....	273,615	Mar. 6	480	139	23	916
Schramm, Carl F. W., Brooklyn, N. Y. Windmill .....	282,122	July 31	2266	621	24	416
Schrebler, Charles, Chambersburg, Pa. Egg beater .....	276,290	Apr. 24	1817	506	23	1562
Schrebler, Charles, Chambersburg, Pa. Card-grinding machine .....	278,608	May 29	2596	708	23	2102
Schrebler, Charles, Chambersburg, Pa. Vegetable-cutter .....	278,827	June 5	205	60, 61	23	2158
Schreiber, Charles W., assignor of two-thirds to F. Robinson and J. S. Morgan, Dubuque, Iowa. Drive-wheel .....	273,166	Feb. 27	2003	563	23	812
Schreiber, Josef, Vienna, Austria-Hungary. Steam-motor boiler .....	281,401	July 17	1326	367	24	246
Schreidt, Frank, Mansfield, Ohio. Vehicle shifting-rail .....	280,674	July 3	403	113	24	72
Schreidt, Frank, Mansfield, Ohio. Shifting-rail for vehicles .....	258,597	Nov. 13	1018	279	25	694
Schrepel, Loui, Hailey, Idaho Ter. Lasting-tool .....	289,861	Dec. 11	613	171	25	1001
Schreppman, Casper, <i>et al.</i> (See Caley, Jeremiah, assignor.)						
Schriek, Walter C., Newark, N. J. Whip-lash .....	273,319	Mar. 6	99	29	23	851
Schriver, Oliver P. (See Conner, Ezra F., assignor.)						
Schröder, Emile, Geneva, Switzerland. Construction of cellars for cooling and ventilation .....	290,483	Dec. 18	1401	387	25	1149
Schroeder, Richard E., Chicago, Ill. Grain and offal drier .....	273,767	Mar. 13	691	185	23	960
Schruben, James L., and W. F. Leonard, Lafayette, Ind. Iron wheel .....	284,074	Aug. 28	1965	547	24	878
Schrum, John. (See Letz, Louis H., assignor.)						
Schnbert, Julius O., Parkersburg, W. Va. Testing oils .....	270,489	Jan. 9	800	233	23	166

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Schubert, Julius O., and V. Bukey, Parkersburg, W. Va. Liquid-tester.....	290,935	Dec. 25	1991	549	25	1258
Schubert, Maurice, Higginsport, Ohio, assignor of one-half to A. Müller, Dover, Ky. Plow-fender.....	278,188	May 22	2046	562	23	1998
Schubert, Max J. (See Worden, Oliver E., assignor.)						
Schuch, Mary J., Cincinnati, Ohio. Lamp-extinguisher.....	272,335	Feb. 13	928	258	23	613
Schuessler, August T., Newark, N. J. Furnace for desulphurizing ores.....	276,636	May 1	114	30	23	1646
Schuessler, August T., Newark, N. J., assignor of one-half to V. Zeis, New York, N. Y. Treating spent lime from gas-works for cyanides.....	277,851	May 15	1633	.....	23	1020
Schnett, Henry J. H., Detroit, Mich. Fire-escape.....	275,083	Apr. 3	269	74	23	1272
Schnett, Henry J. H., Detroit, Mich. Alarm-lock.....	275,527	Apr. 10	868	234	23	1382
Schuetz, Fritz, Carver, Minn. Time-piece.....	276,892	May 1	458	123	23	1707
Schuetze, Robert, San Antonio, Tex. Permutation-lock.....	288,871	Nov. 20	1356	372	25	759
Schülke, Julius, Berlin, Germany. Gas-lamp.....	275,528	Apr. 10	869	235	23	1382
Schulte, D. B., et al. (See Held, August S., assignor.)						
Schultz, Albert T., Zanesville, Ohio. Car-coupling.....	273,167	Feb. 27	2004	564	23	812
Schultz, Frederick W. (See Banks, William H., assignor.)						
Schultz, Louis, New York, N. Y. Machine for trimming fabrics.....	273,898	Mar. 13	849	230	23	987
Schultz, Louis, New York, N. Y. Quilting-machine.....	276,480	Apr. 24	2065	{ 573 574 476 477 478	{ 23 24	1604 324
Schultz, Louis, New York, N. Y. Quilting-machine.....	281,732	July 24	1756	245	25	672
Schultz, Louis, New York, N. Y. Mechanical movement.....	288,497	Nov. 13	899	245	25	672
Schultz, Peter T., et al. (See Edwards, William F., assignor.)						
Schultze, August J., Galveston, Tex. Water-cooler.....	274,663	Mar. 27	1838	511	23	1174
Schulze, August, assignor of three-fourths to S. Langsdorf, New York, N. Y. Hand-mirror holder for toilet-cases.....	275,949	Apr. 17	1399	385	23	1482
Schulze, Hans J. F., New York, N. Y. Roundabout.....	274,228	Mar. 20	1267	350	23	1068
Schulze, Louis, Philadelphia, Pa. Medicated-vapor bath.....	280,675	July 3	404	113	24	72
Schulze-Berge, Hermann, assignor of one-half to J. H. Lippincott, Pittsburg, Pa. Etching glassware.....	276,893	May 1	459	.....	23	1707
Schulze-Berge, Hermann, assignor of one-half to J. H. Lippincott, Pittsburg, Pa. Etching glassware.....	276,894	May 1	461	.....	23	1707
Schulze-Berge, Hermann, assignor of one-half to J. H. Lippincott, Pittsburg, Pa. Etching glassware.....	276,895	May 1	463	.....	23	1707
Schulze-Berge, Hermann, assignor of one-half to J. H. Lippincott, Pittsburg, Pa. Decorating glass, china-ware, and similar articles.....	276,896	May 1	463	.....	23	1707
Schulze-Berge, Hermann, assignor of one-half to J. H. Lippincott, Pittsburg, Pa. Ornamenting glassware.....	276,897	May 1	465	.....	23	1707
Schulze-Berge, Hermann, assignor of one-half to J. H. Lippincott, Pittsburg, Pa. Process of etching and decorating glassware and device therefor.....	283,423	Aug. 21	1156	.....	24	721
Schulze-Berge, Hermann, assignor to himself and J. H. Lippincott, Pittsburg, Pa. Crayon for etching glassware.....	283,424	Aug. 21	1160	.....	24	721
Schumacher, Henry. (See Mann and Schumacher.)						
Schumacher, Ferdinand, Akron, Ohio. Drying grain.....	281,402	July 17	1327	{ 367 368	{ 24	247
Schunck, Charles, Green Bay, Wis. Apparatus for regulating the fermentation of beer.....	276,083	Apr. 17	1559	430	23	1509
Schunk, Henry, assignor to himself, E. Ruff, and C. Christman, Dubuque, Iowa. Rowing-gear for boats.....	284,984	Sept. 11	1006	284	24	1084
Schurch, Albert, San Francisco, Cal. Adjustable head for milling-machines.....	283,668	Aug. 21	1437	402	24	774
Schureman, David S., and W. McCulloch, Cincinnati, Ohio. Nut-lock.....	282,572	Aug. 7	119	35	24	521
Schurr, Johann, J., Pittsburg, Pa. Stern-wheel boat.....	270,344	Jan. 9	617	{ 181 182	{ 23	130
Schüssler, John P., Jr., and H. E. Kersten, New York, N. Y. Combined measure and funnel.....	285,168	Sept. 18	1248	350	24	1132
Schütt, Johannes, and J. Warnholtz, Neumünster, Holstein, Prussia, Germany. Ring-spinning frame.....	289,147	Nov. 27	1695	470	25	827
Schutte, Louis, Philadelphia, Pa. Injector.....	276,898	May 1	467	123	23	1707
Schutte, Louis, and J. Goehring, Philadelphia, Pa.; said Goehring assignor to said Shutte. Steam-jet condenser.....	285,846	Oct. 2	80	24	25	16
Schutz, Emile. (See Henderson and Schutz.)						
Schuyler, Daniel, New York, N. Y. Music-cabinet.....	289,569	Dec. 4	248	70	25	931
Schuyler, Daniel, New York, N. Y. Music-cabinet.....	289,570	Dec. 4	250	70	25	931
Schuyler, Henry, Sturgeon Bay, Wis. Apparatus for raising sunken vessels.....	287,586	Oct. 30	2289	622	25	447
Schwaner, Christian C., Winterset, Iowa. Hame-tug.....	286,230	Oct. 9	546	150	25	110
Schwaner, Christian C., assignor of two-thirds to H. J. B. Cummings and T. F. Mard, Winterset, Iowa. Pad-tree and harness-saddle.....	271,927	Feb. 6	419	114	23	514
Schwartz, Charles, Brooklyn, N. Y., assignor of one-half to J. E. Linde, Hoboken, N. J. Picture-card.....	286,642	Oct. 16	1084	292	25	212
Schwartz, Moses. (See Thoens, Burehard, assignor.)						
Schwartz, Philip, Madison, Ohio. Fence-post.....	287,871	Nov. 6	101	30	25	525
Schwarz, Anton. (See Ulrich, Justus, assignor.)						
Schwarz, Frederick, Buffalo, N. Y. Washing-machine.....	272,780	Feb. 20	1506	424	23	719
Schwarz, Georg, Fürth, Bavaria, Germany. Machine for grinding elliptical glasses, mirrors, and the like.....	276,084	Apr. 17	1560	430	23	1509
Schwarz, Theodore, Sedalia, Mo. Roofing-tongs.....	288,498	Nov. 13	901	245	26	672
Schwarzwalder, Anton, Minneapolis, Minn. Process of and mechanism for removing bran from wheat.....	288,669	Nov. 20	1108	{ 304 305	{ 25	715
Schwarzwalder, Elizabeth, et al. (See Schwarzwalder, Henry, assignor.)						
Schwarzwalder, Henry, New York, N. Y. Nut-lock.....	288,263	Nov. 13	592	162	25	619
Schwarzwalder, Henry, assignor to himself, E. Schwarzwalder, and E. H. Herb, New York, N. Y. Dog for barrel-staves.....	289,453	Dec. 4	94	27	25	903
Schwegler, Joseph, Buffalo, N. Y. Lifting-jack.....	278,280	May 22	2169	597	23	2018
Schweich, George W. S., Richmond, Mo. Cornet.....	284,492	Sept. 4	403	113	24	972
Schweikhard, Daniel, Bavaria, N. Y. Fence-post.....	270,609	Jan. 16	969	280	23	206
Schweitzer, Julius, Brixton, county of Surrey, England. Producing farinaceous food.....	277,792	May 15	1563	426	23	1908
Schweizer, Maximilian, Naubuc, Conn. Marking knife-blades.....	288,369	Nov. 13	736	200	25	643
Schwemlein, George, assignor to J. R. Mills & Co., Cincinnati, Ohio. Paper-ruling machine.....	288,370	Nov. 13	737	200	25	643
Schwenk, August. (See Yodor and Schwenk.)						
Schweriner, Joseph, Ithaca, N. Y. Key-board attachment for musical instruments.....	277,067	May 8	705	183	23	1753
Schwibinger, August, Milwaukee, Wis. Stove-hood.....	286,643	Oct. 16	1085	293	25	213
Schwintzer, Carl, and W. Gräff, Berlin, Germany, assignors of one-half to J. F. Donnell & Co., New York, N. Y. Lamp-burner.....	289,571	Dec. 4	251	70, 71	25	931
Scivalley, Martin L., Decherd, Tenn. Churn and domestic motor.....	269,964	Jan. 2	169	49	23	35



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Scotfield, Levi, Cedar Rapids, Iowa. Corn-planter.....	276,719	May 1	244	61, 62	23	1666
Scotfield, Levi, Cedar Rapids, Iowa. Corn-planter.....	279,822	June 19	1456	416	23	2391
Scotfield, Levi, Grand Haven, Mich. Check-rower.....	283,425	Aug. 21	1162	327	24	721
Scotfield, Orison. (See Simons and Scotfield.)						
Scotfield, Walter P., Hawthorn, Fla. Saw-mill set-works.....	289,572	Dec. 4	252	71	25	932
Scotfield, William C., New York, N. Y. Oil-tank.....	286,231	Oct. 9	548	150	25	111
Scoggins, Samuel R., Baltimore, Md. Cough-syrup.....	283,029	Aug. 14	664		24	625
Scollay, George W., New York, N. Y., assignor to Scollay Preserving and Shipping Com- pany. Preserving meats.....	284,242	Sept. 4	112		24	923
Scollay Preserving and Shipping Company. (See Scollay, George W., assignor.)						
Scollay, William A., San Francisco, Cal. Tail-piece for banjos.....	283,519	Aug. 21	1270	355	24	741
Scotchmer, Henry E., Chicago, Ill. Attaching wheels to shafts.....	284,678	Sept. 11	639	180	24	1018
Scotford, Louis K., New York, N. Y. Hand-stamp.....	284,243	Sept. 4	113	30	24	923
Scott, Albert O., Summit, R. I. Carriage-jack.....	283,573	Aug. 7	120	35	24	521
Scott, Charles A., Boston, Mass. Railway electric signal apparatus.....	282,229	July 31	2400	660	24	439
Scott, Charles A., Boston, Mass. Railway electric signaling apparatus.....	282,230	July 31	2403	661	24	440
Scott, Charles A., Boston, Mass. Electric-circuit track-instrument.....	283,152	Aug. 14	806	225	24	649
Scott, Charles E., Freeport, Ill. Show-box.....	277,515	May 15	1236	333	23	1851
Scott, Charles S., Cadiz, Ohio, and R. P. Scott, assignors to Scott Manufacturing Company, Baltimore, Md. Apple parer, corer, and slicer.....	288,956	Nov. 20	1460	404	25	779
Scott, David B., Shingle Springs, Cal. Metallic fence-post.....	289,149	Nov. 27	1697	471	25	827
Scott, Emmet H., and J. Frenier, La Porte, Ind. Vehicle-wheel.....	276,899	May 1	468	123	23	1708
Scott, Erastus W., Wauregan, Conn. Whip-socket.....	272,907	Feb. 27	1692	474	23	758
Scott, Erastus W., Wauregan, Conn. Machinery for dumping bags.....	274,664	Mar. 27	1839	511 } 512 }	23	1174
Scott, Erastus W., Wauregan, Conn. Whip-socket.....	287,872	Nov. 6	102	30	25	525
Scott, Frank D., and O. L. Gordon, Santa Cruz, Cal. Manifold writing-case.....	281,403	July 17	1329	368	24	247
Scott, George B., Brooklyn, N. Y. Printing-telegraph.....	274,665	Mar. 27	1840	512 } 513 }	23	1175
Scott, George W., Defiance, Ohio. Eye-water.....	284,335	Sept. 4	217		24	941
Scott, Henry E., Ossian, Iowa. Land-roller.....	283,288	Aug. 14	978	273	24	682
Scott, Jacob R., Nyack, N. Y. Lasting-machine for boots and shoes.....	281,306	July 17	1207	334	24	227
Scott, Jacob R., Nyack, assignor to J. Cavanagh, trustee, Brooklyn, N. Y. Machine for lasting boots and shoes.....	284,906	Sept. 11	915	258	24	1067
Scott, James, Pittsburg, Pa. Combustion-chamber for steam-boilers.....	270,490	Jan. 9	802	234	23	166
Scott, James M., (See Contancin, Scott, and Stumpf.)						
Scott, James P., et al. (See Hughes, Henry A., assignor.)						
Scott, James W., Uhrichsville, Ohio. Gate for sheep-feeding yards.....	285,686	Sept. 25	1858	530	24	1249
Scott, John. (See Kent, William, assignor.)						
Scott, John P., Delphos, Ohio. Sewing-machine.....	283,669	Aug. 21	1439	402 } 403 } 404 }	24	774
Scott, Lamphear H., Baltimore, Md. Apple-parer.....	278,460	May 29	2426	661	23	2072
Scott, Lamphear H., Newark, N. J. Apple-parer.....	285,687	Sept. 25	1858	530 } 531 }	24	1249
Scott Manufacturing Company. (See Egerton, C. Calvert, assignor.)						
Scott Manufacturing Company. (See Phillips, William R., assignor.)						
Scott Manufacturing Company. (See Scott, Charles S. and R. P., assignors.)						
Scott Manufacturing Company. (See Scott, Robert P., assignor.)						
Scott Manufacturing Company. (See White, Charles, assignor.)						
Scott, Matthew T., et al. (See Radford, Thomas, assignor.)						
Scott, Nathan B., L. Schanb, and H. Fernhake, Wheeling, W. Va. Furnace for the man- ufacture of glass.....	284,075	Aug. 28	1966	547 } 548 }	24	878
Scott, Robert P. (See Scott, Charles S. and R. P.)						
Scott, Robert P., assignor to Scott Manufacturing Company, Baltimore, Md. Apple parer, corer, and slicer.....	283,030	Aug. 14	665	187	24	625
Scott, Robert P., assignor to Scott Manufacturing Company, Baltimore, Md. Apple-parer.....	283,031	Aug. 14	666	187	24	626
Scott, Robert W., Philadelphia, Pa. Stocking and making the same.....	271,526	Jan. 30	2116	609	23	421
Scott, Samuel H., and G. J. Talmage, Chanute, Kans. Car-coupling.....	279,251	June 12	826	229	23	2275
Scott, Seth B., Orange, N. J. Toy block.....	274,980	Apr. 3	124	35	23	1247
Scott, Walter, Plainfield, N. J. Damping and cutting paper.....	272,588	Feb. 20	1267	353	23	676
Scott, Walter, Plainfield, N. J. Air-cushioning mechanism for printing-presses.....	282,379	July 31	2588	711	24	471
Scott, Walter, Plainfield, N. J. Cushioning apparatus for printing-presses.....	288,872	Nov. 20	1358	373	25	759
Scott, Walter, Hoosick Falls, N. Y. Lamp-filler.....	275,419	Apr. 10	727	193	23	1359
Scott, William, et al. (See Grove and Steely, assignors.)						
Scott, William, Malden, Mass. Ventilating cars.....	290,710	Dec. 25	1709	470	25	1209
Scott, William, Faulkner, Mass., assignor to Meyer, Saffin & Co., New York, N. Y. Wa- ter-closet cistern.....	275,716	Apr. 10	1103	302	23	1423
Scott, William E. (See Parnall, George A. and A. N., assignors.)						
Scott, William G., and H. Campbell, Richmond, Ind. Screen for thrashing-machines.....	286,853	Oct. 16	1351	370	25	260
Scott, William M. (See Baker and Scott.)						
Scott, William M., Lockport, N. Y. Water-elevator.....	276,481	Apr. 24	2067	574	23	1604
Scott, William M., Birmingham, county of Warwick, and C. Proctor, Handsworth, county of Stafford, England: said Proctor assignor to said Scott. Breakdown gun.....	288,670	Nov. 20	1111	305	25	716
Scott, William O. N., Baltimore, Md. Wash-stand.....	270,701	Jan. 16	1088	312	23	228
Scott, William W., and S. A. Emerson, Algona, Iowa. Cream-measuring device.....	284,493	Sept. 4	404	113	24	972
Scott, Winfield G., Milwaukee, Wis. Window curtain and shade.....	289,573	Dec. 4	254	71	25	932
Scottron, Samuel R., Brooklyn, N. Y. Cornice.....	270,851	Jan. 16	1262	364	23	262
Scouller, Alexander, assignor to himself and J. F. O'Conner, Davenport, Iowa. Eccentric- coupling for shakers.....	284,907	Sept. 11	917	258	24	1068
Scovell, Joseph B. (See Pattee and Scovell.)						
Scovell, Melvill A. (See Weber and Scovell.)						
Scovill Manufacturing Company. (See Camp, Wallace H., assignor.)						
Scovill Manufacturing Company. (See Crane and Lines, assignors.)						
Scovill Manufacturing Company. (See Kilburn, Benjamin W., assignor.)						
Scovill Manufacturing Company. (See Price, H. Clay, assignor.)						
Scovill Manufacturing Company. (See Shipley, Alfred J., assignor.)						
Scovill Manufacturing Company. (See Spruce, James, assignor.)						
Scovill Manufacturing Company. (See Welton, Edwin D., assignor.)						
Scrannage, Matthew. (See Johnson, Jacob, assignor.)						
Scranton, Abner R. (See Scranton, Alfred L., assignor.)						
Scranton, Alfred L., Western Springs, Ill. Hinge.....	282,574	Aug. 7	121	36	24	531
Scranton, Alfred L., assignor of one-half to A. R. Scranton, Rochelle, Ill. Door-latch.....	284,336	Sept. 4	217	61	24	941
Scranton, Clifford R. (See Redman, Andrew J., assignor.)						
Scranton, Worthington, assignor to Sargent & Co., New Haven, Conn. Door-bell.....	272,336	Feb. 13	929	258	23	613

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Scrape, William H., Beebe, Kans. Shaft for vehicles.....	290,936	Dec. 25	1991	549	25	1258
Screeven, Sparkman R., Philadelphia, Pa. Toy bird.....	278,461	May 29	2427	661	23	2072
Screeven, Sparkman R., Philadelphia, Pa. Dental-engine hand-piece.....	288,499	Nov. 13	902	246	25	672
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Circuit for multiple switch-boards for telephone-exchanges.....	271,279	Jan. 30	1790	520	23	363
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Secrecy-switch for telephones.....	271,280	Jan. 30	1791	520	23	363
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Head-gear for switchmen's telephones.....	275,420	Apr. 10	728	194	23	1359
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Telephone-switch.....	284,908	Sept. 11	918	259	24	1068
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Telephone-switch.....	284,909	Sept. 11	919	259	24	1068
Scribner, Charles E., assignor to Western Electric Manufacturing Company, Chicago, Ill. Automatic crank-switch for telephone call-boxes.....	287,873	Nov. 6	103	30	25	525
Scribner, Charles E., assignor, by mesne assignments, to Western Electric Company, Chicago, Ill. Circuit for telephone-exchanges.....	278,367	May 29	2313	633	23	2052
Scribner, Charles E., assignor, by mesne assignments, to Western Electric Company, Chicago, Ill. Circuit for telephone call-boxes.....	283,927	Aug. 28	1761	497	24	842
Scribner, Edwin A., Brooklyn, N. Y. Manufacturing artificial fertilizers.....	283,426	Aug. 21	1164	.....	24	731
Scribner, Edwin A., Brooklyn, N. Y. Manufacturing artificial fertilizers.....	283,427	Aug. 21	1166	.....	24	722
Scrivanow, Grégoire, Paris, France, assignor to H. H. Eldred, London, England. Galvanic battery.....	270,702	Jan. 16	1089	312	23	228
Scruton, Stephen B., assignor to E. G. and E. Wallace, Rochester, N. H. Burnisher and header head for polishing heels.....	282,673	Aug. 7	236	69	24	541
Scrymgeour, David, Foxborough, assignor of one-half to S. K. Scrymgeour, Worcester, Mass. Frame for school-slates.....	277,164	May 8	829	219	23	1774
Scrymgeour, Samuel K. (See Scrymgeour, David, assignor.)						
Scull, Charles R., et al. (See Henwood, John, assignor.)						
Scully, Benjamin B., Lynn, Mass. Necktie-support.....	272,337	Feb. 13	930	258	23	613
Scully, James. (See Scully, John T., assignor.)						
Scully, James, New Orleans, La. Conical boiler-tube expander.....	290,273	Dec. 18	1118	315	25	1099
Scully, John T., Cambridge, Mass., assignor of one-half to J. Scully, Groton, Conn. Derrick-switch. (See Brooks and Scully.)	275,421	Apr. 10	729	194	23	1360
Scutt, Hiram B., Joliet, Ill. Wire-barbing machine.....	280,676	July 3	405	113	24	72
Scutt, Hiram B., Joliet, Ill. Barbed wire for fences.....	287,059	Oct. 23	1620	446	25	313
Seabrook, William, Edisto Island, S. C. Wheelbarrow.....	279,604	June 19	1239	343	23	2348
Seabury, Edgar R., Brooklyn, N. Y. Necktie-holder.....	280,246	June 26	2004	563	23	2489
Seabury, Frederick W., Providence, R. I. Securing teeth to artificial gums and flask for the same.....	271,370	Jan. 30	1919	555	23	386
Seabury, Frederick W., Providence, R. I. Dental flask.....	279,605	June 19	1239	344	23	2349
Seabury, Frederick W., Providence, R. I. Dental flask.....	283,928	Aug. 28	1762	497	24	843
Seager, S. F., et al. (See Bennette, Jacob B., assignor.)						
Seagrave, Frederic S., Rochester, Mich. Ladder.....	278,051	May 22	1876	513	23	1968
Seagrave, Frederic S., Rochester, Mich. Extension step-ladder.....	278,052	May 22	1877	513	23	1969
Seagrave, John D., and E. R. Fuller, Worcester, Mass. Fire-escape.....	286,644	Oct. 16	1085	293	25	213
Sealamer, John, assignor of one-half to Z. F. Fluhat, Pana, Ill. Fruit-picker.....	287,780	Oct. 30	2561	689	25	496
Seaman, John A., Chicago, Ill. Tool for working off kegs and barrels.....	271,660	Feb. 6	90	24	23	456
Seaman, John A., Chicago, Ill. Pie-plat.....	284,244	Sept. 4	113	30	24	923
Seaman, Joseph S., assignor to himself, J. B. Young, and R. Sleeth, Pittsburg, Pa. Splice-bar for rail-joints.....	276,900	May 1	469	124	23	1708
Seaman, Thomas, Listowell, Ontario, Canada. Wagon-gearing.....	272,908	Feb. 27	1693	474	23	758
Seaman, Thomas C., Chicago, Ill. Machine for crozing, chamfering and howeling barrels.....	284,245	Sept. 4	114	31	24	923
Seaman, William K., Scranton, Pa. Rail-straightening machine. (Reissue).....	10,276	Jan. 23	1703	492	23	340
Seaman, William K., Scranton, Pa. Hot-bed for cooling railway-rails.....	272,781	Feb. 20	1507	{ 424 425 }	{ 23 23 }	719
Seaman, William T. (See Bunce and Sammis, assignors.)						
Seamans, Irving M., Buffalo, N. Y. Gas-heater for sad-irons.....	286,155	Oct. 2	458	124	25	85
Scaring, James E., assignor to Robbins & Appleton, New York, N. Y. Watch-case.....	278,609	May 29	2597	709	23	2102
Searle, Frank S. (See Turner and Searle.)						
Searle, Orlando H. (See Ivins and Snyder, assignors.)						
Searle, Thomas A., Quindnick, assignor to R. Barton, Providence, R. I. Button or stud.....	281,404	July 17	1330	368	24	247
Searle, William H. (See Eskrett and Searle.)						
Searles, Albert P., Mount Kisco, N. Y. Socket-wrench.....	284,076	Aug. 28	1967	548	24	878
Searles, Andrew B. (See Gifford, Alenza T., assignor.)						
Searles, Charles P., assignor of one-half to G. W. Butler, Columbus, Ohio. Car-coupling.....	286,080	Oct. 2	371	103	25	68
Searls, Anson, Newark, N. J. Top-prop nut.....	276,589	Feb. 20	1268	353	23	676
Searls, Anson, Newark, N. J. Capped screw-nut.....	276,482	Apr. 24	2068	574	23	1605
Searls, Anson, Newark, N. J. Whip-socket.....	279,282	June 12	827	229	23	2275
Searls, Anson, Newark, N. J. Whip-socket fastener.....	283,520	Aug. 21	1270	356	24	741
Searls, Anson, Newark, N. J. Whip-socket fastener.....	287,871	Nov. 6	103	31	25	525
Searls, Anson, Newark, N. J. Whip-socket.....	288,671	Nov. 20	1112	305	25	716
Sears, Charles, South Evanston, Ill. Baggage-check.....	281,733	July 24	1758	478	24	324
Sears, Charles, South Evanston, Ill. Game apparatus or toy target.....	280,032	Nov. 27	1559	430	25	803
Sears, Edward P. (See Cooper, Edward A., assignor.)						
Sears, Edwin P., Buffalo, N. Y. Halter.....	277,354	May 8	1046	280	23	1813
Sears, Edwin P., Buffalo, N. Y. Wagon-seat fastener.....	282,786	Aug. 7	373	105	24	565
Sears, Henry C., Boston, Mass. Two-wheeled vehicle.....	280,524	July 3	228	60	24	41
Seath, James. (See Wagner and Seath.)						
Seaton, Benjamin C., Cowan, Tenn. Vehicle-wheel.....	285,515	Sept. 25	1657	466	24	1211
Seaton, William, London, England. Rail-joint.....	280,406	July 3	82	22	24	17
Seaton, William C., Quebec, Quebec, Canada. Wick-trimmer.....	272,338	Feb. 13	931	259	23	613
Seaton, William C., Quebec, Quebec, Canada. Wick-trimmer.....	283,521	Aug. 21	1271	356	24	741
Seaton, Wright J., Wyandotte, Kans. Automatic safety-brake for elevators.....	279,024	June 5	503	137	23	2209
Seaver, Latimer S., Boston, Mass. Machine for hulling and polishing rice.....	277,947	May 22	1748	{ 476 477 }	{ 23 23 }	1945
Seaverns, Isaac W., Jr., Chicago, Ill. Device for promoting combustion in boiler-furnaces.....	286,854	Oct. 16	1352	370	25	260
Seawell, Jesse P., Hope, Ark. Pile-driver.....	280,407	July 3	83	22	24	17
Seay, Thomas N., Eastover, S. C. Cotton-planter.....	281,145	July 10	995	278	24	182
Sebold, Georg, Karlsruhe, Germany. Molding-machine.....	284,494	Sept. 4	405	{ 113 114 115 }	{ 24 24 24 }	973
Sebring, Henry K., East St. Louis, Ill., assignor of one-fourth to C. W. Wanghop, St. Louis, Mo. Car-coupling.....	275,717	Apr. 10	1105	302	23	1423



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Secor, Jerome B., Bridgeport, Conn. Sewing-machine .....	282,674	Aug. 7	237	69	24	541
Secor, Jerome B., Bridgeport, Conn. Sewing-machine tension .....	286,336	Oct. 9	708	189	25	138
Secor, Nelson. (See Johnston, Abner, assignor.)						
Secor, William H., assignor of one-third to S. Crosser and H. Rogers, Farragut, Iowa. Combined corn harvester and husker .....	281,569	July 17	1531	420	24	281
Sedgwick, John, Richmond, Ind. Wire and cord stretcher .....	277,068	May 8	707	184	23	1753
Sedgwick & Stuart Manufacturing Company. (See Stuart, Robert J., assignor.)						
Sedlacek, Karl. (See Pichler and Sedlacek.)						
See, James W. (See Carr and See.)						
See, James W., assignor of one-half to F. X. Black and S. P. Clawson, Hamilton, Ohio. Device for transmitting motion .....	280,247	June 26	2004	564	23	2489
See, James W., Hamilton, Ohio, assignor to Aschroft Manufacturing Company, of Massachusetts and New York. Scale for steam-engine indicators .....	282,931	Aug. 7	537	152	24	596
See, Joseph B., Poughkeepsie, N. Y. Shirt .....	273,168	Feb. 27	2005	564	23	812
Seebach, Louis, and J. Bettschen, Gowanstown, Ontario, Canada. Motive power .....	281,929	July 24	2008	550	24	369
Seeger, George G., Hillsdale, Iowa. Combined harrow and roller .....	273,320	Mar. 6	99	30	23	851
Seeger, George G., Hillsdale, Iowa. Drag-saw .....	288,264	Nov. 13	592	163	25	619
Seel, John B., Clinton Villas Church Road, Urnston, county of Lancaster, England. Umbrella or parasol .....	284,495	Sept. 4	410	117	24	973
Seelo, Henry F. W., Rolla, Mo. Reflector for lamps .....	278,610	May 29	2599	709	23	2102
Seeley, Charles A., New York, N. Y. Dynamo and magneto electric machine .....	271,928	Feb. 6	420	114	23	514
Seeley, Charles A., New York, assignor to J. B. Tibbitts, Hoosick, N. Y. Magneto-electric machine .....	277,069	May 8	709	184	23	1753
Seeley, Hiram T., Sheboygan Falls, Wis. Two-wheeled vehicle .....	275,084	Apr. 3	270	74	23	1272
Seeley, Marquis F., Fremont, Nebr. Grain-elevator .....	288,371	Nov. 13	737	{ 200 201 }	{ 25 25 }	643
Seely, Clarence E. (See Curtis, Martin M., assignor.)						
Seely, Edwin R., et al. (See Wright, Noah D., assignor.)						
Seely, Henry W. (See Dyer, Richard N., assignor.)						
Seely, Henry W. (See Dyer and Seely.)						
Seely, James W., et al. (See Seely, Samuel F., assignor.)						
Seely, John A. (See Eckert and Seely.)						
Seely, John A. (See Eckert, Seely, and Eckert.)						
Seely, Samuel F., Petersburg, Mich. Stove-pipe shelf .....	283,822	Aug. 28	1639	462	24	821
Seely, Samuel F., assignor of two-thirds to J. W. and W. M. Seely, Toledo, Ohio. Spring for beds, &c. ....	276,901	May 1	471	124	23	1708
Seely, Thomas. (See Carter and Seely.)						
Seely, William M., et al. (See Seely, Samuel F., assignor.)						
Seely, Willis G., Albany, N. Y. Music-leaf holder .....	274,037	Mar. 13	1009	277	23	1015
Seely, Seymour K., Hudson, Mich. Sulky-plow .....	288,673	Nov. 20	1360	373	25	760
Seely, Thomas F., assignor of one-third to H. Stubbendorf, Montreal, Quebec, Canada. Stowage of grain .....	288,500	Nov. 13	903	246	25	672
Segal, Adolph, San Francisco, Cal. Cooking-cabinet .....	273,169	Feb. 27	2006	564	23	813
Segar, Charles T., Utica, N. Y. Cot-bed .....	281,930	July 24	2008	550	24	369
Segesser, John U., San Francisco, Cal. Bretzel-cutter .....	283,522	Aug. 21	1273	356	24	741
Segur, Harvy, assignor of one-half to J. Watts, Decatur, Ind. Carpet-stretcher .....	290,274	Dec. 18	1119	315	25	1100
Seheel, John H. (See Assmann, Franz A., assignor.)						
Seibel, Georges, Cransac, France. Coke-oven .....	288,874	Nov. 20	1361	{ 373 374 }	{ 25 25 }	760
Seiberlich, Frank B., East Cambridge, Mass. Bottle-washing machine .....	272,484	Feb. 20	1134	319	23	653
Seiberlich, Frank B., East Cambridge, Mass. Bottle-washing machine. (Reissne) .....	10,327	May 15	1656	451	23	1924
Seiberling, John F., Akron, Ohio. Machine for the manufacture of paper barrels .....	285,447	Oct. 2	83	24, 25	25	17
Seiberling, John F., Akron, Ohio. Harvester .....	290,484	Dec. 18	1402	{ 387 388 }	{ 25 25 }	1149
Seibert, Edgar H., Jamestown, Ohio. End-gate .....	285,848	Oct. 2	86	25	25	17
Seibold, Otto F., Brooklyn, N. Y. Gun-wad .....	271,527	Jan. 30	2117	609	23	422
Seidel, Emil F., St. Louis, Mo. Counter-roll or arm-rest bracket .....	281,405	July 17	1331	369	24	247
Seifert, Katharina, Cincinnati, Ohio. Degratulatng-machine .....	290,485	Dec. 18	1404	388	25	1150
Seiler, George, Spring Forge, Pa. Purifying water .....	275,277	Apr. 3	503	23	23	1312
Seller, Max, New York, N. Y. Combined cape and hood .....	276,720	May 1	245	62	23	1666
Seip, Andrew M., Jr. (See Reiff, William H., assignor.)						
Seitz, Albert and W., Washington, D. C. Fan .....	271,528	Jan. 30	2118	609	23	422
Seitz, William. (See Seitz, Albert and W.)						
Seivard, Abraham, Reading, Pa. Lock-hinge .....	283,523	Aug. 21	1274	356	24	741
Selby, Charles M., et al. (See Lederer, Charles, assignor.)						
Selby, James, Peoria, Ill. Corn-planter .....	274,981	Apr. 3	125	35	23	1247
Selby, James H., assignor of one-half to J. W. Skeavington, Albion, Ill. Bed-rail-slat lock .....	275,718	Apr. 10	1106	302	23	1423
Selby, James H., assignor of one-half to H. J. Strawn, Albion, Ill. Kitchen-safe .....	279,311	Nov. 27	1887	525	25	864
Selby, Stephen F. (See Rathbun and Selby.)						
Selden, Charles, Toledo, Ohio. Multiplex telegraphy .....	270,990	Jan. 23	1443	417	23	297
Selden, Charles, St. Louis, Mo. Mechanical telephone .....	281,406	July 17	1332	369	24	247
Selden, Charles, St. Louis, Mo. Acoustic telephone .....	281,407	July 17	1333	369	24	248
Selden, Edward P., administrator. (See Griswold and Selden.)						
Selden, George, Erie, Pa. Balanced slide-valve .....	276,721	May 1	246	62	23	1667
Selden & Griswold Manufacturing Company. (See Hanchett, Oren R., assignor.)						
Selden, Henry C., Cincinnati, Ohio. Distilling apparatus .....	276,483	Apr. 24	2069	574	23	1605
Selden, Mira, administratrix. (See Warren, Jabez T., assignor.)						
Selden, Samuel, deceased. (See Griswold and Selden.)						
Seldon, Mira, administratrix. (See Seldon, Robert.)						
Seldon, Robert, deceased, Stafford, N. Y., M. Seldon, administratrix. Friction roller and box .....	277,070	May 8	710	184	23	1753
Selkirk, David. (See Beil and Selkirk.)						
Selle, Ferdinand, Detroit, Mich. Wagon platform-gearing .....	270,254	Jan. 9	507	149	23	109
Sellers, George H. (See Sellers, William and G. H.)						
Sellers, John, Jr. (See Sellers, William and G. H., assignors.)						
Sellers, Morris, Chicago, Ill. Railway splice-bar .....	285,688	Sept. 25	1860	531	24	1250
Sellers, Thomas H., Vallejo, Cal. Boat-detaching apparatus .....	275,529	Apr. 10	870	235	23	1383
Sellers, William. (See Bancroft and Thorne, assignors.)						
Sellers, William, Philadelphia, Pa. Pneumatic fire-extinguisher .....	269,965	Jan. 2	170	49	23	35
Sellers, William, Philadelphia, Pa., and G. H. Sellers, Wilmington, Del.; said G. H. Sellers assignor to J. Sellers, Jr., Philadelphia, Pa. Upsetting metal .....	276,291	Apr. 24	1818	507	23	1562
Selting, Bernard, Dyersville, Iowa. Gate .....	285,689	Sept. 25	1861	531	24	1250
Sembritzki, Max, Schöglmühl, near Vienna, Austria-Hungary. Paper-making apparatus .....	288,125	Nov. 6	413	117	25	580

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Semet, Louis, Brussels, Belgium. Coke-oven .....	287,332	Oct. 23	1964	{ 536 } 537	25	375
Semones, John C., Minden, Nebr. Bagasse-furnace .....	824,246	Sept. 4	115	31	24	924
Semper, Conrad, assignor to Harrison Brothers & Co., Philadelphia, Pa. Manufacture of aluminous cake .....	271,371	Jan. 30	1920	.....	23	386
Semper, Conrad, assignor to Harrison Brothers & Co., Philadelphia, Pa. Manufacture of sulphate of alumina .....	280,088	June 26	1823	.....	23	2457
Semper, Conrad, assignor to Harrison Brothers & Co., Philadelphia, Pa. Manufacture of sulphate of alumina .....	280,089	June 26	1824	.....	23	2457
Semper, Conrad, assignor to Harrison Brothers & Co., Philadelphia, Pa. Manufacture of sulphate of alumina .....	280,090	June 26	1824	.....	23	2457
Semple, Harry, and A. P. Ayling, Wellsburg, W. Va. Revolving glass caster .....	290,804	Dec. 25	1828	505	25	1230
Semple, James, Cincinnati, Ohio. Cock .....	269,886	Jan. 2	74	22, 23	23	17
Semple, William F., Mount Vernon, Ohio. Inhaler .....	290,466	Dec. 18	1405	388	25	1150
Senderling, Martin L., Jersey City, N. J. Hub for vehicle-wheels .....	277,355	May 8	1046	281	23	1813
Senderling, Martin L., Jersey City, N. J. Journal-lubricator .....	290,937	Dec. 25	1992	550	25	1258
Seng, Wendelin, Chicago, Ill. Bung and bush .....	276,902	May 1	472	124	23	1709
Senour, Faunt L., New Alexandria, Pa. Electric light .....	280,677	July 3	406	114	24	72
Senour, William P., Pimento, Ind. Car-door and fastening .....	278,611	May 29	2599	709	23	2103
Sensoney, Edgar M., St. Louis, Mo. Bicycle-bell .....	279,448	June 12	1052	291	23	2310
Senter, George F. (See Toppan, Charles, assignor.) .....						
Sequeira, Augustus, Hartford, Conn. Centering-gage .....	271,746	Feb. 6	193	54	23	473
Sergeant, Benjamin E., Greensborough, N. C. Saw-mill set-works .....	283,670	Aug. 21	1442	404	24	774
Sergeant & Cullingworth Company. (See Cullingworth and Potter, assignors.) .....						
Sergeant & Cullingworth Company. (See Potter, Charles W., assignor.) .....						
Serrell, Harold, Plainfield, N. J. Alarm-bell for bicycles .....	285,933	Oct. 2	201	56	25	39
Serrell, John A., Bayonne, and G. M. Ward, Newark, assignors to Ralston Gas Engine and Manufacturing Company, Newark, N. J. Gas-motor .....	285,169	Sept. 18	1249	{ 350 } 351	24	1132
Serson, James. (See Kauffler and Serson.) .....						
Servis, David, Sennett, assignor, by mesne assignments, to Servis Railroad Tie Plate Com- pany, New York, N. Y. Wear-plate for railway-ties. (Reissue) .....	10,302	Apr. 3	615	165	23	1330
Servis Railroad Tie Plate Company. (See Servis, David, assignor.) (Reissue) .....						
Sessions, John H. (See Crouch, George, assignor.) .....						
Settle, Thomas, assignor to H., A. H., H. C., and W. Disston, Philadelphia, Pa. Machine for grinding metal plates .....	286,855	Oct. 16	1354	{ 370 } 371	25	260
Severance, James R., Fremont, Ohio. Bundle-discharger for grain-binders .....	277,356	May 8	1047	281	23	1813
Severance, James R., Fremont, Ohio. Feeding and packing mechanism for grain-binders .....	281,570	July 17	1533	{ 430 } 431	24	261
Severance, James R., Fremont, Ohio. Endless carrier for grain-binders, &c. ....	283,671	Aug. 21	1444	{ 404 } 405	24	775
Severance, James R., Fremont, Ohio. Wheel for harvesters .....	289,150	Nov. 27	1698	471	25	827
Severin, Emil, Aurora, Ind. Metallic roofing .....	276,085	Apr. 17	1562	430	23	1510
Sewier, Moses N., Gainesville, Tex. Fence .....	277,357	May 8	1049	282	23	1813
Sewall, Bradford, Farmington, Me. Elevator .....	275,950	Apr. 17	1400	386	23	1482
Seward, George F., et al. (See Clay, Robert J., assignor.) .....						
Seward & Son, M. (See Cooper, William H., assignor.) .....						
Seward, Williamson B., Bloomington, Ind. Evaporating-pan .....	290,193	Dec. 11	1005	283	25	1072
Sewell, Franklin M., Dangerfield, Tex. Cotton-condenser .....	280,868	July 10	659	185	24	123
Sewell, Joseph, Jr., Hamilton, Ind. Lifting-jack .....	271,137	Jan. 23	1614	464	23	325
Sexton, Henry M., Chicago, Ill. Refrigerator-car .....	290,805	Dec. 25	1829	{ 505 } 506	25	1230
Sexton, Michael, New York, N. Y. Automatic flushing-tank .....	287,179	Oct. 23	1773	486	25	344
Sexton, William F., Sr., and William F. Sexton, Jr., Toronto, Ontario, Canada. Door-bal- ance .....	285,365	Sept. 18	1475	415	24	1172
Sextro, Joseph G., Carthage, Ohio. Furnace for steam-boilers .....	276,903	May 1	473	124	23	1709
Seybert, Harvey R., Brady's Bend, Pa. Miner's pick .....	271,929	Feb. 6	421	115	23	514
Seybold, Frederick J., New York, assignor to C. C. Gignoux, Brooklyn, N. Y. Stylographic pen .....	272,161	Feb. 13	716	197	23	575
Seymour, Alvin C., Fall River, Mass. Road-plow .....	289,454	Dec. 4	95	27	25	903
Seymour, Arba M., Mazomanie, Wis. Table-leg .....	284,764	Sept. 11	749	208	24	1037
Seymour, Emily, et al. (See Cameron, James V., assignor.) .....						
Seymour, Francis, Paterson, N. J. Theatrical appliance .....	280,525	July 3	229	60	24	41
Seymour, Francis, and A. Bannigan; said Bannigan assignor to said Seymour; said Sey- mour assignor of one-half to R. Rossiter and S. Thorp, Paterson, N. J. Machine for spin- ning, doubling, and twisting silk .....	282,123	July 31	2268	622	24	417
Seymour, Frederick H., Detroit, Mich. Monkey-wrench .....	273,170	Feb. 27	2007	564	23	813
Seymour, Henry A., Washington, D. C. Electric light .....	270,491	Jan. 9	802	234	23	167
Seymour, James M., Newark, N. J. Differential index for machine-tools .....	276,292	Apr. 24	1821	507	23	1562
Seymour, James M., Newark, N. J. Automatic fan .....	284,077	Aug. 28	1968	548	24	878
Seymour, James M., Newark, N. J. Mechanism for adjusting rods or pitmen of die-presses .....	284,910	Sept. 11	920	{ 259 } 260	24	1069
Seymour, James M., Newark, N. J. Die-press connecting-rod .....	287,333	Oct. 23	1966	537	25	376
Seymour, James M., Newark, N. J. Sheet-metal press .....	290,275	Dec. 18	1120	315	25	1100
Seymour, Joseph L., New York, N. Y. Kindling-block-sawing machine .....	290,711	Dec. 25	1710	471	25	1209
Seymour Manufacturing Company. (See Swope, Francis M., assignor.) .....						
Seymour, Marvin J., Olean, N. Y. Process of and apparatus for manufacturing lamp- black .....	278,749	June 5	91	26, 27	23	2139
Seymour, Nelson, Erie, Pa. Gold-separator .....	270,492	Jan. 9	804	234	23	167
Seymour, Robert H., Holyoke, Mass. Monkey-wrench .....	273,899	Mar. 13	850	230	23	987
Seymour, William H., Gloversville, N. Y. Shoe and glove fastening .....	282,675	Aug. 7	238	69	24	541
Seymour, Will S., assignor to H. C. Bradley, Chicago, Ill. Cutting device .....	284,496	Sept. 4	410	117	24	973
Seymour, William S., assignor to H. C. Bradley, Chicago, Ill. Uniting sheets of fibrous and other materials .....	289,455	Dec. 4	96	28	25	903
Shaaber, Jacob. (See Fioster, John C., assignor.) .....						
Shafer, Caspar B., Washington, D. C. Medicated effervescent salts .....	287,781	Oct. 30	2562	.....	25	496
Shafer, Charles T., Springfield, Ohio. Fountain pen-holder .....	279,025	June 5	505	{ 137 } 138	23	2209
Shaffer, Charles H., assignor of one-half to S. N. Jones, Rockford, Ill. Hose-reel .....	290,806	Dec. 25	1831	{ 507 } 507	25	1231
Shaffer, Henry E., Rochester, N. Y. Lamp .....	285,310	Sept. 18	1405	397	24	1161
Shaffer, John B., Kearney, Nebr. Steam-engine .....	273,171	Feb. 27	2008	565	23	813
Shaffer, Joseph, assignor of one-half to E. F. Cooper, Dayton, Ohio. Grupper for harness .....	277,516	May 15	1236	333	23	1851
Shaffer, Thomas, assignor to Phoenix Iron Company, Phoenixville, Pa. Rolling-mill .....	276,086	Apr. 17	1562	431	23	1510
Shaffer, Thomas, assignor to Phoenix Iron Company, Phoenixville, Pa. Rolling-mill .....	280,248	June 26	2006	564	23	2490
Shaffer, Thomas, assignor to Phoenix Iron Company, Phoenixville, Pa. Rolling-mill .....	288,501	Nov. 13	904	246	25	672



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Shaffer, William C., Philadelphia, Pa., assignor to Railroad Safety Lock and Signal Company, of New Jersey. Apparatus for stopping trains, signaling, &c. ....	276,904	May 1	474	125	23	1709
Shaffer, William C., and A. M. White, Philadelphia, Pa., assignors to Railroad Safety Lock and Signal Company, of New Jersey. Automatically stopping trains and signaling .....	276,905	May 1	475	125	23	1709
Shaffer, William F., Cedar Rapids, Iowa. Oil-cake former and spring-mat .....	275,278	Apr. 3	504	139	23	1312
Shaffner, Ephraim L., Joliet, Ill. Door-hanger .....	279,606	June 19	1240	344	23	2349
Shafto, Thomas M. (See Wood, Thomas W., assignor.) .....						
Shaler, Clarence A., Fox Lake, Wis. Rotary engine .....	286,232	Oct. 9	549	{ 150 151 }	25	111
Shaler, Ira W., Brooklyn, N. Y., assignor of one-half to H. C. Covert, New York. Carbu- retor .....	278,281	May 22	2170	598	23	2018
Shallus, William W., assignor of two-thirds to S. B. Bitzer and W. B. Wilson, Lancaster, Pa. Seal-lock .....	282,380	July 31	2589	711	24	472
Shamp, George W., Buffalo, N. Y. Feed-water heater and purifier .....	283,823	Aug. 28	1640	462	24	821
Shamp, George W., assignor to A. M. Westfall and E. A. Gay, Buffalo, N. Y. Rotary pump .....	283,153	Aug. 14	808	226	24	650
Shanahan, Winfield S., assignor of one-half to S. C. Hulbert, East Chatham, N. Y. Thill- coupling .....	279,026	June 5	505	137	23	2309
Shanck, Henry K., assignor of one-fourth to J. A. Snell, Dayton, Ohio. Railway-tricycle .....	287,732	Oct. 30	2493	671	25	483
Shauck, Henry K., assignor of one-fourth to J. A. Snell, Dayton, Ohio. Tricycle .....	289,151	Nov. 27	1699	472	25	828
Shaner, David G., Blue Mound, Ill. Check-roller and drill .....	283,824	Aug. 28	1641	462	24	821
Shank, Charles A. (See Cummings and Shank.) .....						
Shankland, Manning R., et al. (See Smith, Abraham B., assignor.) .....						
Shanner, Charles T. (See Weston and Shanner.) .....						
Shannon, James, Washington, D. C. Sash-cord guide .....	274,831	Mar. 27	2031	565	23	1208
Shannon, James S., Hinsdale, Ill. Paper-file .....	274,832	Mar. 27	2032	566	23	1208
Shannou, John, Wixom, Mich. Potato-digger .....	288,875	Nov. 20	1362	374	25	760
Shannon, William. (See Nolan, John M., assignor.) .....						
Sharkey, Thomas W., Philadelphia, Pa. Stopping mechanism for looms .....	283,289	Aug. 14	979	273	24	682
Sharp, Dennis P., Ithaca, N. Y. Thill for vehicles .....	276,196	Apr. 24	1704	471	23	1542
Sharp, Dennis P., Ithaca, N. Y. Spring-vehicle .....	276,906	May 1	477	125	23	1709
Sharp, Dennis P., Ithaca, N. Y. Two-wheeled vehicle .....	280,962	July 10	775	215	24	142
Sharp, Frank, Los Angeles, Cal. Flue-plugging device .....	278,612	May 29	2600	709	23	2103
Sharp, George W., Crawfordsville, Ind. Automatic grain-meter .....	286,645	Oct. 16	1087	{ 293 294 }	25	213
Sharp, James L. (See Hutchins, Abner B., assignor.) .....						
Sharp, John F., et al. (See Shields, Francis M., assignor.) .....						
Sharpe, Alfred H. B., and F. Palmer, Lincoln, county of Lincoln, England. Vertical steam- boiler .....	283,672	Aug. 21	1446	405	24	775
Sharpless, Joel H., Kennett Square, Pa. Lime-wash for coating buildings, &c. ....	276,293	Apr. 24	1822	.....	23	1562
Sharpnuck, William S., assignor of one-half to G. Majors, Blair, Nebr. Rock-breaker. ....	271,138	Jan. 23	1615	464	23	325
Sharpnuck, William S., assignor of one-half to G. Majors, Blair, Nebr. Blower .....	271,139	Jan. 23	1616	465	23	326
Sharpnuck, William S., Denver, Colo., assignor of two-thirds to H. N. Nichols, North Platte, Nebr. Steam-power stamp .....	273,485	Feb. 20	1136	319	23	653
Sharpnuck, William S., Denver, Colo., assignor of two-thirds to H. N. Nichols, North Platte, Nebr. Ore-crusher .....	279,983	June 26	1690	474	23	2433
Sharpnuck, William S., Denver, Colo., assignor of two-thirds to H. N. Nichols, North Platte, Nebr. Steam-power stamp .....	279,984	June 26	1691	475	23	2433
Sharrett, John W., Portsmouth, Va. Guide for sail-rigging .....	279,985	June 26	1692	475	23	2434
Shattuck, Aaron D., Granby, Conn. Stretcher-frame .....	273,162	Feb. 13	718	197	23	576
Shattuck, Charles L., Grand Rapids, Mich. Folding table .....	273,909	Feb. 27	1694	474	23	758
Shattuck, Jane A., Utica, N. Y. Hair-tonic .....	277,165	May 8	830	.....	23	1774
Shattuck, Stephen D., Cohocton, N. Y. Fire-escape ladder .....	285,690	Sept. 25	1862	531	24	1250
Shattuck, William P., Minneapolis, Minn. Spiral spring post .....	289,033	Nov. 27	1560	430	25	803
Shanghnessy, Thomas J., Marshall, Mo. Scaffold-support .....	290,487	Dec. 18	1406	388	25	1150
Shaver, Charles B., and S. C. Schofield, Freeport, Ill.; said Schofield assignor to said Shaver. Ladder .....	272,163	Feb. 13	718	197	23	576
Shaver, George F., Erie, Pa. Angle-hanger for mechanical-telephone lines .....	278,750	June 5	93	27	23	2140
Shaw, A. B., Medford, Mass. Spring-roller fixture .....	280,249	June 26	2006	564	23	2490
Shaw, A. B., Medford, Mass. Roller for curtain-fixtures .....	283,737	Aug. 21	1527	431	24	790
Shaw, Albert C., assignor of one-half to G. H. Fuller, San Francisco, Cal. Tellurian .....	288,372	Nov. 13	741	201	25	644
Shaw, Benjamin C., Toledo, Ohio. Draft-equalizer .....	282,575	Aug. 7	122	36	24	521
Shaw, Charles A. (See Conkey, Edward L., assignor.) .....						
Shaw, Charles A. (See Eskildson, Henry W., assignor.) .....						
Shaw, Charles A. (See Hoyt, Lewis S., assignor.) .....						
Shaw, Charles A. (See Rooney, Henry F., assignor.) .....						
Shaw, Charles A. (See Smith, Lawrence F., assignor.) .....						
Shaw, Charles B., Malden, Mass. Cloth-measuring machine .....	276,722	May 1	248	63	23	1667
Shaw, Charles H., Brooklyn, N. Y. Clock-holding attachment for gas-burners .....	272,963	Feb. 27	1777	497	23	772
Shaw, Charles H., assignor of one-half to J. H. Reynolds, Troy, N. Y. Faucet-bushing .....	270,559	Jan. 9	901	260	23	185
Shaw, Charles H., Brooklyn, assignor of one-half to J. H. Reynolds, Troy, N. Y. Stopper for the feeding-holes of cans .....	273,400	Mar. 6	209	56	23	869
Shaw, Charles H., assignor to G. Willem, Brooklyn, N. Y. Guard for the pendant-bows of watches .....	278,282	May 22	2171	598	23	2019
Shaw, Edgar. (See De Laski and Shaw.) .....						
Shaw, Frank, New York, N. Y., and W. A. Childs, Englewood, N. J. Telephone-exchange system and apparatus .....	278,613	May 29	2601	710	23	2103
Shaw, Fred A., and H. E. Judkins, Portland, Me.; said Shaw assignor to said Judkins. Electric signaling apparatus for railway-trains .....	277,358	May 8	1050	282	23	1813
Shaw, George E., assignor to Shaw Telephonic Company of America, Chicago, Ill. Tele- phonic transmitter .....	270,136	Jan. 2	365	106	23	75
Shaw, George E., Chicago, Ill., assignor to Shaw Telephonic Company of America. Tele- phone-receiver .....	276,723	May 1	249	63	23	1667
Shaw, Isaac B., assignor of one-half to H. T. Breese, Rixford, Pa. Glb .....	276,484	Apr. 24	2070	575	23	1605
Shaw, Isaac B., Tunstall, county of Stafford, England. Manufacture of tiles, bricks, &c. ....	288,876	Nov. 20	1363	.....	25	760
Shaw, Jehyleman, Bridgeport, Conn. Driven well .....	278,751	June 5	95	27	23	2140
Shaw, Jerome B. (See Newby, William H., assignor.) .....						
Shaw, John, Hindmarsh, South Australia. Tawing hides or skins .....	286,491	Oct. 9	885	.....	25	171
Shaw, John P., Bridgeton, N. J. Egg-tester .....	289,574	Dec. 4	254	71	25	932
Shaw, John R., Elm, Mich. Check-rein hook .....	283,154	Aug. 14	809	226	24	650
Shaw, Kendall & Co. (See Wolcott, Joseph L., assignor.) .....						
Shaw, Lorenzo D. B., Revere, Mass. Horse hay-rake .....	280,963	July 10	776	215	24	142
Shaw, Myron J., Williamsport, Pa. Machine for bundling kindling-wood .....	282,381	July 31	2591	712	24	472
Shaw, Myron J., Williamsport, Pa. Kiln for drying kindling-wood .....	283,673	Aug. 21	1447	{ 405 406 }	24	775

*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Shaw, Philip B. (See Hewett and Leonard, assignors.)						
Shaw, Philip B. (See Hewett and Millen, assignors.)						
Shaw, S. Wheeler, Chicago, Ill. Cot-settee	284,680	Sept. 11	641	181	24	1018
Shaw, Samuel. (See Wright, Fowler, and Shaw.)						
Shaw, Sumner, Boston, Mass. Nut-lock	290,712	Dec. 25	1711	471	25	1209
Shaw Telephonic Company of America. (See Shaw, George E., assignor.)						
Shaw, Thomas, Philadelphia, Pa. Disinfecting candle	231,798	July 24	1848	505	24	340
Shaw, Thomas, Newark, N. J. Telegraph-wire	259,575	Dec. 4	255	72	25	932
Shaw, William, Paris, Ky. Grain-cleaning apparatus	272,782	Feb. 20	1508	425	23	719
Shaw, William, Bay City, Mich. Blacksmith's forge	287,180	Oct. 23	1774	487	25	342
Shaw, William, assignor to White Sewing Machine Company, Cleveland, Ohio. Shuttle-carrier for sewing-machines	276,485	Apr. 24	2071	575	23	1605
Shaw, William A., Brooklyn, N. Y. Combined electric light and gas-burner	271,140	Jan. 23	1617	465	23	326
Shaw, William A., Brooklyn, assignor of one-half to L. H. Rogers, New York, N. Y. Electrical conductor or cable for lighting and other systems	290,122	Dec. 11	928	263	25	1058
Shaw, William A., Pittsburg, Pa., assignor of one-half to L. H. Rogers, New York, N. Y. Electrical conductor	290,121	Dec. 11	927	263	25	1058
Shaw, William F., and A. S. Dinsmore, Boston, Mass. Gas-stove	285,311	Sept. 18	1406	398	24	1162
Shay, Ephraim. (See Doxsie, George W., assignor.)						
Shaylor, Lucien K., et al. (See Knowlton, William W., assignor.)						
Sheaffer, Frederick, Liverpool township, Perry county, Pa. Straddle-row cultivator	279,823	June 19	1488	417	23	2392
Sheaffer, John W., Franklin, Pa. Car-coupling	288,502	Nov. 13	905	247	25	673
Sheard, Titus. (See Clark, Farrington, and Sheard.)						
Shearer, Frank B., assignor to himself and W. W. Sherar, Rochester, N. Y. Dental plate	269,966	Jan. 2	171	49	23	36
Shearman, Addison P., Jamestown, N. Y. Knockdown table	288,126	Nov. 6	414	117	25	580
Shearman, John D., Avondale, Ohio. Bucket-washing machine	285,312	Sept. 18	1408	398	24	1162
Shedd, William B., New York, N. Y., assignor of three-fourths to J. Metz, Jersey City, N. J., and S. C. Forsaith & Co., Manchester, N. H. Printing-press	286,337	Oct. 9	709	189	25	139
Shedlock, Alfred, Brooklyn, N. Y. Rock-drill	285,516	Sept. 25	1637	466	24	1211
Shedlock, Alfred, assignor to J. D. Shedlock, Brooklyn, N. Y. Rock-drilling machine	282,382	July 31	2593	712	24	472
Shedlock, Alfred, Brooklyn, N. Y., assignor to Star Electric Light and Power Company of the United States. Electric-arc lamp	277,166	May 8	831	219	23	1774
Shedlock, Alfred, Brooklyn, N. Y., assignor to Star Electric Light and Power Company of the United States. Electric-arc lamp	277,167	May 8	834	220	23	1774
Shedlock, Alfred, Brooklyn, N. Y., assignor to Star Electric Light and Power Company of the United States. Electric-lamp holder	277,168	May 8	836	220	23	1775
Shedlock, John D. (See Shedlock, Alfred, assignor.)						
Sheehan, James H., assignor of one-half to E. L. Sterns, Bangor, Me. Nut-lock	282,383	July 31	2595	713	24	473
Sheehan, Thomas, Dunkirk, N. Y. Composition of matter for preventing the occurrence of explosions	274,666	Mar. 27	1843		23	1175
Sheehan, William J. (See Murphy, Edward T., assignor.)						
Sheehy, James, St. Albans, Vt. Box or case	274,038	Mar. 13	1010	277	23	1015
Sheehy, Robert J., New York, N. Y. Electric-arc lamp	279,894	June 19	1429	417	23	2392
Sheehy, Robert J., New York, N. Y. Electric-arc lighting system	279,825	June 19	1491	417	23	2392
Sheehy, Robert J., New York, N. Y. Combined current-indicator and commutator-adjuster for dynamo-electric machines	279,826	June 19	1493	417	23	2393
Sheehy, Robert J., New York, N. Y. Automatic cut-out for electric circuits	281,799	July 24	1849	505	24	340
Sheehy, Robert J., New York, N. Y. Electric-light regulator	281,800	July 24	1851	506	24	341
Sheehy, Robert J., New York, N. Y. Regulator for dynamo-electric machines	283,155	Aug. 14	810	226	24	650
Sheehy, Robert J., New York, N. Y. Switch-board for electric-light stations	284,247	Sept. 4	116	31, 32	24	924
Sheehy, Robert J., New York, N. Y. Electric-arc lamp	284,497	Sept. 4	411	117	24	973
Sheehy, Robert J., New York, N. Y. Dynamo-electric machine	285,691	Sept. 25	1864	532	24	1250
Sheehy, Robert J., New York, N. Y. Incandescent electric lamp	289,456	Dec. 4	97	28	25	904
Sheehy, Robert J., New York, N. Y. Recorder and register for electric lighting systems	290,862	Dec. 11	614	171	25	1001
Sheeler, William H., assignor to W. A. Tottle, Baltimore, Md. Whitewash-brush	288,187	Nov. 6	485	135	25	592
Sheets, Elizabeth, Casttown, Ohio. Fruit-drier	288,503	Nov. 13	906	247	25	673
Sheffield, George S., Three Rivers, Mich. Vehicle-wheel	270,449	June 12	1052	291	23	2310
Sheffield, George S., assignor, by mesne assignments, to Sheffield Velocipede Car Company, Three Rivers, Mich. Hand-car. (Reissue.)	10,303	Apr. 3	616	166	23	1330
Sheffield, George V. (See Parks and Sheffield.)						
Sheffield, George V. (See Wuterich and Sheffield.)						
Sheffield, Lucius T. (See Richmond, Alvan S., assignor.)						
Sheffield Velocipede Car Company. (See Hagan, John A., assignor.)						
Sheffield Velocipede Car Company. (See Linsley, Edward B., assignor.)						
Sheffield Velocipede Car Company. (See Sheffield, George S., assignor.) (Reissue.)						
Sheffield Velocipede Car Company. (See Willits, Warren J., assignor.)						
Sheffield & Wuterich Sewing Machine Company. (See Wuterich and Sheffield, assignors.)						
Sheffer, Connell B., et al. (See Gray and Hallenback, assignors.)						
Sheffer, Conrad B., et al. (See Gray, Josiah, assignor.)						
Shelbourne, Sidney F., New York, N. Y. Insulating compound for electric conductors	275,422	Apr. 10	730		23	1360
Shelbourne, Sidney F., New York, N. Y. Mold for insulating subterranean electric cables	275,423	Apr. 10	732	194	23	1360
Shelbourne, Sidney F., New York, N. Y. Electric cable	275,424	Apr. 10	733	195	23	1360
Shelbourne, Sidney F., New York, N. Y. Subterranean electric cable	275,425	Apr. 10	736	195	23	1360
Shelburne, Cephas, Johnson City, Tenn. Gas-engine	277,618	May 15	1363	367	23	1871
Shelby, Christopher C., New York, N. Y. Sleeve-adjuster	273,770	Mar. 13	693	186	23	961
Shelby, Christopher C., New York, N. Y. Suspender-end	280,964	July 10	777	215	24	143
Shelby, Christopher C., New York, assignor of one-half to E. F. Gurley, Brooklyn, N. Y. Suspender-end	273,768	Mar. 13	692	186	23	960
Shelby, Christopher C., New York, assignor of one-half to E. F. Gurley, Brooklyn, N. Y. Suspender-end	273,769	Mar. 13	693	186	23	961
Sheldon & Co. (See Cagney, Timothy J., assignor.)						
Sheldon & Co. (See Phillips, Henry F., assignor.)						
Sheldon, Frank L. (See Lynch and Sheldon.)						
Sheldon, Henry H., Pawtucket, R. I. Gas-stove	285,170	Sept. 18	1252	351	24	1132
Sheldon, Philo B., Erie, Pa. Washing-machine	274,396	Mar. 20	1482	407	23	1105
Sheldon, Philo B., Erie, Pa. Coffee-roaster and corn-popper	289,312	Nov. 27	1887	526	25	864
Shelfer, William H., Concord, Fla. Machine for beating and cleaning rice	275,426	Apr. 10	738	195	23	1361
Shellabarger, Edward F., Dayton, Ohio. Picket fence	284,337	Sept. 4	218	61	24	941
Shellabarger, Kirk L., Dayton, Ohio. Barbed-wire fencing	272,091	Feb. 13	630	171	23	561
Shellenberger, John, assignor of one-half to C. P. Jacobs, Indianapolis, Ind. Wooden bottle-wrapper	272,910	Feb. 27	1695	474	23	758
Shellenberger, William E., Woodland, Cal. Bag-holder	271,930	Feb. 6	421	115	23	514
Shelley, Benjamin N., Anderson, Ind. Vehicle-wheel	270,493	Jan. 9	805	235	23	167



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Shelton, Dyas, Santa Rosa, Cal. Rnb-iron for vehicles	275,865	Apr. 17	1306	359	23	1465
Shelton, Dyas, Santa Rosa, Cal. Device for securing wheel-tires	289,719	Dec. 4	440	123	25	963
Shenfield, Abraham. (See Pitchaft, Bernard, assignor.)						
Shenton, George G. (See French and Shenton.)						
Shepard, Albert H. (See Shocker and Shepard.)						
Shepard, Amos, Plantsville, Conn. Hinge	282,576	Aug. 7	123	36, 37	24	521
Shepard, Charles G., and P. Adams, Jr.; said Adams assignor to W. J. Shepard, Buffalo, N. Y. Blind-hinge	282,470	July 31	2706	744	24	492
Shepard, Charles S., Raymond, N. H. Lightning-arrester	287,875	Nov. 6	104	31	25	525
Shepard, Charles T., assignor of one-half to W. Appleton, Jr., Albany, N. Y. Trundle-crib	274,982	Apr. 3	126	35	23	1247
Shepard & Co., Sidney. (See Woepfel, Ignatz, assignor.)						
Shepard, Edson E., Watertown, assignor of one-half to T. Rowlee, Morristown, N. Y. Sash-holder	286,559	Oct. 9	973	262	25	187
Shepard, Edwin, Goshen, Va. Feed-hopper and bell for blast and other furnaces	274,667	Mar. 27	1844	513	23	1175
Shepard, Edwin, Newark, N. J. Chart-hanging	286,736	Oct. 16	1206	325	25	234
Shepard, Frederick M., East Orange, N. J. Rubber boot and shoe	288,127	Nov. 6	415	117	25	580
Shepard, Freedom G., A. J. Hoag, and A. Thomson, assignors to Nichols, Shepard & Company, Battle Creek, Mich. Reversing-gear for engines	282,932	Aug. 7	538	152	24	596
Shepard, George B., Ogdensburg, N. Y. Label-bottle	283,825	Aug. 23	1642	462	24	822
Shepard, George E., Troy, N. Y. Letter-file	286,233	Oct. 9	551	151	25	111
Shepard, Henry W., Brooklyn, assignor to Iron Clad Manufacturing Company, New York, N. Y. Bottom-support	272,500	Feb. 20	1269	354	23	676
Shepard, John, assignor of one-half to J. R. Kuykendall, Carmi, Ill. Smoke blower and burner combined	289,863	Dec. 11	615	171	25	1001
Shepard, Luther D., Boston, Mass. Dental-disk holder	282,384	July 31	2596	713	24	473
Shepard, Luther D., Boston, Mass. Holder for abrasive disks	282,385	July 31	2596	713	24	473
Shepard, Morrill A., Lebanon, Ill. Apparatus for drying and cleaning grain and ventilating buildings	273,900	Mar. 13	851	230	23	987
Shepard, Morrill A., Lebanon, Ill. Crusher and pulverizer	277,071	May 8	711	184	23	1753
Shepard, Orry M., Boston, Mass. Train-indicator	272,783	Feb. 20	1509	425	23	720
Shepard, Robert B., Pittsburg, Pa. Composition of matter for the manufacture of glass	285,436	Sept. 25	1567		24	1194
Shepard, Rufus G. (See Cowan, Charles D., assignor.)						
Shepard, Walter J. (See Shepard and Adams, assignors.)						
Shepardson & Co., F. L. (See Herring, Henry M., assignor.)						
Shepardson, Edward D., Bellevue, Ohio. Float	274,833	Mar. 27	2033	566	23	1208
Shepherd, Charles C., Passaic, N. J. Manufacture of dominos, checks, and similar articles	274,668	Mar. 27	1845	514	23	1175
Shepherd, Edward M. (See Rivers, Thomas L., assignor.)						
Shepherd, Francis H., and J. W. Meyer, Davenport, Iowa. Tag for wall-paper, &c.	279,192	June 12	728	200	23	2258
Shepherd, George R., Hartford, assignor of one-half to W. E. Simonds, Canton, Conn. Telephone	286,737	Oct. 16	1208	325	25	234
Shepherd, Henry S. (See Hendricks, Adam C., assignor.)						
Shepherd, J. Hooper. (See Richardson, Samuel T., assignor.)						
Shepherd, J. Hooper, et al. (See Blakeslee, Burton E., assignor.)						
Shepherd, James R., assignor of one-third to C. J. Howe, Cleburne, Tex. Packing attachment for baling-presses	277,619	May 15	1366	368	23	1872
Shepherd, John H., and H. H. Beuschoten, Huron, Ohio. Vapor-stove	278,752	June 5	96	27	23	2140
Shepherd, Joseph H., Auburndale, Mass. Spike-machine	283,674	Aug. 21	1448	406 407	24	776
Shepherd Nailing Machine Company. (See Carter, Francis M., assignor.)*						
Shepherd, Samuel, Nashua, N. H. Boot and shoe nailing machine	272,486	Feb. 20	1137	319 320	23	654
Shepler, James M. F. (See Stone and Shepler.)						
Shepler, Pius L., assignor of one-half to W. H. Cray and A. E. Rood, Toledo, Ohio. Folding desk	272,164	Feb. 13	719	198	23	576
Shepler, Pius L., assignor of one-half to W. H. Cray and A. E. Rood, Toledo, Ohio. Folding school seat and desk	272,165	Feb. 13	720	198	23	576
Shepler, Pius L., assignor of one-half to W. H. Cray and A. E. Rood, Toledo, Ohio. Folding seat	272,166	Feb. 13	721	198	23	577
Sheppard, Charles, Bridgend, county of Glamorgan, England. Apparatus for washing and delivering coal, &c.	283,156	Aug. 14	811	227	24	650
Sheppard, David, et al. (See Davidson, George, assignor.)						
Sheppard, John P., Canton, N. J. Can-filler	274,039	Mar. 13	1011	277	23	1015
Sherar, William W. (See Shearer, Frank B., assignor.)						
Sherard, William C., Monterey, S. C. Back-band hook for harness	288,128	Nov. 6	415	118	25	580
Sherburne, Samuel. (See De Beaumont, Alexandre, assignor.)						
Sherer, William H., Binghamton, N. Y. Door-spring	274,397	Mar. 20	1483	408	23	1105
Sheridan, Cornelius A., assignor of one-half to F. McGough, Detroit, Mich. Refrigerator	269,887	Jan. 2	75	23	23	17
Sheridan, David G. (See White and Sheridan.)						
Sheridan, David G., Bridgeport, Conn. Snap-hook	271,372	Jan. 30	1920	555	23	386
Sheridan, Thomas W., New York, N. Y. Ale-cooling measure	286,967	Oct. 16	1495	411	25	284
Sherman, Aaron, assignor of one-half to J. Sherman, Charlotte, Mich. Bag-holder	285,692	Sept. 25	1870	533	24	1251
Sherman, Anna, Alameda, Cal. Steam-cooker	273,901	Mar. 13	852	231	23	988
Sherman, Charles E., San Francisco, Cal. Siphon	275,530	Apr. 10	871	235	23	1383
Sherman, I. N. Walter, Des Plaines, Ill. Sash-holder for street-car windows	277,793	May 15	1564	426	23	1908
Sherman, Jessie. (See Sherman, Aaron, assignor.)						
Sherman, John E., North Attleborough, Mass. Scratch-gage	290,807	Dec. 25	1835	507	25	1231
Sherman, John S., Napoleon, Ohio. Carpet-stretcher	285,313	Sept. 18	1409	398	24	1162
Sherman, Lewis P., Biddeford, Me. Machine for drawing in warp-threads	282,124	July 31	2270	622 623 624	24	417
Sherman, Louis, Philadelphia, Pa. Vegetable-slicer	284,078	Aug. 28	1969	548	24	879
Sherman, Marshall. (See Chadwick, Jay R., assignor.)						
Sherman, William J., St. Augustine, Fla. Well-boring machine	277,794	May 15	1565	426 427 427	23	1909
Sherman, William J., St. Augustine, Fla. Wrench	283,675	Aug. 21	1450	407	24	776
Sheriff, William J., Pittsburg, Pa. Double-headed ejector	277,072	May 8	711	185	23	1753
Sherry, Daniel, Connersville, Ind. Stackers for thrashers	272,487	Feb. 20	1141	320	23	654
Sherry, Daniel, Connersville, and F. W. Robinson, Richmond, Ind. Stackers-base for thrashers	272,488	Feb. 20	1142	320	23	654
Sherry, Thomas, Neenah, Wis. Carriage-axle cutter	280,678	July 3	407	114	24	73
Sherwood, Alphonso S. (See Mulford, Ichabod H., assignor.)						
Sherwood, Alvin, Burlington, Kans. Wind-wheel	272,489	Feb. 20	1143	321	23	655
Sherwood, Arthur H., Southport, Conn. Garden-seed drill	277,620	May 15	1367	368	23	1872

*Alphabetical list of patentees—Continued.*

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Sherwood, Henry C. (See Doolittle and Sherwood.)						
Sherwood, Joseph W. (See Woodard, James H., assignor.)						
Sherwood, Orsamus, Cleveland, Ohio. Vessel-unloading apparatus	274,983	Apr. 3	128	36	23	1247
Sherwood, Merrill B., Jr., and G. C. Farnsworth, Buffalo, N. Y. Process of and apparatus for manufacturing soap	271,281	Jan. 30	1792	520	23	364
Shetter, John W. (See Ghaler, Peter C., assignor.)						
Sheward, Edward G., Richmond, county of Surrey, and J. Gresham, Salford, county of Lancaster, England. Injector	285,171	Sept. 18	1254	352	24	1133
Shibe, Benjamin F., Philadelphia, Pa. Base-ball	272,984	Feb. 27	1778	497	23	772
Shick, William. (See Miller, Franklin, assignor.)						
Shickle, Frederick, St. Louis, Mo. Pipe-mold	289,034	Nov. 27	1561	431	25	803
Shickle, Frederick, St. Louis, Mo. Forming molds and cores in pipe-making	289,035	Nov. 27	1561	431	25	803
Shickle, Frederick, St. Louis, Mo. Pipe-molding machine	289,036	Nov. 27	1565	432	25	804
Shickle, Frederick, St. Louis, Mo. Apparatus for forming cores and molds	289,037	Nov. 27	1566	432	25	804
Shield, Henry, et al. (See Beechey, Charles G., assignor.)						
Shields & Brown. (See Pierce, James D., assignor.) (Reissue.)						
Shields, Charles A., Washington, D. C. Parallel ruler	289,457	Dec. 4	98	28	25	904
Shields, Edward J., Elizabethport, N. J. Furnace or stove door latch	273,172	Feb. 27	2009	565	23	813
Shields, Francis M., Coopwood, assignor to himself and S. T. Shields, W. D. Cornwell, L. Liebenfeld, H. Herman, M. W. Conner, J. F. Sharp, and J. N. Woodward, Louisville, Miss. Machine-gun	282,787	Aug. 7	374	106	24	566
Shields, Henry C., Troy, N. Y. Gas-generating apparatus	277,852	May 15	1633	445	23	1921
Shields, James H., Boston, Mass. Fountain-pen	287,060	Oct. 23	1621	446	25	313
Shields, James H., Boston, assignor of one-third to E. B. Marsh, Amherst, Mass. Spring-bed and spring	273,401	Mar. 6	209	56	23	869
Shields, John, Hancock, Mich. Locomotive-cab window	276,907	May 1	478	126	23	1710
Shields, John, Perth, county of Perth, Scotland. Oil-discharging buoy	289,720	Dec. 4	440	123	25	963
Shields, Sarah T., et al. (See Shields, Francis M., assignor.)						
Shields, Thomas, St. Louis, Mo. Drive-chain	286,338	Oct. 9	711	190	25	139
Shimer, George J., Freemansburg, assignor of one-half to S. J. Shimer, Milton, Pa. Brake-shoe	272,911	Feb. 27	1696	475	23	758
Shimer, George J., Freemansburg, assignor of one-half to S. J. Shimer, Milton, Pa. Crushing and grinding machine	287,876	Nov. 6	105	31, 32	25	526
Shimer, Milton J., Freemansburg, Pa. Manufacture of sad-irons	284,249	Sept. 4	119	32	24	925
Shimer, Samuel J. (See Shimer, George J., assignor.)						
Shimp, William, Naperville, Ill. Two-wheeled vehicle	290,123	Dec. 11	930	264	25	1059
Shinabery, Michael and S. Melrose, Ohio. Spade	285,693	Sept. 25	1871	533	24	1251
Shinabery, Samuel. (See Shinabery, Michael and S.)						
Shindelbower, Richard D., and H. Pressler, Louisville, Ky. Sugar-evaporator	279,450	June 12	1053	291	23	2310
Shinn, John, and A. F. Fuller, Philadelphia, Pa. Machinery for breaking and scutching flax, &c	277,517	May 15	1237	333	23	1851
Shinn, John K. (See Shinn, Joseph A., assignor.)						
Shinn, Joseph A., Pittsburg, assignor of one-half to J. K. Shinn, New Castle, Pa. Mortar and building composition	280,679	July 3	408		24	73
Shinu, William P., et al. (See Rumble, William, assignor.)						
Shipherd, William C., Cleveland, Ohio. Fifth-wheel	281,307	July 17	1209	335	24	227
Shipherd, William C., assignor of one-half to F. H. Strieby, Cleveland, Ohio. Ratchet wrench and drill	278,053	May 22	1878	514	23	1969
Shipley, Alfred J., assignor to Scovill Manufacturing Company, Waterbury, Conn. Eye-letting-machine	284,911	Sept. 11	924	260	24	1069
Shipman, Asa L. (See Rile, John L., assignor.)						
Shipman, George, West Bridgewater, Mass. Eyeletting-machine	288,373	Nov. 13	742	202	25	644
Shipman, Edward L., et al. (See Williams, Henry S., assignor.)						
Shipman, James D., et al. (See Williams, Henry S., assignor.)						
Shipman, William H., Newark, N. J. Spring bed-bottom	272,167	Feb. 13	722	199	23	577
Shireman, Henry L., Nazareth, Pa. Car-coupling	290,276	Dec. 18	1122	315	25	1100
Shirley, Daniel, New Market, Va. Paper bag	273,902	Mar. 13	853	231	23	988
Shirley, Daniel, New Market, Va. Cutter-bar for harvesters	280,250	June 26	2008	564	23	2490
Shirley, Daniel, New Market, Va. Foot-warmer	287,061	Oct. 23	1622	447	25	313
Shirpser, Isidor, assignor to P. Steck, San Francisco, Cal. Heating apparatus for cars	281,001	July 24	1853	506	24	341
Shive, David, assignor of one-half to B. F. DuBois, Philadelphia, Pa. Spring-motor	279,827	June 19	1496	418	23	2303
Shive, David, assignor of one-half to B. F. DuBois, Philadelphia, Pa. Compensation-pendulum	279,828	June 19	1497	418	23	2393
Shive, David, assignor of one-half to B. F. DuBois, Philadelphia, Pa. Watch-regulator	284,079	Aug. 28	1970	549	24	879
Shive, David, assignor of one-half to B. F. DuBois, Philadelphia, Pa. Gravity-escapement for clocks	287,181	Oct. 23	1775	487	25	342
Shively Samuel H., Fremont, Ohio. Washer	271,373	Jan. 30	1921	555	23	386
Shiver, Elisha, assignor to R. R. Donaldson and W. T. Keenan, Washington, D. C. Shot-machine	271,374	Jan. 30	1922	556	23	386
Shivler, Charles S., Brooklyn, N. Y. Electric call apparatus	281,931	July 24	2009	550	24	369
Shocker, Paul, and A. H. Shepard, Providence, R. I. Carriage-button	283,676	Aug. 21	1451	408	24	776
Shockley, David W. (See Mahony and Shockley.)						
Shoemaker, Charles F., and E. J. Hess; said Shoemaker assignor to A. Hess, Cincinnati, Ohio. Machine for forming springs	272,912	Feb. 27	1697	475	23	758
Shoemaker, George A. (See Wardman, William, assignor.)						
Shoemaker, Jacob, assignor of one-half to F. Thornely and E. Ott, La Crosse, Wis. Evaporating-pan	272,784	Feb. 20	1510	426	23	720
Shoemaker, John, Garner, Iowa. Weather-strip	281,802	July 24	1854	506	24	341
Shoeninger, Adolph. (See Arbogast, George, assignor.)						
Shoeninger, Adolph. (See Henneberg, Henry, assignor.)						
Shoeninger, Adolph. (See Unzecker, Otto, assignor.)						
Shono, George, East St. Louis, Ill. Balanced slide-valve	277,795	May 15	1566	427	23	1909
Shone, George, East St. Louis, assignor of one-half to A. M. De Clercq, Belleville, Ill. Fan-coil	290,124	Dec. 11	931	264	25	1059
Shoninger, B. (See Lomas, John R., assignor.)						
Shoptaugh, Nicholas, Booneville, Ind. Spark-arrester	282,933	Aug. 7	539	152	24	596
Shorey, Samuel W., Boston, Mass. Button	283,032	Aug. 14	667	188	24	626
Shorey Spring Bed and Shade Roller Company. (See Graves, Marshall E., assignor.)						
Short, George C., and W. L. Roe, assignors of one-fourth to A. G. Davidson, New London, Conn. Car-coupling	286,492	Oct. 9	885	239	25	171
Short, Samuel, Brooklyn, N. Y. Egg or batter beater	273,173	Feb. 27	2010	565	23	813
Shortridge, William P., Jr., and William P., Easton, Mo. Grain-drill	279,027	June 5	506	137, 138, 139	23	2209



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Shortsleeve, David, assignor of one-half to E. A. Morse, Rutland, Vt. Machine for sawing stone	283,929	Aug. 28	1762	{ 497 498 499 }	24	843
Shondy, George A., Rockford, Ill. Lifting mechanism	274,834	Mar. 27	2034	566	23	1208
Shoup, James C., St. Louis Mo. Conductor's fare-recorder	286,493	Oct. 9	886	240	25	171
Shoup, James C., assignor of six-tenths to J. Franklin and G. M. Wright, St. Louis, Mo. Antographic registering apparatus	286,560	Oct. 9	974	262	25	187
Shoup, James T., Jr., Delaware, Ohio. Band-cutter	284,765	Sept. 11	750	208	24	1037
Shonpe, Winfield S., Elyria, and T. Buskirk, assignors of one-third to W. Kline, Toledo, Ohio. Combined telephonic and burglar-alarm system	279,193	June 12	729	200	23	2258
Shourds, Charles F., Newark, N. J. Shade-roller	275,531	Apr. 10	872	236	23	1383
Shourds, Charles F., Newark, N. J. Toy	278,462	May 29	2427	662	23	2073
Shourds, Charles F., Newark, N. J. Toy	288,265	Nov. 13	595	163	25	619
Shorey, George L., Lynn, Mass. Centrifugal machine	288,129	Nov. 6	416	118	25	580
Showalter, Abraham, Pataskala, Ohio. Scroll-saw and edge-molder	272,785	Feb. 20	1511	426	23	730
Showalter, Jeremiah, Okonoko, W. Va., assignor of one-half to A. and D. Barth, Oldtown, Md. Car-coupling	273,903	Mar. 13	853	231	23	988
Shreffler, Andrew H. (See Dice, Andrew F., assignor.)						
Shreffler, Samuel, Jr., Joliet, Ill. Parlor-door hanger	281,308	July 17	1210	335	24	227
Shreve, Charles T., Delaware township, Camden county, N. J. Hood for vehicle-tops	276,908	May 1	478	126	23	1710
Shreve, Victor, assignor of one-half to B. Meeker, Detroit, Mich. Car-coupling	288,504	Nov. 13	907	248	25	673
Shreves, William A., et al. (See Dow and Chandler, assignors.)						
Shrewder, Robertson F., et al. (See Freeman, Walter F., assignor.)						
Shrieves, Charles D., and J. E. Cook, Philadelphia, Pa. Laying underground electric wires	276,466	Apr. 24	2071	575	23	1605
Shriver, Daniel R., Manchester, Ohio. Churn-dasher	285,694	Sept. 25	1871	533	24	1251
Shroff, Samuel A. (See Smith, Israel E., assignor.)						
Shroyer, A. R. (See Marshall, William P., assignor.)						
Shuck, John M., et al. (See Moore, James D., assignor.)						
Shue, Abraham W., Fishersville, Va. Wagon-brake	279,829	June 19	1498	419	23	2394
Shuler, Andrew F., Arcanum, Ohio. Shifting-rail	281,146	July 10	995	278	24	183
Shuler, David, New Dover, Ohio. Table-leaf support	279,986	June 26	1693	475	23	2434
Shull, John, et al. (See Baker, William T., assignor.)						
Shultz, John W., Van Wert, Ohio. Dental plate	277,796	May 15	1567	427	23	1909
Shumaker, Charles F., Silver Creek, N. Y. Grain-cleaning machine	273,174	Feb. 27	2011	{ 565 566 }	23	814
Shuman, Charles, Rockford, Ill. Universal-joint coupling	272,339	Feb. 13	932	259	23	613
Shumard, Sarah S. (See Shumard, Warren, assignor.)						
Shumard, Warren, assignor to S. S. Shumard, Richmond, Ind. Sash-balance	285,079	Sept. 18	1136	317	24	1113
Shumway, Edward A., Walnut Creek, Cal. Step-ladder	283,524	Aug. 21	1275	357	24	742
Shupe, Eli. (See Durant and Shupe.)						
Shute, Jay F., et al. (See Moore and Heaberlin, assignors.)						
Shute, John W. (See Groves, Leroy S., assignor.)						
Shute, Joseph B., et al. (See Clark, Albert M., assignor.)						
Shute, Joseph M. and L. M., Philadelphia, Pa. Excavating apparatus	290,488	Dec. 18	1406	389	25	1150
Shute, Lorenzo M. (See Shute, Joseph M. and L. M.)						
Shute, Richard G., Edgartown, Mass. Androides or automaton shoe-factory	284,338	Sept. 4	219	61	24	941
Shute, Samuel E., and J. C. Albright, Richmond, Ind., assignors of one-third to J. S. Zeller. Stove-pipe fastening	274,835	Mar. 27	2036	567	23	1209
Shuttleworth, Charles H. (See Kelsey and Shuttleworth.)						
Sibley, Edward L., Bennington, Vt. Center-board for boats	282,386	July 31	2597	713	24	473
Sibley, Ezra F. (See Granger and Sibley.)						
Sibley, Frank A. (See Humphrey, Dennison, assignor.)						
Sibley, Franklin, Sutton, Mass. Butter holder or jar	277,948	May 22	1749	477	23	1945
Sibley, Gideon, Philadelphia, Pa. Crushing and pulverizing machine	275,719	Apr. 10	1106	303	23	1423
Sichel, Albert, et al. (See Chinnoek, George H., assignor.)						
Sickels, Frederick E., New York, N. Y. Steam steering apparatus	273,617	Mar. 6	482	{ 129 130 }	23	916
Sickles, Gerard, Jr., assignor of one-half to A. T. Howard, Brooklyn, N. Y. Machine for making envelopes	271,282	Jan. 30	1794	521	23	364
Sickles, William C., Dallas, Tex. Windmill	279,194	June 12	731	200	23	2258
Siddeley, John, et al. (See Young and Neilson, assignors.)						
Siddeley, John, and F. N. Mackay, Liverpool, England. Apparatus for refrigerating oils, fats, &c	277,797	May 15	1568	{ 428 429 }	23	1909
Siddeley, Joshua, et al. (See Young and Neilson, assignors.)						
Sidersky, David, and H. Probst, Rositz, Germany. Obtaining carbonate of strontium	278,283	May 22	2172	598	23	2019
Sidnell, William E., Cuyahoga Falls, Ohio. Lathe-dog	282,577	Aug. 7	124	37	24	522
Siebert, Frederick. (See Danziger, Adolph, assignor.)						
Siegel, F., Jr., et al. (See Collins, M. Grier, assignor.)						
Siegley, Jacob, New York, N. Y. Bench-plane	269,967	Jan. 2	173	50	23	36
Siegley, Jacob, New York, N. Y. Bench-plane	269,968	Jan. 2	173	50	23	36
Siemens Brothers & Company. (See Jacob, Frank, assignor.)						
Siemens, Charles W., Westminster, county of Middlesex, England. Gas-producer	282,387	July 31	2599	714	24	474
Siemens, Charles W., Westminster, county of Middlesex, England. Gas-producer	288,877	Nov. 20	1364	{ 374 375 376 }	25	760
Siemens, Charles W., Westminster, county of Middlesex, England. Gas-producer and furnace operating in connection therewith	288,878	Nov. 20	1366	{ 377 378 379 }	25	761
Siemens, Frederick, Dresden, Germany. Lamp	270,345	Jan. 9	618	{ 182 183 }	23	131
Sies, Enos L. (See Doherty and Sies.)						
Sievern, Gustav F., Pittsburg, Pa. Chain driving-gear for locomotives, steamboats, &c	280,091	June 26	1825	513	23	2457
Sigwalt, John, Jr., Chicago, Ill. Sewing-machine	275,427	Apr. 10	738	{ 196 197 }	23	1361
Sigwalt Sewing Machine Company. (See Curtis, William R., assignor.)						
Silberman, Adam, et al. (See Schmidt, Christian, assignor.)						
Silberstein, Morris, New York, N. Y. Suspender-end	276,909	May 1	479	126	23	1710
Silcott, Oscar F., Felicity, Ohio. Shipping-case	271,253	Jan. 30	1800	522	23	365
Sill, John M. B., Detroit, Mich. Map-drawing	280,965	July 10	778	216	24	143
Siller, Frank. (See Kessler, Johann K., assignor.)						
Sillman, Herbert R., assignor to himself, A. H. Whitten, and G. W. Lascell, Lynn, Mass. Last-block fastener	281,147	July 10	996	278	24	183
Sillman, Henry R., Brooklyn, N. Y. Bronzing-machine	277,621	May 15	1369	369	23	1872
Silsby Manufacturing Company. (See Medden, Edwin, assignor.)						
Siltz, Frank R., assignor, by mesne assignments, to S. Siltz, Leon, Iowa. Ventilator	280,092	June 26	1826	513	23	2458
Siltz, Sabina. (See Siltz, Frank R., assignor.)						
Silver, Samuel N., Auburn, Me. Motor	281,571	July 17	1535	421	24	281

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Silver, Thomas, assignor to S. E. May, New York, N. Y. Clock-work for mechanical lamps	287,334	Oct. 23	1968	537	25	376
Silvey, William L., Castleton, Ind. Electric motor	269,888	Jan. 2	76	24	23	17
Simar, Ephraim, West Union, Iowa, and V. D. Simar, St. Paul, Minn. Horseshoe	281,932	July 24	2011	551	24	370
Simar, Vine D. (See Simar, Ephraim and V. D.)						
Simar, Vine D., and J. Dale, St. Paul, Minn. Excavator	278,368	May 29	2313	633	23	2032
Simar, Vine D., and J. Dale, St. Paul, Minn. Car-unloading apparatus	282,125	July 31	2274	624	24	418
Simis, Caesar, Brooklyn, N. Y. Hat or cap lining	279,830	June 19	1499	419	23	2394
Simkins, Lebbeus, Marshfield, Oreg. Apparatus to prevent boiler-explosions	281,803	July 24	1854	507	24	342
Simkins, Miles W., Newburg, Ontario, Canada. Needle-clamp for sewing-machines	279,007	June 19	1241	344	23	2349
Simmonds, Ferdinand M., Indianapolis, Ind. Two-wheeled vehicle	281,309	July 17	1211	335	24	227
Simmonds, William, Youkers, N. Y. Machine for starting and sizing hats	278,614	May 29	2608	711	23	2104
Simmons, Edmund S., assignor of one-half to G. A. Leonard, Fowlerville, Mich. Bean-harvester	280,966	July 10	779	216	24	143
Simmons, Edward B. (See Sanderson and Simmons.)						
Simmons, George H., Taunton, Mass. Vehicle hub and axle	273,618	Mar. 6	484	130	23	917
Simmons, John B., assignor of one-half to C. R. Arnold, Philadelphia, Pa. Cut-off-valve gear	290,808	Dec. 25	1836	507	25	1231
Simmons, John P., San Francisco, and S. Adams, Antioch, Cal. Magazine-gun	275,085	Apr. 3	271	74	23	1272
Simmons, Myron E., assignor of one-half to S. H. Mizenes, Rocky Ridge, Ohio. Buckle for harness, &c.	279,028	June 5	510	139	23	2210
Simmons, Peter A., and C. J. Henry, Leadville, Colo. Ore-concentrator	289,152	Nov. 27	1701	472 473	25	827
Simmons, Robert F., et al. (See Becker, Franck, assignor.)						
Simmons, Robert F., et al. (See White, Jarvis N. B., assignor.)						
Simmons, Thomas. (See Donnelly, William E., assignor.)						
Simmons, Thomas A., assignor, by mesne assignments, to himself, W. A. Underwood, and D. McMillan; said McMillan assignor to C. M. McMillan, Wooster, Ohio. Hame-tug. (Reissue)	10,287	Feb. 13	1022	285	23	628
Simmons, Thomas F., Ardencote, Thornhill Road, Croydon, county of Surrey, England. Perambulator	281,933	July 24	2012	551	24	370
Simms, James F., and J. W. Cody, assignors of one-third to F. Fontnean, Attleborough, Mass. Chain-swivel	271,375	Jan. 30	1923	556	23	387
Simon, Amaury, and V. Petit, St. Nicolas de Redon, France. Manufacturing artificial stone or metal	272,786	Feb. 20	1513		23	720
Simon, Edward, Newark, N. J. Handle for satchels, bags, &c.	270,852	Jan. 16	1263	364	23	262
Simon, Joseph. (See Hahn, Charles F. C., assignor.)						
Simon, Robert, Weehawken, N. J. Power-loom	286,081	Oct. 2	372	103	25	68
Simon, William, Newark, N. J. Trunk	273,175	Feb. 27	2012	566	23	814
Simonds, Alvan A., Dayton, Ohio. Tempering-tank	277,518	May 15	1239	334	23	1852
Simonds, Alvan A., Dayton, Ohio. Guide for rolling-mills	280,093	June 26	1827	514	23	2458
Simonds, Frank A., Grand Rapids, Mich. Pipe-wrench	282,126	July 31	2276	625	24	418
Simonds, George W., assignor to himself, G. O. Carpenter, Boston, and J. F. Emerson, Wakefield, Mass. Table and mirror	290,361	Dec. 18	1228	346	25	1119
Simonds, Gustavus B., Sedalia, assignor of one-half to A. J. Robertson, St. Louis, Mo. Brake-shoe	289,313	Nov. 27	1888	526	25	864
Simonds, Nathaniel G., Charlestown, assignor of one-sixth to F. McMellon, Boston, Mass. Grain-elevator	281,572	July 17	1537	421	24	282
Simonds, William E. (See Burr, H. Jerome, assignor.)						
Simonds, William E. (See Shepherd, George R., assignor.)						
Simons, James Y., Pawtucket, R. I. Block-facing machine	287,478	Oct. 30	2148	584	25	418
Simons, Simon, and O. Scofield, Creek Centre, N. Y. Link for chains	271,141	Jan. 23	1618	465	23	326
Simons, William L. (See Wildey and Simons.)						
Simonson, Jacob, Newark, N. J. Wire fabric and art of making the same	281,804	July 24	1855	507	24	342
Simonson, James H. (See Slater, Jacob G., assignor.)						
Simonson, Theodore, Hillsborough, Ohio. Hand-rail for stairways	287,968	Nov. 6	227	64	25	547
Simonton, Charles B., et al. (See McGregor, Rob Roy, assignor.)						
Simpson, Andrew J., assignor of five-sixths to T. J. Mayer, W. F. Farrish, F. P. Davis, W. H. Covington, and J. B. Wilson, Washington, D. C. Machine for breaking loaded shells	290,606	Dec. 18	1567	431	25	1177
Simpson, Charles P., and S. Wilson, Sullivan, Me. Cooking-utensil	286,082	Oct. 2	373	103	25	68
Simpson, Clarence D., et al. (See King, Sidney D., assignor.)						
Simpson, George, Bryan, Tex. Plow	280,680	July 3	409	114	24	73
Simpson, J. Fourestier. (See Okie and Simpson.)						
Simpson, James. (See Paruell, Edward W., assignor.)						
Simpson, James H., and J. T. Wilson, assignors to Wilson, Walker & Co., (limited,) Pittsburgh, Pa. Car-coupling	275,720	Apr. 10	1108	303 304	23	1423
Simpson, James H., and J. T. Wilson, assignors to Wilson, Walker & Co., (limited,) Pittsburgh, Pa. Car-coupling	275,721	Apr. 10	1110	304	23	1424
Simpson, Josiah M., Chicago, Ill. Display-body	290,489	Dec. 18	1409	389	25	1150
Simpson, Orin, Tampico, Ind. Harvester. (Reissue)	10,354	July 10	1102	304	24	201
Simpson, Orin, Tampico, Ind. Truck for moving harvesters	283,290	Aug. 14	980	273	24	682
Simpson, Robert A. (See Dawson and Simpson.)						
Simpson, Robert A. (See Dawson, Simpson, and Longcor.)						
Sims, Alfred, et al. (See Darling, James D., assignor.)						
Sims, James C., assignor to himself and H. O. Hornberger, Pittsburgh, Pa. Apparatus for blacking molds for roll-pinions	282,676	Aug. 7	239	70	24	541
Sims, Robert. (See Randel and Sims.)						
Sinclair, George, Leith, county of Mid-Lothian, Scotland. Fuel-feeding device	288,505	Nov. 13	908	248	25	673
Sinclair, James D., Brooklyn, N. Y. Elevator attachment	285,437	Sept. 25	1567	441	24	1194
Sinclair, James E., Baltimore, Md. Valve for pumps	270,853	Jan. 16	1264	364	23	262
Sinclair, James E., Baltimore County, Md. Valve	279,451	June 12	1054	291	23	2310
Sinclair, James E., Baltimore County, Md. Direct acting steam-pump	279,452	June 12	1055	292	23	2311
Sinclair, James E., Baltimore County, Md. Superheating steam-engine	279,453	June 12	1056	292	23	2311
Sinclair, James H., assignor of one-half to W. Malony, Denver, Colo. Buckboard-wagon	277,359	May 8	1053	282 283	23	1814
Sindell, Thomas H., and W. B. Stewart, Pittsburgh, Pa. Compound for the manufacture of glass	270,991	Jan. 23	1446		23	298
Singer, Jasper H., New York, N. Y. Toy theatrical stage	277,798	May 15	1572	429	23	1909
Singer Manufacturing Company. (See Diehl, Philip, assignor.)						
Singer Manufacturing Company of New Jersey. (See Miller and Diehl, assignors.)						
Singer, Peter J., Chicago, Ill. Safety attachment for elevators	277,073	May 8	712	185	23	1754
Singler, Jacob, St. Louis, Mo. Double-acting pump	290,125	Dec. 11	931	264	25	1059
Singleton, George, Paterson, N. J. Machine for doubling silk, &c.	277,074	May 8	715	186	23	1754



## Alphabetical list of patentees—Continued.

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Sinker, Davis & Co. (See Stephens, Samuel, assignor.)						
Sinker, Davis & Company. (See Groves, Henry W., assignor.)						
Sinton, George F., <i>et al.</i> (See Earl, Henry W., assignor.)						
Sipp, John P. (See Rhoades and Sipp.)						
Siqneira, Manuel J., Brooklyn, Cal. Brake-block .....	277,360	May 8	1053	283	23	1814
Sise, Horace F. (See Foster, John T., assignor.)						
Sisson, George W., Fredonia, N. Y. Dumping-wagon .....	279,029	June 5	511	139	23	2210
Sisum, William H. H., Brooklyn, N. Y. Machine for bunching match-sticks .....	281,408	July 17	1335	{ 369 370 }	24	248
Sisum, William H. H., Brooklyn, N. Y. Machine for bunching match-sticks .....	288,506	Nov. 13	909	{ 248 249 }	25	673
Sjölinder, Axel L., and E. Larson, South Pueblo, Colo. Wire-twister .....	270,494	Jan. 9	807	235	23	167
Skaats, Abraham. (See Castle and Skaats.)						
Skala, Venzl. (See Ekl, Skala, Hodya, and Cizek.)						
Shank, George F., Lincoln township, Montgomery county, Iowa. Cultivator .....	272,490	Feb. 20	1145	321	23	655
Skeavington, John W. (See Selby, James H., assignor.)						
Skene, Alfred. (See Kühlmaier, Franz, assignor.)						
Skillings, Hiram, New Bedford, Mass. Spade-wheel plow .....	271,142	Jan. 23	1618	{ 465 466 533 534 }	23	326
Skinner, A. Frank, Tama City, Iowa. Engraving-machine .....	285,695	Sept. 25	1872	{ 466 533 534 }	24	1252
Skinner, Andrew P. W., Chicago, Ill. Combined lamp filler, lighter, extinguisher, and torch .....	282,578	Aug. 7	125	37	24	522
Skinner, Charles A., <i>et al.</i> (See Rumsey, Charles B., assignor.)						
Skinner, Charles E., Yonkers, N. Y. Blacking-box holder .....	283,428	Aug. 21	1166	327	24	722
Skinner, Charles E., assignor to Smith Moquette Loom Company, Yonkers, N. Y. Loom for weaving tufted fabrics .....	270,346	Jan. 9	619	183	23	131
Skinner, Charles E., assignor to Smith Moquette Loom Company, Yonkers, N. Y. Loom for weaving tufted fabrics .....	270,495	Jan. 9	808	{ 235 236 }	23	168
Skinner, Charles E., assignor to Smith Moquette Loom Company, Yonkers, N. Y. Loom for weaving tufted fabrics .....	288,266	Nov. 13	595	163	25	620
Skinner, Charles E., assignor to Smith Moquette Loom Company, Yonkers, N. Y. Loom for weaving tufted fabrics .....	288,267	Nov. 13	597	164	25	620
Skinner, Charles E., and E. Tyneson, assignors to Smith Moquette Loom Company, Yonkers, N. Y. Loom for weaving tufted fabrics .....	288,268	Nov. 13	599	164	25	620
Skinner, Daniel M., Centre Sandwich, N. H. Parcel-transmitter for stores .....	287,182	Oct. 23	1776	487	25	342
Skinner, Halcyon, assignor to Smith Moquette Loom Company, Yonkers, N. Y. Loom for weaving moquette carpets .....	285,767	Sept. 25	1970	{ 558 559 560 }	24	1267
Skinner, Henry M., assignor of one-half to R. Sager, Rockford, Ill. Rolling colter .....	287,733	Oct. 30	2493	671	25	483
Skinner, Henry M., assignor of one-half to R. Sager, Rockford, Ill. Rolling colter .....	288,672	Nov. 20	1113	306	25	716
Skinner, James N., New Britain, Conn. Lathe-chuck .....	269,889	Jan. 2	81	24	23	18
Skinner, Le Grand. (See Barnhurst and Skinner.)						
Skinner, Le Grand, Erie, Pa. Steam-engine crank-shaft .....	276,910	May 1	480	126	23	1710
Skinner, Le Grand, Erie, Pa. Cut-off-valve gear .....	282,388	July 31	2601	714	24	474
Skinner, Le Grand, Erie, Pa. Valve-gear .....	287,877	Nov. 6	107	32, 33	25	526
Skinner, Le Grand, Erie, Pa. Slide-valve for steam-engines .....	287,878	Nov. 6	109	33	25	526
Skinner, Le Grand, Erie, Pa. Governor and valve-gear .....	287,879	Nov. 6	110	33	25	527
Skinner, Le Grand, Erie, Pa. Mechanical movement .....	288,130	Nov. 6	418	118	25	581
Skinner, Le Grand, Erie, Pa. Cut-off-valve gear. (Reissue) .....	10,405	Nov. 6	504	{ 139 140 }	25	595
Skinner, Merrill R., Hamburg, N. Y. Fish-trap hook .....	286,494	Oct. 9	888	240	25	172
Skinner, Samuel W. (See Thomas, William M., assignor.)						
Skinner, Thomas M., Colorado Springs, Colo. Steam pile-driver .....	273,904	Mar. 13	856	232	23	988
Skoog, Rudolph, New York, N. Y. Whisk-broom holder .....	270,137	Jan. 2	366	106	23	75
Slack, Chester, Waynesville, Ill. Bed-spring .....	290,126	Dec. 11	932	264	25	1059
Slatter, Coroden J., Grand Junction, Mich. Lantern dinner-pail .....	270,610	Jan. 16	970	280	23	206
Slatter, J. C. (See Clansen, Adler C., assignor.)						
Slaght, Edwin, Gowanda, N. Y. Evaporator .....	286,646	Oct. 16	1091	294	25	214
Slater, Charles B., Blanchester, Ohio. Conveyor for flour-bolts, &c. ....	277,622	May 15	1370	369	23	1873
Slater, Frank, Guthrie Centre, Iowa. Dental bracket .....	276,637	May 1	115	30	23	1647
Slater, George T. (See Lanthier, Edouard, assignor.)						
Slater, Jacob G., assignor of one-half to J. H. Simonson, Albany, N. Y. Car-coupling .....	275,428	Apr. 10	745	198	23	1362
Slater, John W., <i>et al.</i> (See Vaughan, Henry W., assignor.)						
Slater, Richard L., assignor to P. H. Bagley, San Francisco, Cal. Steam-boiler furnace .....	277,361	May 8	1054	283	23	1814
Slater, Warren G., assignor to A. Sweet, Fremont, Mich. Harness-buckle .....	278,054	May 22	1879	514	23	1969
Slater, William D., assignor to Morgan Envelope Company, Springfield, Mass. Envelope-machine .....	288,673	Nov. 20	1114	{ 306 307 }	25	716
Slaughenbaup, John N., assignor to H. S. Gilbert & Co., Chambersburg, Pa. Straw-cutter .....	273,619	Mar. 6	485	130	23	917
Slaughter, Henry B. (See Slaughter, Joel C., assignor.)						
Slaughter, Joel C., Chestertown, Md., assignor of one-half to H. B. Slaughter, Kansas City, Mo. Grain-drier .....	282,013	July 24	2105	577	24	384
Slanson, Willis D., Racine, Wis. Cotton and hay press .....	287,734	Oct. 30	2494	{ 671 672 }	25	483
Slawson, John B., New York, N. Y. Fare-box .....	272,591	Feb. 20	1270	{ 354 355 }	23	677
Slaymaker, Robert M. (See Iske, Anthony and A., assignors.)						
Slayton, Edward T. (See Goettel and Slayton.)						
Slayton, Nelson B., and W. D. Wells, Alfred Centre, N. Y. Mitten or glove .....	286,738	Oct. 16	1208	326	25	234
Sleeper, Charles F., Boston, assignor to Tate & Co., Malden, Mass. Device for holding cord, tape, &c. ....	278,615	May 29	2609	711	23	2104
Sleeper, Charles F., Boston, assignor to Tate & Co., Malden, Mass. Picture-frame hanger .....	285,517	Sept. 25	1659	466	24	1212
Sleeth, James, and F. M. Lucas, Morristown, Ind. Chuck .....	271,941	Feb. 6	431	118	23	516
Sleeth, Robert, <i>et al.</i> (See Seaman, Joseph S., assignor.)						
Sleicher, John A., Troy, N. Y. Sleeping-car .....	273,620	Mar. 6	486	131	23	917
Sleicher, John A., Troy, N. Y. Sleeping-car .....	281,409	July 17	1338	370	24	249
Sleicher, John A., Troy, N. Y. Sleeping-car .....	281,410	July 17	1338	370	24	249
Slevin, James J., New York, N. Y. Refrigerating-catafalque .....	273,771	Mar. 13	695	187	23	961
Slingland, Nicholas, Falls Village, Conn. Railway-car steam-heater .....	284,250	Sept. 4	120	32, 33	24	925
Sliter, Jefferson B., and C. T. Buzzett, assignors of one-third to A. V. C. Vail, Waverly, N. Y. Vehicle spring .....	281,934	July 24	2013	551	24	370
Sloan, Alexander, Pittston, Pa. Hand-truck .....	275,951	Apr. 17	1401	386	23	1482
Sloan, Alexander, Newark, N. J., assignor of one-half to E. J. Hume, Hyde Park, Mass. Underground telegraph-wire conduit .....	274,522	Mar. 27	1671	464	23	1144

## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Sloan, Alexander, Newark, N. J., assignor to H. W. Peace Company, Brooklyn, N. Y. Crosscut-saw handle	286,968	Oct. 16	1496	411	25	284
Sloan, Frank, assignor to Adams & Westlake Manufacturing Company, Chicago, Ill. Pump for oil-tanks	272,340	Feb. 13	933	259	23	614
Sloan, Frank, assignor to Adams & Westlake Manufacturing Company, Chicago, Ill. Oil-stove	276,911	May 1	481	127	23	1710
Sloan, Frank, assignor to Adams & Westlake Manufacturing Company, Chicago, Ill. Oil-stove	285,696	Sept. 25	1873	534	24	1252
Sloan, Frank B. (See Clarkson, Frank S., assignor.)						
Sloan, Samuel. (See Fox, William T., assignor.)						
Sloan, William D., assignor to G. L. Clark, Brooklyn, N. Y. Wire nail	276,541	Apr. 24	2143	596	23	1617
Sloane, George W., Brooklyn, N. Y. Feed-water heater. (Reissue)	10,427	Dec. 18	1626	447	25	1187
Sloat, Erastus D., Carmel, N. Y. Lifting-jack	279,608	June 19	1242	344	23	2349
Sloat, Frederick, assignor of one-half to M. W. Perkins, Chicago, Ill. Car-coupling	281,935	July 24	2014	551	24	370
Slocumb, Abby L., and J. W. Day, New Orleans, La. Deodorizing perspiration-powder	279,195	June 12	732		23	2258
Slocum, Edward L., Lancaster, Ohio. Druggist's percolator	278,284	May 22	2173	593	23	2019
Slocum, Wanton D., New Bedford, Mass. Neck-bow fastener	277,362	May 8	1055	284	23	1814
Sloma, J. H. (See Lane, Isaac T., assignor.)						
Sloper, Byron, New York, N. Y., assignor to himself, W. M. Jackson, and L. A. Cook, Providence, R. I. Steam-boiler furnace	285,366	Sept. 18	1475	415	24	1173
Slusher, Zachariah T., Mira Fork, Va. Churn	283,033	Aug. 14	669	188	24	626
Small, Charles O., Halliwell, Me. Balanced puppet-valve	275,722	Apr. 10	1113	304	23	1424
Small, Edward, Baltimore, Md. Comminuted soft solder	280,967	July 10	780		24	143
Small, Edward, Baltimore, Md. Apparatus for and process of making comminuted solder	282,579	Aug. 7	126	37	24	522
Small, George A., Jeffersonville, Ind. Tool-handle	273,621	Mar. 6	457	131	23	917
Small, George A., Jeffersonville, assignor to J. Bettis, New Albany, Ind. Car-brake	289,314	Nov. 27	1889	526	25	865
Small, Henry, Hartford, Conn. Fire-escape	287,880	Nov. 6	112	33	25	527
Small, Johnston, Bridgewater, and J. H. Caler, Fallston, Pa. Lard or butter scoop	282,677	Aug. 7	241	70	24	541
Small, Perry, Guaymas, Mexico. Reservoir attachment for ammonia ice-machines	290,490	Dec. 18	1410	390	25	1150
Small, William. (See Armstrong, Robert C., assignor.)						
Small, William H., St. Louis, Mo. Device for closing bricks in the walls of wells or cisterns	290,277	Dec. 18	1123	316	25	1100
Smalley, William. (See Mason, Smalley, and Schofield.)						
Smallridge, Commodore P., Sr., Catlettsburg, Ky. Tawing hides	281,411	July 17	1340		24	249
Smallwood, George T., Jr., Washington, D. C., assignor of one-half to J. H. McLean, St. Louis, Mo. Automatic car-brake	284,766	Sept. 11	751	208 209	24	1037
Smalstig, William C., Springfield, Mo. Riding-saddle	272,341	Feb. 13	934	259	23	614
Smalstig, William C., and W. Massey, Springfield, Mo. Roofing	280,681	July 3	410	114	24	73
Smart, Albert J., Greenfield, Mass., assignor to Wiley & Russell Manufacturing Company, of Massachusetts. Tap-wrench	277,430	May 8	1133	305	23	1827
Smart, Albert J., Greenfield, Mass., assignor to Wiley & Russell Manufacturing Company, of Massachusetts. Screw-cutting machine	288,188	Nov. 6	496	135 136	25	592
Smart, George, assignor to himself and D. B. Taylor, St. Louis, Mo. Ventilator	280,526	July 3	230	61	24	41
Smart, James S., Salem, Mass., assignor, by mesne assignments, to American Filter Company, Portland, Me. Water-filter	270,255	Jan. 9	508	149	23	109
Smead, Ephraim A., Tioga, Pa. Measuring-tank	279,030	June 5	511	139	23	2210
Smead, Isaac D., Toledo, Ohio. Stove	273,402	Mar. 6	210	57	23	869
Smead, Isaac D., Toledo, Ohio. Combined draft-retarder and flue-scraper	289,865	Dec. 11	617	172	25	1001
Smead, John, Toledo, Ohio. Machine for cutting tobacco	289,664	Dec. 11	646	172	25	1001
Smelser, James M., and E. L. Kennedy, Rushville, Ind. Rotary steam-engine	286,556	Oct. 16	1355	371	25	260
Smeltz, Henry A., Dunedin, Fla. Insecticide	274,523	Mar. 27	1672		23	1144
Smiley, Bert, Kalanazoo, Mich. Easel	285,438	Sept. 25	1569	442	24	1195
Smiley, Frederick, San Francisco, Cal. Cravat-supporter	279,031	June 5	512	140	23	2210
Smiley, James H., Caroline, N. Y. Fire-escape with an alarm attachment	280,527	July 3	231	61	24	41
Smiley, Thomas J. L., and C. H. Stombs, San Francisco, Cal. Automatic lamp-extinguisher and wick-trimmer	290,607	Dec. 18	1568	431	25	1177
Smillie, Robert, Springfield, Ill. Combined easel, blackboard, and writing-desk	284,251	Sept. 4	121	33	24	925
Smith, Abbott P., et al. (See Hayes, William, Jr., assignor.)						
Smith, Abraham B., Petersburg, Pa., assignor to M. E. Shankland and C. Walter, Washington, D. C. Animal-trap	273,321	Mar. 6	101	30	23	851
Smith, Adolph T., New York, N. Y. Pneumatic door-opener	281,148	July 10	997	278 279	24	183
Smith, Adolph T., assignor of one-half to A. Pramann, New York, N. Y. Electrical door-opener	273,622	Mar. 6	489	131 132	23	918
Smith, Albert, Zurich, Switzerland. Band-saw mill	283,157	Aug. 14	813	227	24	650
Smith, Albert D. (See Iske, Anthony, assignor.)						
Smith, Alfred B., Chicago, Ill., assignor to H. W. Rood and A. Weber, Detroit, Mich. Crank-pin oiler	284,767	Sept. 11	755	210	24	1038
Smith, Alfred E., Bronxville, N. Y., assignor to A. E. Smith and Warner Axle Company, of Delaware. Vehicle-axle	281,310	July 17	1212	335	24	228
Smith, Alfred W., Boston, Mass. Car-starter	271,661	Feb. 6	91	25	23	456
Smith, Algernon D., Cincinnati, Ohio. Alarm-clock	283,429	Aug. 21	1166	327 328	24	722
Smith, Algernon D., Cincinnati, Ohio. Sign	284,339	Sept. 4	219	62	24	941
Smith, Allan A. (See Smith, H. Adalbert and A. A.)						
Smith, Allen C., Bethlehem, Pa. Fly-net	289,038	Nov. 27	1508	432	25	804
Smith, Allen C., Canaan, assignor of one-half to V. Powell, Troy, N. Y. Horse-tail holder	277,431	May 8	1134	305	23	1827
Smith, Alphonso B., et al. (See Kirkland, William P., assignor.)						
Smith, Alphonso B., assignor of one-half to S. Pattee, San Francisco, Cal. Friction gripping device	288,879	Nov. 20	1368	377	25	761
Smith, Alphonso B., assignor to S. Pattee, San Francisco, Cal. Safety-bridge for railway-cars	289,866	Dec. 11	619	172	25	1002
Smith, Apollon, et al. (See Brownell, Willis L., assignor.)						
Smith, Andrew A., Crested Butte, Colo. Machine for forming roads and paths upon bodies of snow	286,969	Oct. 16	1497	411 412	25	284
Smith, Andrew V., San Francisco, Cal. Link-protector	279,831	June 19	1500	419	23	2394
Smith, Archibald. (See Green and Smith.)						
Smith, Arthur, et al. (See Lattimer, Francis, assignor.)						
Smith, Benjamin, Clayton, Ill. Gate	279,832	June 19	1500	419	23	2394
Smith, Benjamin F., et al. (See Kempster, Daniel E., assignor.)						
Smith, Benjamin F., Alabaster, Mich. Automatic car-brake	274,043	Mar. 13	1014	278	23	1016
Smith, Budd, San Francisco, Cal. Rotary harrow and clod-breaker	287,479	Oct. 30	2149	584 585	25	418



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Smith, Byron C. (See Thomas, Joseph M., assignor.)						
Smith, Calvin T., Albion, Mich. Bag-holder.....	275,086	Apr. 3	273	75	23	1273
Smith, Ceylon, <i>et al.</i> (See Hill, Thomas, assignor.)						
Smith, Ceylon, <i>et al.</i> (See Little, James R., assignor.)						
Smith, Charles, and J. Hutchinson, Chicago, Ill. Grate-bar.....	236,083	Oct. 2	374	103	25	68
Smith, Charles, Belleville, N. J., assignor to himself and Eastwood Wire Manufacturing Company. Let-off mechanism for looms for weaving wire.....	277,623	May 15	1372	369	23	1873
Smith, Charles A., Providence, R. I. Metal ruler.....	287,480	Oct. 30	2152	585	25	418
Smith, Charles A., Wedowee, Ala. Flour-bolt.....	289,935	Dec. 11	699	196	25	1016
Smith, Charles A., Chicago, Ill. Earth-excavator.....	290,362	Dec. 18	1230	346	25	1120
Smith, Charles D., Amador City, Cal. Water-wheel bucket.....	272,592	Feb. 20	1273	355	23	677
Smith, Charles D. F., Aurora, Ill. Tower for electric lights, &c.....	287,881	Nov. 6	112	34	25	527
Smith, Charles F., West Bay City, Mich. Ash-pan for locomotives.....	281,936	July 24	2015	552	24	370
Smith, Charles H. (See Gollings, Ellick H., assignor.)						
Smith, Charles H., Eau Claire, Wis. Tire-setter.....	281,574	July 17	1539	422	24	282
Smith, Charles H., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Padlock.....	272,593	Feb. 20	1274	355	23	677
Smith, Charles O. (See Cate and Smith.)						
Smith, Charles S., Leicester, county of Leicester, England. Machinery or apparatus for compressing lime and other pulverulent substances into solid or cohesive form.....	276,487	Apr. 24	2072	575	23	1605
Smith, Charles W., Coalesburg, Mo. Car-brake.....	278,616	May 29	2610	711	23	2104
Smith, Charles W., Springfield, Ohio. Soil-pulverizing machine.....	281,149	July 10	998	279	24	183
Smith, Charlie E., Hoopston, Ill. Hame.....	276,912	May 1	484	127	23	1710
Smith, Clarence H., and L. E. Hansberry, Springfield, Ill. Cartridge implement.....	290,127	Dec. 11	933	265	25	1059
Smith, Clement C., Lancaster, Pa. Device for oiling slides for engines.....	284,768	Sept. 11	756	210	24	1038
Smith Company, J. Barton. (See French, Josiah F., assignor.)						
Smith Consolidation Company. (See Smith, William H., assignor.)						
Smith Consolidation Company. (See Wagner, John H., assignor.)						
Smith, Curtis A., assignor to R. Carl, Elgin, Ill. Self-adjusting watch-key.....	279,196	June 12	732	201	23	2258
Smith, Daniel F., Republic, Ohio. Bag-holder.....	289,721	Dec. 4	441	123	25	963
Smith, Daniel S., Rockland, and A. Eppler, Jr., Boston, Mass.; said Smith assignor to said Eppler. Sole leveling or molding machine.....	285,314	Sept. 18	1410	399	24	1162
Smith, David E. (See Greene, Isaac T., assignor.)						
Smith, David H., Mishawaka, Ind. Fire and water proof paint.....	288,269	Nov. 13	601	.....	25	620
Smith, David L., assignor to himself and N. H. Vincent, Big Rapids, Mich. Rotary steam-engine.....	284,681	Sept. 11	642	181	24	1019
Smith, David N., and J. B. Raynor, Mazomanie, Wis. Table-leg.....	290,128	Dec. 11	935	265	25	1060
Smith, David R. (See Carter and Smith.)						
Smith, David R. (See McCreary and Smith.)						
Smith, David R., Troy, and J. McCreary, assignors of one-half to G. H. Billings and E. W. Carter, Cohoes, N. Y. Method of and machine for radial crimping.....	283,360	Aug. 14	1077	{ 302 } { 303 }	{ 24 }	701
Smith, Delos A., Locke, Mich. Adjustable stove-pipe.....	278,617	May 29	2611	711	23	2104
Smith, Dexter, Springfield, Mass. Revolver.....	279,197	June 12	733	201	23	2259
Smith, Donald D., Springfield, Mass. Revolving fire-arm.....	269,890	Jan. 2	82	24	23	18
Smith, Dwight L., assignor of one-half to E. A. Smith, Waterbury, Conn. Sun-dial.....	277,799	May 15	1572	429	23	1910
Smith, Earl A. (See Smith, Dwight L., assignor.)						
Smith, Earl S., Chase, Mich. Car-coupling.....	277,363	May 8	1056	284	23	1814
Smith, Ebenezer. (See True and Smith.)						
Smith, Edmond C., Sangatuck, Conn. Knife for splitting and beveling leather.....	285,315	Sept. 18	1412	399	24	1162
Smith, Edward. (See Thomas, James S., assignor.)						
Smith, Edward A., St. Albans, Vt. Smoking-tube.....	281,573	July 17	1538	421	24	282
Smith, Edward H., Rutherford, Cal. Safety-hook.....	286,739	Oct. 16	1210	326	25	235
Smith, Edward S. (See McGovern, Bernard, assignor.)						
Smith, Edward S., Waterbury, Conn. Clasp.....	289,153	Nov. 27	1703	473	25	828
Smith & Egge Manufacturing Company. (See Egge, Frederick, assignor.)						
Smith & Egge Manufacturing Company. (See Smith, Friend W., assignor.)						
Smith, Eli. (See Duckworth and Smith.)						
Smith, Elijah S., Good Hope, Ill. Pump for windmills.....	270,256	Jan. 9	509	149	23	110
Smith, Elmer S., <i>et al.</i> (See Spaulding, Elijah F., assignor.)						
Smith, Elmer S. (See Hallock and Spaulding, assignors.)						
Smith, Elmer S. (See Spaulding and Hallock, assignors.)						
Smith, Emmet L., assignor to C. W. Higby, Jackson, Mich. Plaiting device.....	290,129	Dec. 11	936	265	25	1060
Smith, Erastus W., New York, N. Y. Apparatus for heating cars and extinguishing fires on railway-trains.....	284,682	Sept. 11	643	{ 181 } { 182 }	{ 24 }	1019
Smith, Eugene, San Francisco, Cal. Saw-tooth.....	289,576	Dec. 4	256	72	25	932
Smith, Francis F., Sandusky, and J. W. Lockwood, Gypsum, assignors to Sandusky Plow Company, Sandusky, Ohio. Plow-sulky.....	272,092	Feb. 13	631	172	23	561
Smith, Francis H. (See Blumenberg, Israel R., assignor.)						
Smith, Francis P., Boston, Mass. Car-axle.....	290,938	Dec. 25	1995	550	25	1259
Smith, Frank A., Macomb, Ill. Electric underground cable.....	280,869	July 10	659	186	24	123
Smith, Frank A., Macomb, Ill. Endless chain carrier for brick and tile machines.....	289,039	Nov. 27	1569	433	25	804
Smith, Frank B. (See Hogeboom and Smith.)						
Smith, Franklin A., Jr. (See Thayer and Smith.)						
Smith, Franklin A., Jr., Providence, R. I. Metallic fastening.....	269,891	Jan. 2	83	25	23	18
Smith, Franklin A., Jr., Providence, R. I. Button-fastener.....	272,913	Feb. 27	1699	475	23	759
Smith, Franklin A., Jr., Providence, R. I. Button-fastener.....	276,638	May 1	116	31	23	1647
Smith, Franklin A., Jr., Providence, R. I. Button-fastener.....	277,169	May 8	837	221	23	1775
Smith, Franklin A., Jr., Providence, R. I. Button-setting instrument.....	250,408	July 3	84	23	24	18
Smith, Franklin A., Jr., Providence, R. I. Button-fastening.....	284,912	Sept. 11	925	260	24	1069
Smith, Franklin A., Jr., Providence, R. I. Button-setting instrument.....	284,913	Sept. 11	925	260	24	1069
Smith, Franklin A., Jr., Providence, R. I. Attaching buttons.....	286,740	Oct. 16	1211	326	25	235
Smith, Franklin A., Jr., Providence, R. I. Machine for attaching buttons.....	286,741	Oct. 16	1211	{ 326 } { 327 }	{ 25 }	235
Smith, Franklin R. (See Cook and Smith.)						
Smith, Fred D., and W. L. Casaday, New Carlisle, Ind.; said Smith assignor to said Casaday. Rowing apparatus.....	276,294	Apr. 24	1823	507	23	1562
Smith, Frederick C., and J. W. Weitzell, Atlanta, Ga. Vehicle-spring.....	283,525	Aug. 21	1276	357	24	742
Smith, Friend W., Bridgeport, assignor to Smith & Egge Manufacturing Company, Fairfield, Conn. Napkin-ring.....	275,723	Apr. 10	1114	395	23	1424
Smith, Gary B., Denver, Colo. Sash-weight.....	276,913	May 1	484	127	23	1711
Smith, Gary B., assignor to R. E. Perry, Denver, Colo. Sash-balance.....	289,458	Dec. 4	99	28, 29	25	904
Smith, Gary B., assignor to R. E. Perry, Denver, Colo. Spokesbave.....	289,459	Dec. 4	100	29	25	904
Smith, George A., Bristol, R. I. Automatic water sprinkler or pipe.....	285,697	Sept. 25	1874	534	24	1252
Smith, George A., and M. W. Voigtman, St. Louis, Mo.; said Voigtman assignor to said Smith. Lay-boy.....	281,150	July 10	999	279	24	163

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Smith, George B. and G. H., Latrobe, Ohio. Churn-motor.....	282,389	July 31	2602	715	24	474
Smith, George C. (See Fitz Gerald and Smith.)						
Smith, George E., Middleport, N. Y. Hoop-bending machine.....	289,936	Dec. 11	700	197	25	1016
Smith, George H., Jr. (See Oldroyd and Smith.)						
Smith, George H. (See Smith, George B. and G. H.)						
Smith, George H., et al.* (See Crofoot, George W., assignor.)						
Smith, George H., New York, N. Y. Method of and apparatus for making and raising salt-brine from deep veins.....	273,623	Mar. 6	491	132	23	918
Smith, George H., New York, N. Y. Salt-evaporating pan.....	287,183	Oct. 23	1777	{ 487 488 }	{ 25 25 }	{ 342 342 }
Smith, George W., et al. (See Kempster, Daniel E., assignor.)						
Smith, George W., Boston, Mass. Hand drilling-machine.....	279,032	June 5	513	140	23	2211
Smith, Gerritt, Astoria, and T. F. Taylor, Brooklyn, N. Y. Telegraphy.....	284,493	Sept. 4	414	118	24	974
Smith, Grant & Co. (See Newell and Ladd, assignors.)						
Smith, H. Adalbert and A. A., Omaha, Nebr. Box.....	290,130	Dec. 11	937	265	25	1060
Smith, H. G., et al. (See Bugbey, Benjamin N., assignor.)						
Smith, Hamilton E., New York, N. Y. Washing-machine.....	275,724	Apr. 10	1115	305	23	1424
Smith, Hampton S., Jr. (See Graner, John, assignor.)						
Smith, Harmon L., Watkins, N. Y. Cultivator.....	277,049	May 22	1750	477	23	1946
Smith, Henry, New Haven, Conn. Top-prop nut.....	272,594	Feb. 20	1275	355	23	678
Smith, Henry, Newark, N. J. Pearl button.....	287,969	Nov. 6	928	65	25	547
Smith, Henry, Jr., Baltimore, Md. Sash-cord fastener.....	286,857	Oct. 16	1356	372	25	261
Smith, Henry C., Richmond, county of Surrey, England. Machinery and apparatus for scutching or separating, washing, drying, and bleaching the fibers of fiber-bearing leaves and plants.....	282,788	Aug. 7	375	106	24	566
Smith, Henry D., Rockland, Mass. Machine for winding sewing-machine shuttle-bobbins.....	282,580	Aug. 7	126	38	24	522
Smith, Henry J., Pittsburg, Pa. Cruet-caster.....	284,499	Sept. 4	416	118	24	974
Smith, Henry V., Plantsville, Conn. Bit-stock.....	274,041	Mar. 13	1013	278	23	1016
Smith, Henry V., assignor of one-half to G. E. Crutenden, Plantsville, Conn. Bit-stock.....	274,040	Mar. 13	1012	277	23	1016
Smith, Henry V., assignor of one-half to G. E. Crutenden, Plantsville, Conn. Convertible screw-driver and borer.....	274,042	Mar. 13	1014	278	23	1016
Smith, Herbert N. (See Crocker, James A., assignor.)						
Smith, Holland, San Francisco, Cal. Basin and water-closet valve.....	289,937	Dec. 11	701	197	25	1016
Smith, Howard M., St. Louis, Mo. Spark-arrester.....	255,849	Oct. 2	86	26	25	18
Smith, Howard M., St. Louis, Mo. Spark-arrester.....	288,195	Nov. 6	495	138	25	594
Smith, Hugh, Roodhouse, assignor of one-half to G. E. Hill, Whitehall, Ill. Motor for churns and washing-machines.....	284,500	Sept. 4	417	118	24	974
Smith, Ira T., Mount Carmel, Conn. Machine for swaging needle-blanks.....	280,682	July 3	410	115	24	73
Smith, Isaac M. (See Beery, Samuel M., assignor.)						
Smith, Isaac N., Ashley, Ill. Grinding-machine.....	281,151	July 10	1000	280	24	183
Smith, Israel E., York, assignor to S. A. Shroff, Columbia, Pa. Gate.....	287,184	Oct. 23	1779	488	25	342
Smith, Israel S., assignor of one-half to E. B. Hay, Washington, D. C. Bill-file.....	277,170	May 8	838	221	23	1775
Smith, J. C., et al. (See Brust, Albert G., assignor.)						
Smith, Jacob A., White Hall, assignor of one-third to J. C. Phillips, Baltimore, Md. Machine for cutting green corn from the cob.....	279,833	Oct. 19	1501	420	23	2394
Smith, James, and D. E. Blake, St. Louis, Mo. Refrigerator.....	286,084	June 2	375	104	25	68
Smith, James A., et al. (See Mitchell, James C., assignor.)						
Smith, James A., assignor to E. N. Thayer, Holbrook, Mass. Machine for rolling leather-strings.....	287,970	Nov. 6	928	65	25	547
Smith, James C., The Dalles, Oreg. Drilling-machine.....	279,834	June 19	1503	420	23	2394
Smith, James C., assignor of one-third to G. B. Ford, Jamestown, N. Y. Detachable table-leg.....	271,143	Jan. 23	1619	466	23	326
Smith, James F. (See Brown and Smith.)						
Smith, James F., Terrell, Tex. Vehicle.....	280,870	July 10	660	186	24	123
Smith, James G., et al. (See Coy, George W., assignor.)						
Smith, James S., Middletown, Conn. Button.....	272,491	Feb. 20	1146	322	23	655
Smith, James T., New York, N. Y. Umbrella stick and cane.....	282,231	July 31	2404	661	24	440
Smith, James T., New York, N. Y. Umbrella and parasol handle.....	289,722	Dec. 4	442	124	25	964
Smith, James W., Jersey City, N. J. Overshoe for horses.....	288,880	Nov. 20	1369	377	25	762
Smith, James W., Green, assignor of one-half to J. Brown, Louisville, Kans. Corn check-rower.....	270,497	Jan. 9	811	236	23	168
Smith, Jared W., Hartford, Conn. Band sawing machine.....	276,197	Apr. 24	1705	471	23	1542
Smith, Jason, Rockland, Mass. Machine for trimming, channeling, and grooving boot and shoe soles.....	270,498	Jan. 9	812	237	23	169
Smith, Jesse M., Detroit, Mich. Crank-movement in steam-engines and other machinery.....	273,624	Mar. 6	492	132	23	918
Smith, Jesse M., Detroit, Mich. Slide-valve for steam-engines.....	275,725	Apr. 10	1116	305	23	1425
Smith, Jesse M., Detroit, Mich. Governor for steam-engines.....	282,789	Aug. 7	376	106	24	566
Smith, John, Caldwell Prairie, Wis. Crank-plate for bolster-springs.....	287,335	Oct. 23	1969	537	25	376
Smith, John, Stillwater, Minn. Horse-power.....	289,154	Nov. 27	1704	473	25	828
Smith, John, and J. P. Rhodes, Rockville Centre, N. Y. Dumping-car.....	275,532	Apr. 10	873	236	23	1383
Smith, John, and J. P. Rhodes, Rockville Centre, N. Y. Attachment for inside doors.....	275,726	Apr. 10	1117	305	23	1425
Smith, John, and J. P. Rhodes, Rockville Centre, N. Y. Dumping-scow.....	280,871	July 10	661	186	24	124
Smith, John, Ontonagon, Mich., assignor of one-half to J. Little, Horicon, Wis. Grain-drill.....	279,033	June 5	514	140	23	2211
Smith, John A., North East, Pa. Adjustable chair, desk, &c.....	283,430	Aug. 21	1167	328	24	722
Smith, John A., Frankford, Pa. Vegetable-cutter.....	290,363	Dec. 18	1231	{ 346 347 }	{ 25 25 }	{ 1120 1120 }
Smith, John B., Sunapee, assignor to C. N. Freeman and D. W. O'Neil, Claremont, N. H. Machine for making brackets for telegraph-insulators.....	278,618	May 29	2611	712	23	2105
Smith, John B., Sunapee, assignor to C. N. Freeman and D. W. O'Neil, Claremont, N. H. Machine for making telegraph-insulator pins.....	278,619	May 29	2613	{ 712 713 }	{ 23 23 }	{ 2105 2105 }
Smith, John E., New York, N. Y. Fire-proof garment.....	279,669	June 19	1317	366	23	2362
Smith, John E., Bangor, Me. Oscillating steam-engine.....	290,713	Dec. 25	1712	472	25	1210
Smith, John G. (See Scanlan, Charles A., assignor.)						
Smith, John J. (See Rees and Smith.)						
Smith, John J. C., College Point, N. Y. Machine for covering wire for electrical purposes.....	276,724	May 1	250	63, 64	23	1667
Smith, John J. C., College Point, N. Y. Covering wire for electrical purposes.....	276,725	May 1	252	65	23	1668
Smith, John J. C., College Point, N. Y. Insulating wire for electric purposes.....	277,519	May 15	1239	334	23	1852
Smith, John J. C., College Point, assignor to Ansonia Rubber Company, New York, N. Y. Bristle-setting apparatus.....	276,488	Apr. 24	2074	576	23	1606
Smith, John L., Philadelphia, Pa. Awning.....	286,495	Oct. 9	889	240	25	172
Smith, John O., Jamison, Ala. Apparatus for drying and seasoning lumber.....	270,138	Jan. 2	367	106	24	75
Smith, John O., Jamison, Ala. Lumber-drier.....	286,234	Oct. 9	551	151	25	111
Smith, John O., Jamison, Ala. Apparatus for drying and seasoning lumber. (Reissue).....	10,393	Oct. 16	1523	419	25	288
Smith, John R., Rochester, N. Y. Middlings-purifier.....	271,932	Feb. 6	423	115	23	515
Smith, John S., Philadelphia, Pa. Venetian blind.....	279,835	June 19	1504	420	23	2395



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Smith, John T., assignor of one-half to J. B. Dawson, Uhrichsville, Ohio. Foot-warmer....	284,914	Sept. 11	926	261	24	1069
Smith, Joseph, <i>et al.</i> (See Locke, Stephen F., assignor.)						
Smith, Joseph A. (See Nunns and Smith.)						
Smith, Joseph B., North Buffalo, Pa. Fire-escape.....	288,131	Nov. 6	419	118	25	581
Smith, Joseph D., assignor to himself and L. D. Minnick, Rockford, Ill. Corn-planter.....	285,768	Sept. 25	1977	560	24	1268
Smith, Joseph G., Quincy, Ill. Thermometer.....	282,390	July 31	2603	715	24	475
Smith, Joseph N. (See Whiting and Smith.)						
Smith, Joseph S. (See Wells, George M., assignor.)						
Smith, Joseph W. (See Schiller, John G., assignor.)						
Smith, Josephine M. (See Whiting, Eleanor, assignor.)						
Smith, Josephine M. (See Whiting and Smith, assignors.)						
Smith, Josephine V., Hornellsville, N. Y. Fluting and ironing machine.....	277,520	May 15	1242	334	23	1852
Smith, Joshua. (See Sample, Levi R., assignor.)						
Smith, Joshua, Chicago, Ill. Bill and letter file, &c.....	280,683	July 3	413	115	24	73
Smith, L. Henry, assignor of one-half to T. B. Starr, Salem, N. J. Can-filling machine.....	280,684	July 3	413	116	24	74
Smith, L. Henry, assignor of one-half to T. B. and R. T. Starr, Salem, N. J. Can-filling machine.....	289,155	Nov. 27	1705	473	25	828
Smith, L. Henry, assignor of one-half to T. B. and R. T. Starr, Salem, N. J. Can-filling machine.....				474		
Smith, Lawrence F., assignor to C. A. Shaw, Boston, Mass. Toy.....	289,156	Nov. 27	1706	474	25	829
Smith, Lewis I., Cantril, Iowa. Revolving riddle for thrashing-machines.....	272,168	Feb. 13	723	190	23	577
Smith, Lewis W., Sutton, Mass. Carriage-axle.....	282,790	Aug. 7	379	107	24	566
Smith, Luella E., Brooklyn, assignor to G. P. Farmer, New York, N. Y., and J. Jenkins, Montclair, N. J. Safety-pin.....	283,034	Aug. 14	669	188	24	626
Smith, Luke A., Ludington, Mich. Door-hanger.....	281,152	July 10	1001	280	24	183
Smith, Luther L., Ansonia, Conn. Apparatus for coating wire.....	286,085	Oct. 2	376	104	25	69
Smith, Lyman, Kansas City, Mo. Pneumatic and automatic grain-transfer apparatus.....	276,914	May 1	485	128	23	1711
Smith, Lyman, Kansas City, Mo. Mouth-piece for grain-transferring apparatus.....	279,034	June 5	517	141	23	2211
Smith, Lyman, Kansas City, Mo. Apparatus for transferring grain, &c.....	289,315	Nov. 27	1890	526	25	865
Smith, Lyman, Kansas City, Mo. Apparatus for transferring grain, &c.....	289,316	Nov. 27	1891	527	25	865
Smith, Lyman, Kansas City, Mo. Eccentric-shaped filter.....	290,364	Dec. 18	1232	347	25	1120
Smith, Lyman C. (See Brown, Alexander T., assignor.)						
Smith, Malcolm, Gloucester, Mass. Shoe.....	275,430	Apr. 10	747	198	23	1302
Smith Manufacturing Company. (See Smith, Seth H., assignor.)						
Smith, Margret, Little Rock, Ark. Muff.....	282,391	July 31	2605	715	24	475
Smith, Margret, Little Rock, Ark. Hat and bonnet supporter.....	290,365	Dec. 18	1233	347	25	1120
Smith, Martin V., McKeesport, Pa. Continuous rolling-mill.....	274,524	Mar. 27	1672	464	23	1144
Smith, Martin V., McKeesport, Pa. Continuous rolling-mill.....	274,525	Mar. 27	1674	464	23	1144
Smith, Martin V., Tyrone, Pa. Furnace for melting glass, &c.....	280,872	July 10	662	186	24	124
Smith, Martin V., Tyrone, Pa. Glass-furnace.....				187		
Smith, Mary E., Southbury, Conn. Lamp-supporting bracket for sewing-machines.....	285,316	Sept. 18	1412	399	24	1163
Smith, Mary E., Somerville, Mass. Mattress.....	274,984	Apr. 3	129	36	23	1248
Smith Middlings Purifier Company, George T. (See Holt, Noah W., assignor.)	276,055	May 22	1880	514	23	1969
Smith Middlings Purifier Company, George T. (See Mount and Bassett, assignors.)						
Smith, Milo P., Norwalk, Ohio. Sewing-machine.....	280,409	July 3	85	23	24	18
Smith, Milo R. (See Neff, Enders, and Fieser, assignors.)						
Smith Moquette Loom Company. (See Skinner, Charles E., assignor.)						
Smith Moquette Loom Company. (See Skinner, Halcyon, assignor.)						
Smith Moquette Loom Company. (See Skinner and Tymeson, assignors.)						
Smith, Myers & Schnier. (See Smith and Myers, assignors.)						
Smith, Norton, Roscommon, Mich. Device for securing binding-chains.....	276,295	Apr. 24	1825	508	23	1563
Smith, Obediah J., and R. J. Johnson, Meadville, Mo. Steam-washer.....	285,934	Oct. 2	202	57	25	39
Smith, Orren W., Bangor, Me. Tool for watch makers and repairers.....	274,837	Mar. 27	2037	567	23	1209
Smith, Oscar F., Norristown, Pa. Clothes-drier.....	281,734	July 24	1759	478	24	324
Smith, Oscar F., assignor of one-half to J. A. Bell, Buffalo, N. Y. Sewing-machine shuttle.....	276,489	Apr. 24	2076	576	23	1606
Smith, Ozias A., Atlanta, Ga. Basement or cellar floor.....	274,985	Apr. 3	130	36	23	1248
Smith, Paul, <i>et al.</i> (See Ollis, John W., assignor.)						
Smith, Phillip, Prairie City, Iowa. Wagon end-gate.....	286,647	Oct. 16	1093	294	25	214
Smith, Peter, Cato, Kans. Fire-escape.....	283,158	Aug. 14	815	227	24	651
Smith, R. Hale, Springfield, Mass. Seal-press.....	286,496	Oct. 9	890	240	25	172
Smith, R. Hale, Springfield, Mass. Self-inking printing-stamp.....	288,674	Nov. 20	1117	307	25	716
Smith, Ransom J., Georgia, Vt. Chimney-cap.....	282,392	July 31	2605	715	24	475
Smith, Richard, Sherbrooke, Quebec, Canada. Reciprocating propeller and operating mechanism.....	279,967	June 26	1694	476	23	2434
Smith, Richard, Sherbrooke, Quebec, Canada. Tension-equalizer for fishing-rods.....	279,988	June 26	1696	476	23	2434
Smith, Richard, Sherbrooke, Quebec, Canada. Vibrating propeller.....	289,867	Dec. 11	620	172	25	1002
Smith, Richard, Boston, assignor of one-half to G. W. Russell, Lawrence, Mass. Machine for testing paper, &c.....	274,146	Mar. 20	1158	319	23	1048
Smith, Richard S. (See McNeil, Mordock, assignor.)				320		
Smith, Robert M., Annada, assignor of one-half to H. S. Carroll, Clarksville, Mo. Car-wheel.....	272,342	Feb. 13	935	260	23	614
Smith, Robert P., <i>et al.</i> (See Leake, Lewis C., assignor.)						
Smith, Robert R. (See Allen, John, assignor.)						
Smith, Roderick H., Dunkirk, N. Y. Liquid paint.....	286,858	Oct. 16	1356	-----	25	261
Smith, Roland H. (See Bannister, Henry D., assignor.)						
Smith, Roland H., Pittsburg, Pa. Apparatus for the manufacture of gas.....	288,741	Nov. 20	1206	330	25	731
Smith, Roswell T., Nashua, N. H. Paper-perforating machine. (Reissue).....	10,311	Apr. 10	1213	332	23	1441
Smith, Roswell T., Nashua, N. H. Machine for perforating music-paper for automatic musical instruments.....				333		
Smith, Samuel C., Lowell, Mass. Screw-cutting machine.....	287,062	Oct. 23	1623	447	25	313
Smith, Samuel P. (See Sanford and Smith.)	284,501	Sept. 4	418	118	24	975
Smith, Samuel P., New York, N. Y. Machine for obtaining fibers, &c.....	276,915	May 1	486	128	23	1711
Smith, Samuel P., New York, N. Y. Machine for obtaining and treating fibrous and other substances.....	280,968	July 10	781	216	24	143
Smith, Samuel R. (See Schnier and Smith.)						
Smith, Samuel R., and E. Myers, assignors to Smith, Myers & Schnier, Cincinnati, Ohio. Circular-saw guide.....	270,139	Jan. 2	368	107	23	75
Smith, Samuel R., and E. Myers, assignors to Smith, Myers & Schnier, Cincinnati, Ohio. Saw-mill feed mechanism.....	270,140	Jan. 2	369	107	23	75
Smith, Samuel R., and E. Myers, assignors to Smith, Myers & Schnier, Cincinnati, Ohio. Head-block.....	271,747	Feb. 6	194	54	23	474
Smith, Sarah L., administratrix. (See Smith, William.)						
Smith, Seth H., assignor to Smith Manufacturing Company, Delta, Ohio. Wooden plate.....	273,773	Mar. 13	697	187	23	961

*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. to	Vol.	Page.
Smith, Seth H., assignor to Smith Manufacturing Company, Delta, Ohio. Machine for cutting wooden plates	276,198	Apr. 24	1706	{ 471 472 }	23	1543
Smith, Seth H., assignor to Smith Manufacturing Company, Delta, Ohio. Cutting articles from wood	278,828	June 5	207	61	23	2158
Smith, Sidney. (See Peterman and Smith.)						
Smith, Sidney, Cambridge, Mass. Steam-generator	289,317	Nov. 27	1892	527	25	865
Smith, Sidney B., Kirksville, Mo. Fence	269,892	Jan. 2	83	25	23	18
Smith, Sidney M., San Francisco, Cal. Honey-comb-packing bottle or jar	290,131	Dec. 11	938	266	25	1060
Smith, Stephen N., Providence, R. I. Machine for making lacing-hooks	272,787	Feb. 20	1514	{ 426 427 }	23	720
Smith, Thaddeus S., St. Louis, Mo. Brick-kiln	290,939	Dec. 25	1996	550	25	1259
Smith, Thomas, Alliance, Ohio. Plastic refractory material for repairing ingot-molds	284,502	Sept. 4	421	.....	24	975
Smith, Thomas B., assignor of one-third to B. Weber, Baltimore, Md. Fire-escape	289,318	Nov. 27	1895	527	25	866
Smith, Thomas H., Bloomington, Ill. Mail-bag fastening	285,518	Sept. 25	1660	467	24	1212
Smith, Thomas L., and W. S. Doig, Brooklyn, N. Y. Feeder for nailing-machines	276,639	May 1	117	31, 32	23	1647
Smith, Thomas L., and W. S. Doig, Brooklyn, N. Y. Box-nailing machine	276,726	May 1	255	65	23	1668
Smith, Thomas L., and W. S. Doig, Brooklyn, N. Y., assignors to Central Refining Company, (limited,) of New York. Can-seaming machine	273,774	Mar. 13	698	188	23	961
Smith, Thomas S., New Haven, Conn. Sash-fastener	286,859	Oct. 16	1357	372	25	261
Smith, Uzziel P., Chicago, Ill. Elevator	280,251	Dec. 26	2009	565	23	2490
Smith, Victor, assignor of one-half to H. D. Tate, Bedford, Pa. Harness	271,933	Feb. 6	424	116	23	515
Smith, W. C. (See Leslie, Joseph C., assignor.)						
Smith, W. Dean, Boston, Mass. Machine for cutting soap and other materials	273,176	Feb. 27	2013	566	23	814
Smith, Walter C., Philadelphia, Pa. Telegraph-sounder	288,881	Nov. 20	1370	378	25	762
Smith, Walton D., assignor of one-half to C. Emery, Prophetstown, Ill. Package-tie	274,044	Mar. 13	1016	278	23	1016
Smith and Warner Axle Company, Alfred E. (See Smith, Alfred E., assignor.)						
Smith, Willard N. (See Vincent and Smith.)						
Smith, Willard N., and H. M. Vincent, assignors of one-third to E. H. Noble, New Bedford, Mass. Wrench	286,561	Oct. 9	976	262	25	187
Smith, William. (See Fagan, Thomas B., assignor.)						
Smith, William, Aberdeen, Scotland. Excavating and dredging apparatus	284,503	Sept. 4	422	{ 119 120 }	24	975
Smith, William, deceased, S. L. Smith, Cincinnati, Ohio, administratrix, and assignor to M. S. Miller, Chicago, Ill. Manufacture of impression-paper	273,772	Mar. 13	696	187	23	961
Smith, William, San Francisco, Cal. Ball-cock	278,159	May 22	2047	562	23	1998
Smith, William, Tomah, Wis. Stump-extractor	278,620	May 29	2616	714	23	2105
Smith, William C. R., and J. B. Morton, San Francisco, Cal. Return-erate	283,930	Aug. 28	1766	499	24	844
Smith, William E. (See Bromley, James M., assignor.)						
Smith, William F. (See Kilborn and Smith.)						
Smith, William F., Tucson, Ariz. Ter. Boiler-tube stopper	277,365	May 8	1057	284	23	1815
Smith, William H., Upper Alton, Ill. Saw-jointer	227,364	May 8	1056	284	23	1815
Smith, William H., assignor to Smith Consolidation Company, Chicago, Ill. Machine for consolidating loose and bulky material into solid blocks	275,866	Apr. 17	1306	{ 359 360 361 }	23	1465
Smith, William H., assignor of one-half to Orr, Painter and Company, Reading, Pa. Pattern for molding stove-lids	278,370	May 29	2315	633	23	2053
Smith, William H. H., Somerville, Mass. Stove-lid and pan lifter	278,369	May 29	2315	633	23	2053
Smith, William H. H., Somerville, Mass. Kitchen utensil	285,439	Sept. 25	1570	442	24	1195
Smith, William J., Brookline, N. H. Barrel-head cutter	271,934	Feb. 6	425	116	23	515
Smith, William M., assignor to Meriden Britannia Company, Meriden, Conn. Casket ornament	270,496	Jan. 9	810	236	23	168
Smith, William O., Orwell, Ohio. Egg-erate	284,252	Sept. 4	123	33	24	925
Smith, William O., Cambridgeport, Mass. Wood-molding machine	289,319	Nov. 27	1896	528	25	866
Smith, William R., and N. H. Bigger, Bentonville, Ark. Pump	272,343	Feb. 13	936	260	23	614
Smith, William T. (See Heavner, Andrew J., assignor.)						
Smith, William T., et al. (See Colvin, Orson, assignor.)						
Smith, Willoughby, Wharf Road, City Road, county of Middlesex, England. Insulating electrical conductors and a new compound suitable to be used for this and other purposes	276,916	May 1	488	.....	23	1711
Smith, Willoughby, Wharf Road, City Road, county of Middlesex, England. Insulated electrical conductor	277,366	May 8	1058	285	23	1815
Smith, Wilson R., assignor of one-half to C. A. Hodge, Beloit, Wis. Harvester	276,490	Apr. 24	2077	{ 576 577 }	23	1606
Smith, Wilson R., assignor of one-half to Monitor Works, Beloit, Wis. Elevator	283,431	Aug. 21	1169	328	24	723
Smith Woolen Machinery Company, James. (See Hockins, Irving W., assignor.)						
Smith Woolen Machinery Company, James. (See Moulton, Hamilton L., assignor.)						
Smith Woolen Machinery Company, James. (See Proctor, Josiah K., assignor.)						
Smith, Wright D., Detroit, Mich. Rotary fan-blower	272,595	Feb. 20	1275	356	23	678
Smith, Wright D., assignor of one-half to M. C. Huyatt, Detroit, Mich. Exhaust-fan	275,087	Apr. 3	274	75	23	1273
Smith, Zephaniah C., Brooklyn, N. Y. Ironing-machine	279,514	June 12	1132	314	23	2322
Smithers, Joseph C., and J. D. Carlisle, Nicholasville, Ky. Draft-chain loop for hack-hands	289,157	Nov. 27	1707	475	25	829
Smithers, Joseph P., Brooklyn, N. Y. Telegraphic relay	276,087	Apr. 17	1564	431	23	1510
Smithers, Joseph P., Brooklyn, N. Y. Telegraphic repeater	279,670	June 19	1317	366	23	2362
Smithmeyer, John L., Washington, D. C. Building block or brick	279,836	June 19	1504	421	23	2395
Smithson, Joseph S., Chicago, Ill. Branding device	278,621	May 29	2616	714	23	2106
Smitten, Thomas W. F., New York, N. Y. Pen and pencil holder	274,836	Mar. 27	2036	567	23	1209
Smitten, Thomas W. F., Brooklyn, N. Y. Button or stud	276,917	May 1	488	128	23	1711
Smock, Louis G., and C. H. Bill, Danville, Ind. Spark-arrester	289,158	Nov. 27	1708	475	25	829
Smoke, David L. (See Hull and Smoke.)						
Smoot, Luther R. (See Pugh, William G., assignor.)						
Smothers, Frank E., Gloucester, Mass. Lantern	281,153	July 10	1001	280	24	184
Smouse, Charles W. (See Smouse, David, C. W., and D. H.)						
Smouse, David, C. W., and D. H., Mount Pleasant, Iowa. Sugar-evaporator	272,093	Feb. 13	633	172	23	561
Smouse, David H. (See Smouse, David, C. W., and D. H.)						
Smullen, Daniel, assignor to Excelsior Manufacturing Company, St. Louis, Mo. Cylinder-cock	284,504	Sept. 4	424	120	24	976
Smyth, David M. (See Carlton and Smyth.)						
Smyth, David M., assignor to Smyth Manufacturing Company, Hartford, Conn. Book-sewing machine	274,986	Apr. 3	130	36	23	1248
Smyth, David M., Hartford, Conn., assignor to Smyth Manufacturing Company, of Connecticut. Machine for cutting notches in the backs of books	276,296	Apr. 24	1825	508	23	1563
Smyth, David M., assignor to himself and G. W. Root, Hartford, Conn. Machine for preparing papers for physicians' powders	276,297	Apr. 24	1827	{ 508 509 }	23	1563
Smyth Manufacturing Company. (See Carlton and Smyth, assignors.)						
Smyth Manufacturing Company. (See Smyth, David M., assignor.)						
Smyth, Milton B., Holton, Kans. Tire-tightener	279,035	June 5	519	141	23	2211



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Smyth, Samuel, Pittston, Pa. Magazine-stove	286,235	Oct. 9	554	152	25	112
Smyth, Thomas A., Chicago, Ill. Insulating telegraph-wires	278,753	June 5	97	28	23	2140
Snapp, James W., assignor of one-half to M. W. Anderson, Jasper, Tenn. Lifting-jack for raising railway-tracks	276,088	Apr. 17	1569	432	23	1511
Snapp, John T., Barterville, Ky. Quilting-frame clamp	290,940	Dec. 25	1997	551	25	1259
Snedigar, Fielding, Elkader, Iowa. Snow-plow	280,528	July 3	232	61	24	42
Snediker, William E., Trenton, N. J. Metal mold for casting vises	280,769	July 3	533	149	24	94
Snell, Adolphus G., New Haven, Conn. Canopy-holder for children's carriages	281,311	July 17	1213	336	24	228
Snell, Frank H., Washington, D. C. Unison mechanism for electrical indicators	282,791	Aug. 7	380	{ 107 108 }	{ 24 24 }	{ 567 567 }
Snell Manufacturing Company. (See Harris, Darius W., assignor.)						
Snell Manufacturing Company. (See Holley, George G., assignor.)						
Snell, James A. (See Shanck, Henry K., assignor.)						
Snell, Jasper, assignor of one-half to J. Teter, Pottsville, Pa. Cock for hydrants	290,132	Dec. 11	939	266	25	1060
Snell, Luther C., assignor of one-tenth to J. L. Baxter, Olean, N. Y. Facilitating the passage of oil through pipes and making illuminating-gas	290,491	Dec. 18	1411	390	25	1151
Snelling, David R. (See Adams and Snelling.)						
Snider, James B., Pickard's Mills, Ind. Churn-power	284,769	Sept. 11	757	210	24	1038
Snider, John J. (See O'Bannon and Snider.)						
Snider, John J., and W. H. O'Bannon, Cleburne, Tex. Stalk-cutter	288,374	Nov. 13	743	202	25	644
Snider, Nicholas H., Pittsburg, Pa. Holder for grindstone-truing tools	273,625	Mar. 6	496	133	23	919
Snider's Sons, Louis. (See Ryan, J. Tyler, assignor.)						
Snively, Corydon S., and W. F. Palmer, Carmi, Ill. Button	286,860	Oct. 16	1358	372	25	261
Snodgrass, James H., Mifflinburg, Pa. Fastening for quarter-curtains	272,094	Feb. 13	635	172	23	561
Snodgrass, John M., Minneapolis, Minn. Hay-loader	277,800	May 15	1574	430	23	1910
Snoeck, Albert, Ensival, Belgium. Method of removing vegetable matter from wool and apparatus therefor	270,992	Jan. 23	1446	417	23	298
Snook, George W. (See Gibbs and Snook.)						
Snook, Virgil H., Aurora, Ill. Carpet-sweeper	271,284	Jan. 30	1801	522	23	365
Snow, Andrew, <i>et al.</i> (See Davidson, George, assignor.)						
Snow, Azariah, assignor to Bassett & Sherman, Franklin, Mass. Braid-guide for sewing-machines	284,080	Aug. 28	1971	549	24	879
Snow, Ezra H. (See Stranders, Walter, assignor.)						
Snow, Henry H., Brooklyn, N. Y. Traveling-cap	271,529	Jan. 30	2120	610	23	422
Snow, James, Columbus, Ohio. Pattern-chart for cutting out shirts	273,626	Mar. 6	495	133	23	919
Snow, Loxor B., Cleveland, Ohio. Combined check and stop valve	284,770	Sept. 11	758	211	24	1039
Snow, Marcus L. (See Pulson and Snow.)						
Snow, Stephen. (See Beal, Ezra F., assignor.)						
Snow, Stephen D. (See Leonard and Snow.)						
Snow, Victor M., Cashville, S. C. Manure-distributor	287,735	Oct. 30	2496	{ 672 673 }	{ 25 25 }	{ 484 484 }
Snow, William W., Ramapo, N. Y. Car-wheel	276,727	May 1	257	65	23	1668
Snowden, Henry, <i>et al.</i> (See Carrick, Thomas J., assignor.)						
Snowden, Lizzie B. (See Snowden, Robert C., assignor.)						
Snowden, Melissa B. (See Snowden, Robert C., assignor.)						
Snowden, Robert C., assignor to L. B. Snowden, Elizabeth, Pa. Metal-bending machine for tin-roofers	274,398	Mar. 20	1484	408	23	1105
Snowden, Robert C., assignor to M. B. Snowden, Elizabeth, Pa. Roofing-machine	283,291	Aug. 14	981	274	24	683
Snowman, John, Weld, Maine. Rowlock	287,971	Nov. 6	230	65	25	547
Snyder, Alviras, Dryden, (Etna P. O.) N. Y. Creamer	282,678	Aug. 7	241	70	24	541
Snyder, Charles L., Philadelphia, Pa. Toy target	270,141	Jan. 2	370	108	23	75
Snyder, Christian, Elizabethtown, Pa. Vehicle-wheel	271,935	Feb. 6	426	116	23	515
Snyder, Daniel. (See Ivins and Snyder.)						
Snyder, Daniel W., Selma, Ala. Mail-bag fastening	286,339	Oct. 9	712	190	25	139
Snyder, David, assignor to himself and A. L. Fisher, Grafton, Mass. Pot and kettle	279,671	June 19	1323	367	23	2362
Snyder, David, assignor of one-third to A. L. Fisher, Grafton, Mass. Pot and kettle	274,147	Mar. 20	1161	320	23	1013
Snyder, Elisha S., Snyder's Mills, W. Va. Cutting apparatus for harvesters	283,292	Aug. 14	982	274	24	683
Snyder, Fredrick P. (See McGhee, William T., assignor.)						
Snyder, Harrison. (See Strohm, Samuel D., assignor.)						
Snyder, James W., Emporium, Pa. Car-coupling	288,270	Nov. 13	602	164	25	620
Snyder, John H., Fruitport, Mich. Horse-collar	274,229	Mar. 20	1268	350	23	1068
Snyder, Joseph. (See Granger, Sumner C., assignor.)						
Snyder, Joseph, West Pittston, and D. Morse, Hugheston, Pa. Coal-cleaner	281,735	July 24	1760	{ 478 479 }	{ 24 24 }	{ 324 324 }
Snyder, Joseph W., Philadelphia, Pa. Medicinal inhaler	290,608	Dec. 18	1569	431	25	1177
Snyder, Michael L. (See Bittenbender and Snyder.)						
Snyder, Simon P., S. Stough, and T. D. Ulrick, Walton, Ind. Cultivator	290,366	Dec. 18	1234	347	25	1121
Snyder, William H. (See Frick and Snyder.)						
Snyder, William H. (See Rider, Snyder, and Frick.)						
Snyder, William H., San Francisco, Cal. Last	283,826	Aug. 28	1643	463	24	822
Snyder, William H., Waynesborough, Pa. Saw-mill set-works	284,081	Aug. 28	1972	549	24	879
Snyder, William H., and A. O. Frick, Waynesborough, Pa. Traction-engine	275,279	Apr. 3	505	139	23	1312
Sobinski, Charles O. (See Flammger and Sobinski.)						
Sobinski, Charles O., assignor of one-half to A. Meyer, St. Louis, Mo. Link-bending machine	287,736	Oct. 30	2497	{ 673 674 }	{ 25 25 }	{ 484 484 }
Société Anonyme des Anciens Etablissements Cail. (See Ferron, Alexandre, assignor.)						
Société Anonyme des Appareils Automatiques pour Accrocher et Décrocher les Wagons de Chemins de Fer. (See Gilbert, Frederic, assignor.)						
Société Anonyme des Corderies Parisiennes. (See Motiron, Pierre, assignor.)						
Société Anonyme des Produits Chimiques du Sud-Ouest. (See Menard and Hennebattu, assignors.)						
Société Anonyme Lorraine Industrielle. (See Knab, Clovis, assignor.)						
Société Industrielle des Tresses & Lacets de Saint Chamond. (See Rafer, Eugène and E., assignors.)						
Société Secondo Roos. (See Ostrogovich, Francesco, assignor.)						
Söderberg, Otto. (See Persson and Söderberg.)						
Söderström, Albert, Stockholm, Sweden. Ratchet-drill	288,882	Nov. 20	1371	378	25	762
Söderström, Albert, Stockholm, Sweden. Self-oiling drill-chuck	288,957	Nov. 20	1462	404	25	779
Soetheer, Theodor, New York, N. Y. Car-starter	274,399	Mar. 20	1485	408	23	1105
Sohn Ridge Implement Company. (See Carr, Robert S., assignor.)						
Sohn Ridge Implement Company. (See Carr and Sec, assignors.)						
Solidity Iron Last Company. (See Wells, George M., assignor.)						
Solis, John H., assignor to himself and B. McGrann, New York, N. Y. Compression basin-cock	273,177	Feb. 27	2015	566	23	815

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Solliday, Edward R. (See Fisher and Solliday.)						
Solmans, Alden, <i>et al.</i> (See Ryder, Martin H., assignor.)						
Solmans, Alden, South Norwalk, Conn. Compound for stiffening bats	287,972	Nov. 6	231	.....	25	548
Solomon, Thomas D., Corsicana, Tex. Kitchen-scale	280,252	June 26	2011	565	23	2491
Solomons, Edward, Sumter, S. C. Fire-escape	281,154	July 10	1002	281	24	194
Somers Brothers. (See Atkinson, William H., assignor.)						
Somers, George E., assignor to Bridgeport Brass Company, Bridgeport, Conn. Metallic tip and coupling for electrical conductors	284,915	Sept. 11	927	261	24	1069
Somers, George E., and S. G. Stoddard, assignors to Bridgeport Brass Company, Bridgeport, Conn. Shade-holder and method of making the same	285,172	Sept. 18	1255	352	24	1133
Somers, William R., Bridgeport, Conn. Driving attachment for sewing-machines	273,627	Mar. 6	496	133	23	919
Somers, William R., Bridgeport, Conn. Power-transmitter	282,679	Aug. 7	242	70, 71	24	541
Somerset Co-operative Foundry Company. (See Fuller, Cornelius, assignor.)						
Somerville, William, St. Louis, Mo. Reflector-bracket	270,703	Jan. 16	1090	312	23	228
Somerville, William, St. Louis, Mo. Ornamenting glass lamp fonts or bowls	286,236	Oct. 9	555	152	25	112
Somerville, William, St. Louis, Mo. Lamp-shade holder	286,237	Oct. 9	555	152	25	112
Somes, Daniel E., Washington, D. C. Refrigerator-car	278,285	May 22	2174	{ 599 600 }	{ 23 23 }	2019
Somes, Frank S., and S. H. Kimball, Boston, Mass., assignors, by mesne assignments, to said Kimball. Lubricator	282,127	July 31	2277	625	24	418
Sommer, Charles. (See Kully, Louis, assignor.)						
Sommer, John, Jr., Newark, N. J. Fancet	275,727	Apr. 10	1118	306	23	1425
Sonier, Frank, assignor of one-half to W. E. Kinsey, Peoria, Ill. Separating condenser and cooler	278,056	May 22	1881	514	23	1969
Sonn, Leopold, New York, N. Y. Show box and card	271,936	Feb. 6	427	116	23	515
Sonntag, Ernst, Lauban, Prussia, Germany. Steam-actuated valve and expansion-gear	270,854	Jan. 16	1265	{ 364 365 }	{ 23 23 }	262
Sontheimer, Engelbert, assignor of one-half to C. Beard, New York, N. Y. Purse or bag clasp	277,064	May 8	699	182	23	1752
Sook, Joseph Q., Olivet, Kans. Hen's nest	275,088	Apr. 3	274	75	23	1273
Soper, W. Horace, Baltimore, Md. Card or ticket holder	274,400	Mar. 20	1486	409	23	1106
Sörensen, Christen, Sundsvall, Sweden. Transportable engine	275,089	Apr. 3	275	75	23	1273
Sorg, Albert, and F. D. Phillips, Ann Arbor, Mich. Paint	289,893	Dec. 11	621	.....	25	1002
Souder, Jacob J., Washington, D. C. Grain scourer and polisher	277,950	May 22	1751	{ 477 478 }	{ 23 23 }	1946
Souders, John W., and J. Prutzman, Muncie, Ind. Brick and tile kiln	289,938	Dec. 11	702	197	25	1016
Souers, Jacob G., Mount Vernon, Ill. Mole-trap	275,280	Apr. 3	506	140	23	1312
Soule, Buren M., Cedar Rapids, Iowa. Running-gear for vehicles	283,293	Aug. 14	984	{ 274 275 }	{ 24 24 }	683
Soulé, George W., Meridian, Miss. Blind-slat fastener	272,914	Feb. 27	1699	475	23	759
Soule, George W., Boston, Mass. Box-packing press	279,198	June 12	734	201	23	2259
Soule, Leander, Taunton, Mass. Music-rack for pianos	277,951	May 22	1752	478	23	1946
Soulis, Edward N., Newton, Mass. Oil-stone	278,190	May 22	2048	563	23	1998
South Bend Iron Works. (See Anderson, Charles, assignor.)						
South Bend Iron Works. (See Anderson and Oliver, assignors.)						
South Bend Iron Works. (See Oliver, James, assignor.)						
Southack, Cyprian F., Rathbone Place, county of Middlesex, assignor of one-half to W. Downie, London, England. Stringing pianos	279,454	June 12	1057	292	23	2311
Southard, Wilber F., Berlin, Ark. Churn	282,232	July 31	2405	661	24	440
Souther, George, Boston, Mass. Deck dumping-scow	273,178	Feb. 27	2016	567	23	815
Souther, John. (See Dooley, Thomas B., assignor.)						
Southwick, Amos A., Ashtabula, Ohio. Nail-keg	274,045	Mar. 13	1017	279	23	1016
Southwick, Amos A., Ashtabula, Ohio. Bale-tie	277,367	May 8	1059	285	23	1815
Southwick, Amos A., and F. A. Wittich, Ashtabula, Ohio; said Wittich assignor to said Southwick. Bale-tie	277,432	May 8	1135	306	23	1827
Southwick, Andrew S., assignor to G. L. Vose, Providence, R. I. Chain bracelet	280,253	June 26	2012	565	23	2491
Southwick, Daniel F., Meriden, Conn. Die for forming carriage-step pads	277,853	May 15	1635	445	23	1921
Southwick, David E., Ogdensburg, N. Y. Car-coupling	280,254	June 26	2013	566	23	2491
Southworth, Albert H., Lockport, N. Y., assignor to Illinois Iron & Bolt Company, Carpentersville, Ill. Axle-skein	277,624	May 15	1372	370	23	1873
Sowers, B. V. (See Flannagan, John D., assignor.)						
Soyez, Charles L., Brussels, Belgium. Elevator	276,491	Apr. 24	2079	577	23	1606
Spaethe, Otto, Gera, Germany. Accordion	277,368	May 8	1060	285	23	1815
Spalding, Albert J., Alma City, Minn. Vehicle-spring	287,063	Oct. 23	1627	447	25	314
Spang, Chalfant & Co. (See Evans, John, assignor.)						
Spang, Henry W., Reading, Pa. Lightning-conductor	273,179	Feb. 27	2017	567	23	815
Spang, Henry W., Reading, Pa. Electric motor	279,036	June 5	520	142	23	2212
Spang, Henry W., Reading, Pa. Automatic electric switch	281,937	July 24	2016	552	24	370
Spang, Henry W., Reading, Pa. Lightning-conductor	284,082	Aug. 28	1973	550	24	879
Spang, Henry W., Reading, Pa. Combined support and switch for electric lamps	284,505	Sept. 4	425	121	24	976
Spang, Henry W., Reading, Pa. Electrical conductor for oil-tanks	286,086	Oct. 2	376	104	25	69
Spang, Jacob D., Jacksonville, Fla. Game-board	271,530	Jan. 30	2120	610	23	492
Spangler, Daniel, Hanford, Cal. Channeling rivers and other navigable streams	275,952	Apr. 17	1402	387	23	1482
Spangler, John H., Baltimore, Md. Ball-rack for pool-tables	288,675	Nov. 20	1119	308	25	717
Spangler, Joseph, Rock Island, Ill. Extension-ladder	281,805	July 24	1857	507	24	342
Spanier, Adam. (See Schaffer and Spanier.)						
Spare, George E., New Haven, Conn. Carriage-apron	273,180	Feb. 27	2018	567	23	815
Spare, George E., New Haven, Conn. Two-wheeled vehicle	274,401	Mar. 20	1487	409	23	1106
Sparks, Lorenzo H., Triumph, Ohio. Scale-board-rounding machine	269,893	Jan. 2	84	25	23	18
Sparks, Thomas, Kenton town, Ky. Car-coupling	281,155	July 10	1003	281	24	184
Sparks, William A., assignor to Stein Manufacturing Company, Rochester, N. Y. Burial-casket	288,189	Nov. 6	487	136	25	592
Sparks, William A., assignor to Stein Manufacturing Company, Rochester, N. Y. Burial-casket	289,783	Dec. 4	508	141	25	974
Sparks, William E., assignor to P. & F. Corbin, New Britain, Conn. Sash-fastener	270,993	Jan. 23	1448	417	23	298
Sparks, William E., assignor to P. & F. Corbin, New Britain, Conn. Door-latch	275,533	Apr. 10	874	236	23	1383
Sparks, William E., assignor to P. & F. Corbin, New Britain, Conn. Latch	279,837	June 19	1505	421	23	2395
Sparks, William E., assignor to P. & F. Corbin, New Britain, Conn. Sash-fastener	279,838	June 19	1506	421	23	2395
Sparks, William E., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Door-latch	273,403	Mar. 6	212	57	23	870
Sparks, William E., assignor to Kempshall Manufacturing Company, New Britain, Conn. Sash-fastener	284,506	Sept. 4	426	121	24	976
Sparks, William H., Camden, N. J. Vehicle-dash fastening	285,519	Sept. 25	1662	467	24	1212
Sparling, John A., London, county of Middlesex, England. Machinery for covering telephone and telegraph wires, &c.	282,680	Aug. 7	244	71	24	542



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Spaulding, Addison R., Lake City, Minn. Railway-tie.....	281,806	July 24	1858	507	24	342
Spaulding, Doliver S., Mansfield, Mass. Neck or bracelet chain.....	290,278	Dec. 18	1124	316	25	1100
Spaulding, Ebenezer F. (See Arthur, Spaulding, and Davison.).....						
Spaulding, Eli A., Athens, Ohio. Duplex hand seed-planter.....	273,628	Mar. 6	497	133	23	919
Spaulding, Elijah F. (See Hallock and Spaulding.).....						
Spaulding, Elijah F., Hartford, Conn. Fastening for pulleys.....	286,340	Oct. 9	713	{ 190 191	{ 25	139
Spaulding, Elijah F., assignor of two-thirds to J. K. Hallock and E. S. Smith, Erie, Pa. Cut-off-valve gear.....	281,314	July 17	1220	{ 337 338	{ 24	228
Spaulding, Elijah F., and J. K. Hallock, assignors of one-third to E. S. Smith, Erie, Pa. Cut-off-valve gear.....	281,313	July 17	1218	337	24	228
Spaulding, Elijah F., and J. K. Hallock, assignors of one-third to E. S. Smith, Erie, Pa. Cut-off-valve gear.....	281,315	July 17	1223	{ 338 339	{ 24	229
Spaulding, George H., assignor of one-half to W. Deering, Chicago, Ill. Gavel-sizing mechanism for reapers.....	282,581	Aug. 7	128	38	24	522
Spaulding, Henry E., Worcester, assignor of one-third to H. A. Spaulding, Boston, Mass. Bottle-stopper.....	283,432	Aug. 21	1170	329	24	723
Spaulding, Horatio A. (See Spaulding, Henry E., assignor.).....						
Spaulding, John, San Francisco, Cal. Machine for untwisting and spinning hair from and into rope.....	276,492	Apr. 24	2080	578	23	1607
Spaulding, John, San Francisco, Cal. Sediment-collector for steam-boilers.....	276,493	Apr. 24	2081	578	23	1607
Spaulding, John, San Francisco, Cal. Carpet-beating machine.....	276,494	Apr. 24	2082	578	23	1607
Spaulding, Nathan W., San Francisco, Cal. Saw-tooth. (Reissue).....	10,312	Apr. 10	1219	333	23	1442
Spawn, Abel F., Oakland, Cal. Fire-extinguisher.....	280,410	July 3	87	23	24	18
Spawn, Abel F., Oakland, Cal. Apparatus for extinguishing fires on vessels.....	285,520	Sept. 25	1662	467	24	1212
Spear, Arthur. (See Angell and Spear.).....						
Spear, James, Philadelphia, Pa. Damper.....	280,411	July 3	89	24	24	18
Spear, James, Philadelphia, Pa. Heating, ventilating, and draft-regulating apparatus for railway-cars.....	286,341	Oct. 9	714	191	25	139
Spear, Samuel S., South Weymouth, Mass. Piping.....	285,850	Oct. 2	87	26	25	18
Spear, Thomas J., assignor to himself and C. E. Girardey, New Orleans, La. Method of and apparatus for extracting the fibers of jute and cotton plants.....	275,953	Apr. 17	1403	367	23	1483
Spearing, John F., New Orleans, La. Deepening the channels of rivers, &c.....	275,534	Apr. 10	875	{ 236 237	{ 23	1383
Spears, Henry H., Paris, Ky. Clover-seed stripper.....	278,286	May 22	2180	600	23	2020
Speckhart, Gustav. (See Wiedmann, Heinrich, assignor.).....						
Speckden, Robert R., Astoria, Oreg. Brace for axle-spindles.....	274,230	Mar. 20	1269	350	23	1068
Speed, Francis M., Walla Walla, Wash. Ter. Laying underground telegraph-wires.....	286,861	Oct. 16	1359	372	25	261
Speer, David H., Pittsburg, Pa. Switch-lock.....	276,089	Apr. 17	1569	432	23	1511
Speer, Garrett F., Philadelphia, Pa. Drying-kiln.....	271,144	Jan. 23	1620	406	23	327
Speer, William W., Pittsburg, Pa. Plow.....	290,714	Dec. 25	1713	472	25	1210
Speisser, Ottomar, New York, N. Y. Coating articles in imitation of moss-bark.....	284,771	Sept. 11	758	211	24	1039
Spelman Brothers. (See Spelman, William C., assignor.).....						
Spelman, Mark R., New Orleans, La. Combination table and radiator.....	273,905	Mar. 13	857	232	23	988
Spelman, Patrick H., New York, N. Y. Fire-extinguishing apparatus and escape.....	289,869	Dec. 11	621	173	2	1002
Spelman, William C., Brooklyn, assignor to Spelman Brothers, New York, N. Y. Fan.....	270,611	Jan. 16	970	280	23	206
Spence, Sidney D., Ludlow Grove, Ohio. Grate.....	278,191	May 22	2049	563	23	1998
Spencer Arms Company. (See Frazier, Joseph W., assignor.).....						
Spencer, Charles F., Rochester, N. Y. Fire-escape.....	272,389	Feb. 13	1006	282	23	626
Spencer, Charles F., Rochester, N. Y. Fire-escape.....	283,159	Aug. 14	816	228	24	651
Spencer, Christopher M., assignor to Hartford Machine Screw Company, Hartford, Conn. Metal-screw machine.....	275,431	Apr. 10	748	199	23	1362
Spencer, Edward E., New York, N. Y. Rivet-setting machine.....	277,369	May 8	1061	286	23	1815
Spencer, Edward H., Jr., assignor to Cooke & Eddy, Providence, R. I. Button and stud.....	285,080	Sept. 18	1137	317	24	1113
Spencer, Frank J. (See Bartlett, Charles, assignor.).....						
Spencer, Frank T., et al. (See Welles, Richard J., assignor.).....						
Spencer, Frank W., Flint, Mich. Railway foot-guard.....	287,973	Nov. 6	232	66	25	548
Spencer, George H., et al. (See Hodges, Horace F., assignor.).....						
Spencer, George N., Three Rivers, Mich. Velocipede.....	270,913	Jan. 23	1345	388	23	282
Spencer, George N., assignor of one-half to H. Gaskins, Three Rivers, Mich. Railway-velocipede.....	288,507	Nov. 13	912	249	25	674
Spencer, George S. (See Spencer, John E. and G. S.).....						
Spencer, Harvey A. (See Cutting and Spencer.).....						
Spencer, Hedges L. (See White, Henry C., assignor.).....						
Spencer, Henry P., Forestville, N. Y. Step-ladder.....	288,883	Nov. 20	1372	378	25	762
Spencer, John E. and G. S., Stratford, Conn. Advertising-windmill.....	276,640	May 1	120	32	23	1647
Spencer, John N., Newark, assignor of one-half to T. S. Bellah, Wilmington, Del. Polishing device.....	275,954	Apr. 17	1404	387	23	1483
Spencer, John P., South Pueblo, Colo. Gold-washer.....	272,788	Feb. 20	1517	428	23	721
Spencer, Joseph N., and T. H. Dunn, assignors of one-third to C. N. Knox, South Manchester, Conn. Bolt.....	284,253	Sept. 4	123	34	24	925
Spencer, Julius A., Dwight, Ill. Baling-press.....	278,371	May 29	2316	634	23	2053
Spencer, Robert, Brooklyn, N. Y. Saddle.....	270,142	Jan. 2	370	108	23	76
Spencer, Thomas, assignor to Meriden Britannia Company, Meriden, Conn. Covered dish.....	275,281	Apr. 3	507	140	23	1312
Spencer, William L., Springfield, Mass. Needle-threading attachment for sewing-machines.....	282,233	July 31	2406	662	24	440
Spengler, John, assignor of one-half to N. F. Weber, Clarion, Iowa. Car-mover.....	285,698	Sept. 25	1876	534	24	1252
Sperling, Isidor, assignor to J. Strauss, Chicago, Ill. Shirt.....	273,906	Mar. 13	858	232	23	939
Sperry, Alfred W., Hartford, Conn., assignor of one-third to T. J. Montgomery, Boston, Mass. Fire-escape.....	276,090	Apr. 17	1570	432	23	1511
Sperry, Alfred W., Hartford, Conn., assignor to himself and T. J. Montgomery, Boston, Mass. Sharpener for knives, &c.....	290,367	Dec. 18	1235	348	25	1121
Sperry, Alfred W., Hartford, Conn., assignor to himself and T. J. Montgomery, Boston, Mass. Composition for sharpening and grinding metals.....	290,368	Dec. 18	1236	.....	25	1121
Sperry, Elmer A., Cortland, N. Y. Combined annunciator and alarm system.....	286,970	Oct. 16	1499	412	25	284
Sperry, Joseph, Philadelphia, Pa. Machine for heeling boots and shoes.....	275,535	Apr. 10	876	237	23	1384
Spicer, George A., assignor to W. C. Edge, Newark, N. J. Bracelet.....	276,091	Apr. 17	1571	433	23	1511
Spicer, Pratt A., Marshall, Mich. Hay-tedder.....	280,873	July 10	664	187	24	124
Spicer, William A., Providence, R. I. Grate.....	270,499	Jan. 9	814	238	23	169
Spicer, William A., Providence, R. I. Oven-door for cooking-stoves.....	278,057	May 22	1862	515	23	1970
Spicer, William A., Providence, R. I. Cooking stove and range.....	284,916	Sept. 11	928	261	24	1069
Spickerman, Myron, et al. (See Farr, George, assignor.).....						
Spiegel, Henry L., Indianapolis, Ind., assignor to F. W. Mix, New Britain, Conn. Case for locks. (Reissue).....	10,361	July 31	2721	749		494

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Spiegel, William, Newport, Ky., assignor to McIlvain & Spiegel, Cincinnati, Ohio. Ren- dering-tank	269,969	Jan. 2	174	50	23	36
Spielhagen, Franz O. (See Heyer, Ludwig, assignor.)						
Spelman, William, assignor to T. H. Rockwell, Oneonta, N. Y. Railway-switch	272,789	Feb. 20	1518	428	23	721
Spielmann, Jacob. (See Spielmann, Peter and J.)						
Spielmann, Peter and J., Chicago, Ill. Automatic feeder for vinegar-generators	287,064	Oct. 23	1627	448	25	314
Spieess, Oscar, Philadelphia, Pa. Car-brake	280,255	June 26	2014	566	23	2491
Spiller, Elisha, Amite City, La. Seed-planter	279,037	June 5	521	142	23	2212
Spindle, Clarence J., Loretto, Va. Horse-detacher	281,938	July 24	2018	552	24	371
Spindle, Joseph C., Loretto, Va. Millstone-dress	285,081	Sept. 18	1138	318	24	1113
Spitzer, David C., North Robinson, Ohio. Butter-mold	285,851	Oct. 2	88	26	25	18
Spitznass, William, New Athens, Ill. Transplanter	273,181	Feb. 27	2019	568	23	815
Spoehr, Fritz, assignor of one-half to K. Weber, Philadelphia, Pa. Spring bed-bottom	276,918	May 1	489	128	23	1711
Spofford, Nelson, Haverhill, Mass. Cast faucet-joint	274,402	Mar. 20	1488	409	23	1106
Spofford, Nelson, Haverhill, Mass. Imitation wipe-joint	284,917	Sept. 11	929	261	24	1069
Spohr, Alfred F., assignor of one-half to J. Stortz, Grand Island, N. Y. Single-tree clip	284,772	Sept. 11	759	211	24	1039
Spooner, Alvah F., Sterling, Ill. Punching-machine	289,577	Dec. 4	257	72	25	933
Spooner, D. Brainerd, New York, N. Y. Liquid-meter	287,587	Oct. 30	2300	632	25	447
Spooner, D. Brainerd, Boston, Mass. Method of and registering mechanism for determi- nating the amount of the flow of water through a meter	287,588	Oct. 30	2301	632	25	447
Spooner, Daniel, Blue Mound, Ill. Smooth-rope and knotted-wire check-rower	278,622	May 29	2617	714	23	2106
Spooner, Samuel H., Sr., et al. (See Bennett, Karl W., assignor.)						
Spooner, Samuel P., Bucklin, assignor of fifty-one seventy-seconds to D. B. Holmes, R. H. Drennon, W. C. Duvall, and E. Werk, Kansas City, Mo. Metallurgic furnace	274,403	Mar. 20	1489	409	23	1106
Sprague, Austin V. M., assignor to Taylor Brothers, Rochester, N. Y. Razor-strop	276,092	Apr. 17	1573	433	23	1511
Sprague, Charles D. (See Sprague, Dudley D. and P. J., assignors.)						
Sprague, Charles D., Chilhowee, and P. J. Sprague, Higbee, assignors of one-third to D. D. Sprague, California, Mo. Straw-stacking attachment for thrashing-machines	289,460	Dec. 4	101	29	25	904
Sprague, Charles E., New York, N. Y. Office check-book	282,393	July 31	2606	716	24	475
Sprague, Dudley D. (See Sprague, Charles D. and P. J., assignors.)						
Sprague, Dudley D., California, and P. J. Sprague, Higbee, assignors of one-third to C. D. Sprague, Chilhowee, Mo. Straw-stacker attachment for thrashing-machines	284,507	Sept. 4	427	121	24	976
Sprague, Dudley D., California, and P. J. Sprague, Higbee, assignors to themselves and C. D. Sprague, Sedalia, Mo. Straw-stacker for thrashing-machines. (Reissue)	10,406	Nov. 20	1469	406	25	781
Sprague, Dudley D., California, and P. J. Sprague, Higbee, assignors to themselves and C. D. Sprague, Chilhowee, Mo. Straw-stacker for thrashing-machines	289,461	Dec. 4	103	30	25	905
Sprague, Dudley D., California, and P. J. Sprague, Higbee, assignors to themselves and C. D. Sprague, Chilhowee, Mo. Straw-stacker for thrashing-machines	289,462	Dec. 4	105	30	25	905
Sprague, Edward W., Buell's Lowell, Ohio. Bolt-lock	283,725	Aug. 21	1514	427	24	788
Sprague, Edwin L. (See Gregory, George W., assignor.)						
Sprague, Edwin L., Boston, Mass. Shoe	283,035	Aug. 14	670	188	24	626
Sprague, Homer B., Boston, Mass. Windmill	273,182	Feb. 27	2020	568	23	816
Sprague, Ira A., Glenwood, Iowa. Truss-bridge	287,974	Nov. 6	232	66	25	548
Sprague, Nathan K., Milford, Mass. Elevator-hatchway guard	288,684	Nov. 20	1373	378	25	762
Sprague, Nathaniel B. (See Beery and Sprague.)						
Sprague, Pearley J. (See Sprague, Charles D. and P. J.)						
Sprague, Pearley J. (See Sprague, Dudley D. and P. J.)						
Sprague, Pearley J. (See Sprague, Dudley D. and P. J.) (Reissue.)						
Sprague, Zebulon, Stockton, Cal. Vehicle-wheel	271,531	Jan. 30	2121	610	23	422
Spray, Christopher, Sedalia, Mo. Music dealer's furnishing-case	285,317	Sept. 18	1414	400	24	1163
Spreckels, John D., San Francisco, Cal. Ash-hoist	289,159	Nov. 27	1709	475	25	830
Sprick, Theodore. (See Utz and Sprick.)						
Springer, Frederick J., Edwardsville, Ill. Vehicle-spring	280,874	July 10	665	187	24	124
Springer, Frederick J. and O. J., Edwardsville, Ill. Two-wheeled vehicle	280,875	July 10	666	188	24	124
Springer, Henry J., Edwardsville, Ill. Stalk-cutter	270,994	Jan. 23	1449	417	23	298
Springer, James F. and W. N., Indianapolis, Ind. Straw-stacker	287,882	Nov. 6	115	34	25	538
Springer, Joseph H., Sr., Pittsburg, Pa. Manufacture of eye-bars	270,143	Jan. 2	371	108	23	76
Springer, Lewis C., Wilmington, Del. Grinding-mill	290,369	Dec. 18	1237	348	25	1121
Springer, Otto J. (See Springer, Frederick J. and O. J.)						
Springer, T. G. (See Bain, Forcé, assignor.)						
Springer, Theodore G., New York, N. Y. Process of and apparatus for manufacturing gas	280,770	July 3	534	150	24	94
Springer, Theodore G., New York, N. Y. Process of and apparatus for manufacturing gas	284,985	Sept. 11	1006	284	24	1084
Springer, Theodore G., New York, N. Y. Manufacturing illuminating-gas	287,185	Oct. 23	1779	488	25	343
Springer, William N. (See Springer, James F. and W. N.)						
Springfield Engine and Thresher Company. (See Stephan, Henry, assignor.)						
Springfield Engine and Thresher Company. (See Stuart, Alexander, assignor.)						
Springsteen, Robert E., et al. (See Wishard, Lucinda B. J., assignor.)						
Sproule, Adam W., assignor of one-half to C. H. Sproule, Joliet, Ill. Barbed wire for fences	275,536	Apr. 10	878	237	23	1384
Sproule, Charles H. (See Sproule, Adam W., assignor.)						
Spruce, James, assignor to Scovill Manufacturing Company, Waterbury, Conn. Spring- hinge	277,370	May 8	1062	286	23	1815
Spurgeon, Samuel J., Houstonia, Mo. Paper and envelope package	279,283	June 12	829	230	23	2275
Spurgeon, Samuel J., Liberty, Mo. Automatic circuit-closer for telegraph-keys	284,508	Sept. 4	423	121	24	976
Spurrier, Joseph H., Joplin, Mo. Hot-air magazine	286,648	Oct. 16	1094	294	25	214
Squire, George L. (See Stevens, Henry B., assignor.)						
Squire, James E., Glencoe, Ontario, Canada. Car-truck	289,160	Nov. 27	1710	476	25	830
Squires, Edward. (See Hutson and Squires.)						
St. André, Louis. (See Hall and St. André.)						
St. Charles, Charles, New York, N. Y. Ore-separator	283,296	Aug. 14	987	275	24	684
St. Clair, Franklin M., Silver City, Idaho Ter. Device for utilizing the force of currents and streams	271,145	Jan. 23	1622	466	23	327
St. Clair, Lawrence. (See Weeks and St. Clair.)						
St. John, Garland B., Cedar Rapids, Iowa. Landside for plows	278,623	May 29	2618	714	23	2106
St. John, Garland B., Cedar Rapids, Iowa. Rolling landside-cutter	287,336	Oct. 23	1970	538	25	376
St. John, George H., Detroit, assignor of one-half to W. W. Andrus, Attica, Mich. Bag- fastener	271,536	Jan. 30	2126	612	23	423
St. John, Lewis R. (See St. John, Roscoe M., assignor.)						
St. John, Roscoe M., assignor of one-half to L. R. St. John, Albany, Ind. Post-driver	274,989	Apr. 3	134	37	23	1248
St. John, William W., St. Louis, Mo. Piston-packing	275,955	Apr. 17	1405	387	23	1483



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St. Louis Iron and Machine Works. (See Schinke, Carl, assignor.)						
St. Nicholas Toy Company. (See Owsley, Heaton, assignor.)						
St. Nicholas Toy Company. (See Scherling, Rudolph C., assignor.)						
Staahe, William H., <i>et al.</i> (See Bendor, Joseph, assignor.)						
Stabel, John A., Buffalo, N. Y. Culinary vessel	282,394	July 31	2607	716	24	475
Stabler, James P., Sandy Spring, Md. Magneto-generator of electricity	286,497	Oct. 9	892	241	25	172
Stackpole, Aaron, Jr., Boston, Mass. Street-sweeping machine	287,186	Oct. 23	1782	488 489	25	343
Stacy, George W., Marietta, Miss. Cultivator	285,318	Sept. 18	1415	400	24	1163
Stacy, Sanford E., Springfield, Mass. Adjustable gage	288,375	Nov. 13	744	202	25	644
Stadon, Silas M. (See Laurenson, Stadon, and Laurenson.)						
Staebler, Theodor. (See Claussen and Staebler.)						
Staff, Peter N. (See Freeland and Wharry, assignors.)						
Staff, Peter N. (See Gosnell, Andrew J., assignor.)						
Staff, Peter N. (See Yount, Warren, assignor.)						
Stafford, Albert E., Galesburg, Mich. Thill-coupling	283,827	Aug. 28	1644	463	24	822
Stafford, Palmer, Green River, Ill. Wagon-box fastener	277,801	May 15	1575	430	23	1910
Stahl, Harlow C., assignor to Fremont Cultivator Company, Fremont, Ohio. Standard-clamp	270,855	Jan. 16	1266	365	23	262
Stahlin, Carl A., Stockholm, Sweden. Bottle-stopper	279,455	June 12	1058	293	23	2311
Stahlm, Carl A., Stockholm, Sweden. Bottle stopper	288,885	Nov. 20	1374	379	25	762
Stahmer, Herman F., New York, N. Y. Coach	278,463	May 29	2438	662	23	2073
Stahmer, Herman F., assignor of one-half to H. Brewster, J. W. and C. M. Britton, New York, N. Y. Two-wheeled vehicle	271,532	Jan. 30	2122	611	23	422
Staib, Henry, New York, N. Y. Paper-hanging machine and rack	276,728	May 1	259	66	23	1668
Stambaugh, George W., Troy, Ill. Extension step-ladder	274,526	Mar. 27	1676	465	23	1144
Stamour, John B., assignor to T. Cunningham, L. and G. Brown, H. B. Lincoln, F. P. Pendleton, and H. E. Cunningham, Philadelphia, Pa. Loom-temple	274,404	Mar. 20	1490	410	23	1106
Stamp, John H., Mount Union, Ohio. Holdback for vehicles	272,492	Feb. 20	1147	322	23	655
Stanard, Robert T., Nashville, Tenn. Arch for street-lights	288,132	Nov. 6	420	119	25	581
Standard Boiler and Smoke Consuming Furnace Company. (See Blackburn, George, assignor.)						
Standard Cable Company. (See McElroy, William J., assignor.)						
Standard Cable Company. (See Waring, Richard S., assignor.)						
Standard Electric Manufacturing Company. (See Calahan and Delany, assignors.)						
Standard Electric Manufacturing Company. (See Delany, Patrick B., assignor.)						
Standard Time Company. (See Willson, Robert W., assignor.)						
Standing, William, St. Louis, Mo. Trace holder and detacher	276,919	May 1	490	129	23	1712
Standish, Albert, Columbus, Ohio. Foot-power hammer	280,969	July 10	782	217	24	143
Stanek, Ladislav, Prague, Bohemia, Austria-Hungary, assignor to American Steam Gauge Company, Boston, Mass. Steam-engine indicator	290,256	June 26	2015	566	23	2491
Staniels, Charles E. (See Burris and Staniels.)						
Staniels, Eva F. (See Burris and Staniels, assignors.)						
Stanley, Henry, and N. Cornelius, St. Louis, Mo. Gear-wheel	277,802	May 15	1575	430	23	1910
Stanley, Henry D. (See Doolittle and Stanley.)						
Stanley, Henry D., and G. Doolittle, Bridgeport, Conn. Electric conductor	283,433	Aug. 21	1171	329	24	723
Stanley, James, New York, N. Y. Metallic plastering surface	290,133	Dec. 11	940	206	25	1060
Stanley, James D., Wilmington, N. C. Apparatus for charring timber	282,395	July 31	2607	716	24	475
Stanley, Robert V. (See Herkimer, Jacob, assignor.)						
Stanley Rule and Level Company. (See Campbell, John, assignor.)						
Stanley Rule and Level Company. (See Traut, Justus A., assignor.)						
Stanly, Nathan K., Newburyport, Mass. Bottle-tag	275,432	Apr. 10	750	200	23	1362
Stanly, Nathan K., Newburyport, Mass. Tag for bottles	276,298	Apr. 24	1828	509	23	1563
Stannard, William H., Lyme, Conn. Bench-dog	282,792	Aug. 7	382	108	24	567
Stansbury, John W., and J. M. Hedrick, Osceola, Iowa. Lining for burial-caskets, &c	283,526	Aug. 21	1276	-----	24	742
Stanson, James, <i>et al.</i> (See Byrnes, Joseph, assignor.)						
Stanton, Gerald N., New York, N. Y. Device for trimming and polishing the nails	282,793	Aug. 7	383	108	24	567
Stanton, John, and C. Reing, Cincinnati, Ohio. Toy	275,282	Apr. 3	508	140	23	1313
Stanton, Lafayette J., assignor of one-half to S. E. Chapman, Millbrook, Mich. Clamp for harrow-teeth	271,938	Feb. 6	427	117	23	516
Stanton, Philena, Millbrook, Mich. Harrow-tooth	278,287	May 22	2181	600	23	2020
Stanton, Sarah B., New York, N. Y. Brush-handle	287,187	Oct. 23	1783	489	25	343
Stanwood, Frank H., and M. B. Miller, Chicago, Ill. Store-service apparatus	282,582	Aug. 7	130	39	24	523
Stanwood, Thomas L., Brunswick, Me. Box-opener	278,192	May 22	2050	563	23	1998
Staples, Elial M., assignor of one-third to D. A. Stewart, Cleveland, Ohio. Thread-cutter for sewing-machines	280,970	July 10	784	217	24	144
Staples, George B. (See Coburn, John G., assignor.)						
Stapleton, Timothy W., Portland, assignor to J. G. McBride, Pendleton, Oreg. Sand-guard for railways	285,700	Sept. 25	1877	535	24	1253
Stapp, Charles R., <i>et al.</i> (See Bnshfield, Samuel B., assignor.)						
Star Electric Light and Power Company of the United States. (See Loryea and Palmer, assignors.)						
Star Electric Light and Power Company of the United States. (See Shedlock, Alfred, assignor.)						
Starbuck, Fielding M., and R. M. Taylor, Ansted, W. Va. Dinner-pail	277,371	May 8	1063	286	23	1815
Stark, Lewis G., <i>et al.</i> (See Green, William W., assignor.)						
Stark, Michael J., Buffalo, N. Y., assignor to G. J. Record, Conneant, Ohio. Sap-spout	279,284	June 12	829	230	23	2275
Stark, Sali, New York, N. Y. Shirt	282,234	July 31	2408	662	24	440
Stark, Sali, New York, N. Y. Shirt-bosom	285,699	Sept. 25	1877	535	24	1252
Stark, William F., New York, N. Y. Coupon-clipper	284,773	Sept. 11	720	211	24	1039
Stark, William M., and F. George, Mayfield, Ky.; said George assignor to said Stark. Hair-tonic	284,918	Sept. 11	930	-----	24	1070
Starke, Fred C., and P. J. Crowley, Milwaukee, Wis. Steam-shovel	271,939	Feb. 6	428	117	23	516
Starke, Fred C., and P. J. Crowley, Milwaukee, Wis. Breaking-down shovel	271,940	Feb. 6	430	117	23	516
Starke, Fred C., and P. J. Crowley, Milwaukee, Wis. Method of and device for the application of cable-power to steam-shovels	272,790	Feb. 20	1519	428	23	721
Starkey, William, <i>et al.</i> (See Engelking, George L., assignor.)						
Starks, John L., Sharon Grove, Ky. Rotary engine	274,669	Mar. 27	1845	514	23	1175
Starley, John K., assignor to Coventry Machinists Company, (limited), Coventry, county of Warwick, England. Tricycle	274,231	Mar. 20	1270	351	23	1068
Starling, George S., New York, N. Y. Advertising-stand	282,794	Aug. 7	384	108	24	567
Starr Brothers Bell Company. (See Bloomfield, Ellis S., Jr., assignor.)						
Starr, E. Eugene. (See Starr, Eli T. and E. E.)						
Starr, Eli T. (See Gilbert and Starr.)						
Starr, Eli T. (See Johnston, Brawne, Starr, and Gilbert.)						
Starr, Eli T. (See Weston and Starr.)						
Starr, Eli T., Philadelphia, Pa. Artificial tooth	276,920	May 1	491	129	23	1712

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Starr, Eli T., assignor to S. S. White, Philadelphia, Pa. Dental engine .....	276,299	Apr. 24	1828	{ 509 510	} 23	1563
Starr, Eli T., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental engine .....	278,464	May 29	2429	{ 662 663		2073
Starr, Eli T., assignor to J. W. and J. M. White and H. M. Lewis, trustees, Philadelphia, Pa. Dental drill .....	276,921	May 1	493	129	23	1712
Starr, Eli T., Philadelphia, Pa., assignor of one-half to W. J. Peyton, Washington, D. C., H. M. Lewis, and J. W. White, Philadelphia, Pa. Secondary electric battery .....	279,839	June 19	1507	{ 421 432	} 23	2395
Starr, Eli T., Philadelphia, Pa., assignor of one-half to W. J. Peyton, Washington, D. C., H. M. Lewis, and J. W. White, Philadelphia, Pa. Secondary battery .....	282,396	July 31	2608	716	24	476
Starr, Eli T., Philadelphia, Pa., assignor of one-half to W. J. Peyton, Washington, D. C., H. M. Lewis and J. W. White, Philadelphia, Pa. Secondary battery .....	283,295	Aug. 14	986	275	24	684
Starr, Eli T., Philadelphia, Pa., assignor of one-half to W. J. Peyton, Washington, D. C., H. M. Lewis and J. W. White, Philadelphia, Pa. Battery box or vessel .....	282,795	Aug. 7	385	109	24	568
Starr, Eli T., Philadelphia, Pa., assignor of one-half to W. J. Peyton, Washington, D. C., H. M. Lewis and J. W. White, Philadelphia, Pa. Electrode for electric batteries .....	290,942	Dec. 25	2000	551	25	1259
Starr, Eli T., Philadelphia, Pa., assignor of one-half to W. J. Peyton, Washington, D. C., H. M. Lewis and J. W. White, Philadelphia, Pa. Secondary-battery electrode .....	290,943	Dec. 25	2001	551	25	1260
Starr, Eli T., assignor of one-half to H. M. Lewis, J. W. White, Philadelphia, Pa., and W. J. Peyton, Washington, D. C. Secondary battery or electric accumulator .....	281,156	July 10	1004	281	24	184
Starr, Eli T., assignor of one-half to H. M. Lewis, J. W. White, Philadelphia, Pa., and W. J. Peyton, Washington, D. C. Electrode for electric batteries .....	290,941	Dec. 25	1998	551	25	1259
Starr, Eli T. and E. E., Philadelphia, Pa., assignors of one-half to W. J. Peyton, Washington, D. C. Secondary or storage battery .....	276,300	Apr. 24	1831	511	23	1564
Starr, Eli T. and E. E., Philadelphia, Pa., assignors of one-half to W. J. Peyton, Washington, D. C. Secondary or storage battery .....	276,301	Apr. 24	1834	511	23	1564
Starr, Eli T. and E. E., Philadelphia, Pa., assignors to said E. T. Starr, W. J. Peyton, Washington, D. C., H. M. Lewis and J. W. White, Philadelphia, Pa. Automatic regulator for incandescent lamps .....	281,412	July 17	1340	370	24	249
Starr, Eli T. and E. E., Philadelphia, Pa., assignors of one-half to W. J. Peyton, Washington, D. C. Secondary or storage battery .....	284,577	Sept. 4	510	143	24	990
Starr, Horace C., and W. C. Vanneman, Richmond, Ind. Grain-drill .....	271,533	Jan. 30	2123	611	23	422
Starr, John, Malden, Mass. Apparatus for silvering glass .....	277,803	May 15	1576	430	23	1910
Starr, Richard T., et al. (See Smith, L. Henry, assignor.) .....						
Starr, Thomas B. (See Smith, L. Henry, assignor.) .....						
Starrett, Laro S., Athol, Mass. Beveling-instrument .....	282,583	Aug. 7	132	39	24	523
Starrett, Laro S., Athol, Mass. Bevel .....	289,463	Dec. 4	106	31	25	905
Starrsman & Co., William G. (See Petticrew, Albert E., assignor.) .....						
Stasson, Joseph J., Enston Road, London, England. Velocipede .....	284,509	Sept. 4	429	122	24	976
Staub, C. Leo, Pittsburg, Pa. Construction of buildings, ships, &c. .....	277,952	May 22	1753	478	23	1946
Stauffer, Abraham L. and P., Stevens, Pa. Manual-power ice-cutting machine .....	287,883	Nov. 6	116	34	25	528
Stauffer, Philip. (See Stauffer, Abraham L. and P.) .....						
Staving, Henry P. (See Carey, William J., assignor.) .....						
Stayman, David F., Mifflinburg, Pa. Journal .....	283,527	Aug. 21	1277	357	24	742
Ste, Peuvrez & Cie. (See Bonnefond, Michel, assignor.) .....						
Stead, Isaac. (See Davis and Stead.) .....						
Stead, Isaac, Philadelphia, Pa. Dry amalgamator .....	273,775	Mar. 13	701	189	23	962
Stead, James C., Brooklyn, N. Y. Steam-generator .....	274,046	Mar. 13	1018	279	23	1017
Steam Gauge and Lantern Company. (See Ham, Charles T., assignor.) .....						
Stearns, Amos A., Cooper, Mich. Bean-planter .....	278,372	May 29	2318	634	23	2053
Stearns, Delilah A., et al., executors. (See Stearns, George N.) .....						
Stearns, Edward C., et al., executors. (See Stearns, George N.) .....						
Stearns, George F., Chester, Conn. Manufacture of auger-bits and other boring-tools .....	288,676	Nov. 20	1121	308	25	717
Stearns, George L., Grand Haven, Mich. Windmill .....	273,183	Feb. 27	2021	568	23	816
Stearns, George N., deceased, Syracuse, N. Y.; E. C. and D. A. Stearns and A. Mead, executors. Saw-clamp .....	288,376	Nov. 13	745	202	25	645
Stearns, Henry A., Lincoln, R. I. Automatic gas-valve .....	288,271	Nov. 13	603	165	25	620
Stearns, J. Milton, Jr. (See Maxwell and Stearns.) .....						
Stearns, J. Milton, Jr., Brooklyn, N. Y. Telephonic circuit .....	270,500	Jan. 9	815	238	23	169
Stearns, J. Milton, Jr., Brooklyn, N. Y. Telephone-circuit .....	281,413	July 17	1342	371	24	249
Stearns, J. Milton, Jr., Brooklyn, N. Y. Electric telephone .....	281,414	July 17	1343	371	24	250
Stearns, Oscar S., New York, N. Y., assignor to Stearns Railway Improvement Company, of New York. Self-adjusting bearing for car-axles .....	281,157	July 10	1005	{ 281 282	} 24	184
Stearns, Oscar S., assignor of one-half to A. Rogers, New York, N. Y. Car-axle box .....	282,796	Aug. 7	387	109		568
Stearns Railway Improvement Company. (See Stearns, Oscar S., assignor.) .....						
Stearns, Sarah B., Duluth, Minn., assignor to herself and M. Brandenburg, Trempealeau, Wis. Ventilating-screen for windows .....	271,146	Jan. 23	1623	467	23	327
Stearns, Waldo A., St. Joseph, Mo. Wheeled scraper .....	282,681	Aug. 7	245	72	24	542
Stearns, Emily A., Brooklyn, N. Y. Culinary vessel .....	273,629	Mar. 6	498	134	23	919
Stebbins, Frank B. (See Emery and Stebbins.) .....						
Stebbins, George P. (See Stebbins, Lorenzo and G. P.) .....						
Stebbins, Harlan J., Meriden, Conn. Gate .....	283,677	Aug. 21	1452	408	24	776
Stebbins, Julius M., New York, N. Y. Voltaic battery .....	272,493	Feb. 20	1148	322	23	655
Stebbins, Lorenzo, Hinsdale, N. H., and G. P. Stebbins, Vernon, Vt. Car-coupling .....	273,907	Mar. 13	858	233	23	989
Steber, Bernard T., Utica, N. Y. Match-splint separator and gatherer .....	271,376	Jan. 30	1924	556	23	387
Steber, Bernard T., Utica, N. Y. Match-splint machine .....	273,908	Mar. 13	859	{ 233 234	} 23	989
Steber, Bernard T., Utica, N. Y. Machine for making paper boxes .....	279,285	June 12	830	230		2275
Steber, Bernard T., Utica, N. Y. Match-splint-adjusting machine .....	281,206	July 10	1077	296	24	197
Steber, Henry A., Utica, N. Y. Machine for making match-splints .....	290,492	Dec. 18	1412	390	25	1151
Steber, Joseph C., assignor of one-half to C. V. Manner, San Francisco, Cal. Screw-tap .....	284,510	Sept. 4	431	122	24	977
Steehan, Otto, Indianapolis, Ind. Folding bed or lounge .....	276,729	May 1	261	66	23	1669
Steck, Paul. (See Shirsper, Isidor, assignor.) .....						
Stedman & Fuller. (See Hoey, John J., assignor.) .....						
Stedman, George E., New York, N. Y. Buckle .....	272,344	Feb. 13	937	260	23	614
Stedman, Oscar F., Fredonia, N. Y. Mechanical movement .....	281,939	July 24	2019	553	24	371
Stedman, Oscar F., Fredonia, N. Y. Sawing-machine .....	287,975	Nov. 6	233	66	25	548
Steedman, Francis W. (See Ames, Samuel R., assignor.) .....						
Steel, Robert. (See Stites, Steel, and Austin.) .....						
Steel, Robert, Philadelphia, Pa. Inclined plane and sled therefor .....	277,625	May 15	1373	370	} 23	1873
Steel, Robert, assignor of one-half to C. Mace, Philadelphia, Pa. Car-heater .....	277,626	May 15	1374	{ 370 371		1873
Steele, Alva G. (See Holloway, Thomas G., assignor.) .....						
Steele, Elbridge J., New Britain, assignor to Cowles Hardware Company, Unionville, Conn. Sash-fastener .....	270,347	Jan. 9	621	183	23	131



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Steele, Elbridge J., New Britain, assignor to J. Watson, Jr., Bridgeport, Conn. Toy pistol.	288,272	Nov. 13	604	165	25	621
Steele, George W., Paterson, N. J. Machine for shaping meeting-rails	283,678	Aug. 21	1453	408 409 410	24	776
Steele, George W., Paterson, N. J. Machine for shaping meeting-rails for sashes	290,809	Dec. 25	1837	508	25	1232
Steele, John C. (See Brake, Peter, assignor.)						
Steele, John W., Sprague, Mo. Nut-lock	286,498	Oct. 9	894	241	25	173
Steele, Lucy T., Raymond City, W. Va. Mechanic's scaffold	277,953	May 22	1756	479	23	1947
Steelman, Albert W., and W. H. Maynard, Kalamazoo, Mich. Wheel-cultivator	272,915	Feb. 27	1701	476	23	759
Steelman, Sophia, assignor of one-half to W. A. Barritt, Somers Point, N. J. Washing-machine	290,134	Dec. 11	940	266	25	1061
Steely, George H. (See Grove and Steely.)						
Steers, William, Sherbrooke, Quebec, Canada. Bench-plane	284,919	Sept. 11	930	262	24	1070
Steffen, Carl, Viena, Austria-Hungary. Extracting sugar from molasses, sirups, or the juices of plants, &c.	277,521	May 15	1243		23	1852
Steffen, Christian, Jr., et al. (See Ingram, Milo E., assignor.)						
Stegner, Frederick A., Cincinnati, Ohio. Wooden shovel	281,158	July 10	1007	282	24	185
Stein, August, Philadelphia, Pa. Gas-generator	283,297	Aug. 14	988	276	24	684
Stein, Lewis, New York, N. Y. Combined collar-button and necktie-retainer	283,528	Aug. 21	1278	357	24	742
Stein Manufacturing Company. (See Sparks, William A., assignor.)						
Stein, Philip H., Austin, Tex., and J. Tams, Trenton, N. J.; said Tams assignor to said Stein. Fruit-squeezer	280,257	June 26	2016	566	23	2491
Steinbach, George P., Baltimore, Md. Child's carriage	290,716	Jan. 16	971	280	23	207
Steinberger, Louis, Bradford, Pa. Bag and twine holder	271,147	Jan. 23	1624	467	23	328
Steinke, Charley, Brooklyn, assignor of one-third to H. G. Von Lillenschield, Green Point, N. Y. Clamp	274,838	Mar. 27	2038	567	23	1209
Steiner, Charles A. (See Steiner, Frederick W., assignor.)						
Steiner, Frederick W., assignor of one-half to C. A. Steiner, Plainfield, Ill. Horseshoe	283,434	Aug. 21	1172	329	24	723
Steiner, Joseph. (See Hunt, John A., assignor.)						
Steiner, Samuel J., Greenville, Ala. Physician's portable case	284,083	Aug. 28	1976	550	24	880
Steiner, William R., Frederick, Md. Endless carrier for harvesters	290,715	Dec. 25	1714	472 473	25	1210
Steiner, William R., Frederick, Md. Grain-carrier platform	290,716	Dec. 25	1715	473	25	1210
Steinhagen, Cristofer F. C., Anderson, Tex. Water-mill	284,064	Aug. 28	1976	550	24	880
Steinhorst, Emil, Utica, N. Y. Funnel and strainer	279,989	June 26	1698	476	23	2435
Steinmetz, Caspar F., Port Chester, N. Y. Screw-cutting chuck	283,679	Aug. 21	1456	410	24	777
Steinmetz, Caspar F., Port Chester, N. Y. Machine for cutting threads on bolts	283,680	Aug. 21	1458	410	24	777
Steinmetz, M. Van B. (See Iske, Anthony and A., assignors.)						
Steinmetz, Martin V. B., et al. (See Keller and Myers, assignors.)						
Steinmetz, Philipp, assignor of one-half to J. Geisinger, Philadelphia, Pa. Millstone-driver	271,942	Feb. 6	432	118	23	516
Steinmetz, Philipp, and J. Geisinger, Philadelphia, Pa. Bush for vertical shafts	275,867	Apr. 17	1310	361	23	1466
Steinway, Christian F. T., New York, N. Y. Piano-action	270,914	Jan. 23	1246	388	23	282
Steitz, Jacob R., Bay View, Wis. Hay-rack	272,791	Feb. 20	1522	429	23	722
Stelle, Herbert D., and L. M. Cutting, Jerseyville, Ill. Invalid-lifter	274,527	Mar. 27	1677	465	23	1145
Steller, Charles E., Milwaukee, Wis. Sash-holder	288,273	Nov. 13	605	165	25	621
Stemen, Isaac W., Elida, Ohio. Car-signal	285,173	Sept. 18	1256	352	24	1133
Stender, Charles F. G., assignor of one-half to Garfield Manufacturing Company, Chicago, Ill. Harness-loop	279,609	June 19	1243	345	23	2349
Stengel, Charles, Hamilton, Ohio. Furniture-caster	277,954	May 22	1757	479	23	1947
Stenz, Michael, Albion, assignor to F. E. and P. A. Myers, Asbland, Ohio. Hay elevator and carrier	281,736	July 24	1762	479	24	324
Stephan, Henry, assignor to Springfield Engine and Thresher Company, Springfield, Ohio. Thrashing-machine	280,258	June 26	2017	567	23	2492
Stephens, Abner L., assignor to himself, B. F. Isenberg, and T. S. Johnston, Huntingdon, Pa. Bran or flour packer	280,771	July 3	541	151	24	95
Stephens, Benjamin F., Brooklyn, N. Y. Well	272,596	Feb. 20	1276	356	23	678
Stephens, Benjamin F., Brooklyn, N. Y. Reservoir for water-works	274,987	Apr. 3	131	37	23	1248
Stephens, Benjamin F., Brooklyn, N. Y. Apparatus for digging wells	274,988	Apr. 3	132	37	23	1248
Stephens, De Loss H., Riverton, Conn. Rotary filing-machine	279,108	June 5	625	170	23	2320
Stephens, James, assignor of one-half to J. F. Lindley, Jr., Washington, Ind. Drawer	280,412	July 3	69	24	24	18
Stephens, James A., Brockville, Ontario, Canada. Knife-edging machine	272,345	Feb. 13	937	260	23	614
Stephens, John, Hancock, Ohio. Pulverizing, seeding, and fertilizing harrow	283,160	Aug. 14	817	228	24	651
Stephens, John E., Salt Lake City, Utah Ter. Lamp-stove	286,862	Oct. 16	1360	373	25	261
Stephens, John G. (See Chinnock and Stephens.)						
Stephens, John G., Brooklyn, assignor to C. V. Ware, New York, N. Y. Fiber for upholstery purposes	283,161	Aug. 14	817	228	24	651
Stephens, John G., Brooklyn, assignor to C. V. Ware, New York, N. Y. Method of and apparatus for curling fibers for upholstery purposes	283,162	Aug. 14	818	228	24	651
Stephens, Samuel, assignor to Sinker, Davis & Co., Indianapolis, Ind. Rendering apparatus	282,584	Aug. 7	133	39	24	524
Stephenson, Hiram M. (See Estep, Thomas B., assignor.)						
Stephenson, John, New York, N. Y. Car-wheel guard	283,298	Aug. 14	989	276 277	24	684
Stephenson, John, New York, N. Y. Guard attachment for city-railway cars	284,254	Sept. 4	124	34	24	925
Stephenson, John S., Peterborough, Ontario, Canada. Canoe	281,316	July 17	1225	339	24	229
Stephenson, Joseph, Osceola Mills, Pa. Car-wheel lubricator	285,082	Sept. 18	1139	318	24	1113
Stephenson, M. Elmer, assignor of one-half to C. W. Garbutt, La Porte, Colo. Twine-holder	274,047	Mar. 13	1019	279	23	1017
Sterling, Charles A., New York, N. Y. Connecting-rod for rock-drills	287,188	Oct. 23	1784	489	25	343
Sterling, Joseph A. (See Groesbeck, Sterling, Ball, and Wright.)						
Sterling, Mark L., Denver, Colo. Car-coupling	285,701	Sept. 25	1878	535	24	1253
Sterling, Theodore W. (See Moreau, Eugene, assignor.)						
Stern, Edward, New York, N. Y. Gas-stove	276,302	Apr. 24	1836	511	23	1564
Stern, Emanuel M., Walton, N. Y. Charcoal-stove	282,235	July 31	2409	662	24	441
Stern, Joseph, et al. (See Hilbert, Charles, assignor.)						
Stern, Julia, Brooklyn, N. Y. Poke-bonnet	284,511	Sept. 4	432	123	24	977
Stern, Moses E., Albany, N. Y. Awning	269,894	Jan. 2	85	25	23	18
Sternberger, L. & S. (See Schott, Emil, assignor.)						
Sterns, Ezra L. (See Sheehan, James H., assignor.)						
Sterns, William H., Humboldt, Nebr. Churn	285,174	Sept. 18	1257	353	24	1133
Stetefeldt, Carl A., New York, N. Y. Retorting amalgam	279,840	June 19	1509	422	23	2395
Stetefeldt, Carl A., New York, N. Y. Treating sulphides	287,737	Oct. 30	2502		25	485
Stetson, Andrew A., Florida, Mo. Car-coupling	282,397	July 31	2609	717	24	476
Stetson, Bradford, Uxbridge, Mass. Folding table or flower-pot stand	289,464	Dec. 4	107	31	25	906
Stetson, Charles T., Rockland, Mass., assignor to National Waterproof Shoe Company, of Maine. Machine for channeling and trimming soles	288,377	Nov. 13	746	203	25	645

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Stetson, Joseph B., Lincoln, Me. Lantern .....	286,087	Oct. 2	377	104	25	69
Stetson, Thomas D. (See Groom, Levi J., assignor.) .....						
Stetter, Ferdinand, Dubuque, Iowa. Centrifugal bolting-machine .....	287,481	Oct. 30	2153	585	25	418
Stettiner, Chamottefabrik Actiengesellschaft. (See Schilling and Bunte, assignors.) .....						
Stettner, Albert, Jr., Berlin, Germany. Adding-machine .....	277,627	May 15	1374	371	23	1873
Stetzelberger, Daniel P. (See Bechtel, Wunderlich, and Stetzelberger.) .....						
Steup, Gustav. (See Mathes, Michael, assignor.) .....						
Stevaley, Andrew, Frankfort, Ind. Canopy for folding beds .....	277,372	May 8	1064	286	23	1816
Stevens, Abraham J., Owanece, Ill. Land-roller .....	273,909	Mar. 13	863	234	23	990
Stevens, Abram W., Auburn, N. Y. Vehicle-wheel hub .....	270,257	Jan. 9	510	150	23	110
Stevens, Albert, Davenport, Iowa. Vapor-burner .....	284,085	Aug. 28	1977	551	24	880
Stevens, Alden W. (See Locke, Edwin R., assignor.) .....						
Stevens, Amos and A. L., Philadelphia, Pa. Steam rock-drill .....	280,971	July 10	784	217	24	144
Stevens, Andrew J., Sacramento, Cal. Valve-gear for steam-engines .....	288,133	Nov. 6	422	119	25	581
Stevens, Arthur L. (See Stevens, Amos and A. L.) .....						
Stevens, Asher B., Stapleton, N. Y. Base rocking-chair .....	273,630	Mar. 6	499	134	23	920
Stevens, Asher B., Stapleton, N. Y., assignor to Thompson, Perley & Waite, Baldwinsville, Mass. Chair .....	270,144	Jan. 2	373	108 109	23	76
Stevens, Benjamin D., Burlington, Vt. Safety-casing for railway-car stoves .....	277,854	May 15	1636	445 446	23	1921
Stevens, Benjamin R., Grand Rapids, Mich. Carpet-sweeper .....	276,495	Apr. 24	2084	579	23	1607
Stevens, Chancey J. (See Roberts and Stevens.) .....						
Stevens, Charles D., Brooklyn, N. Y. Metallic rod-packing .....	271,748	Feb. 6	196	55	23	474
Stevens, Edgar G., Cleveland, Ohio. Telegraph-key .....	275,433	Apr. 10	750	200	23	1362
Stevens, Edward W. (See Vest, Eugene W., assignor.) .....						
Stevens, Frank M., and C. E. Moore, Boston, Mass.; said Moore assignor to said Stevens. Lathe .....	280,259	June 26	2018	567 568	23	2492
Stevens, Frank M., assignor to Stevens Locomotive and Machine Company, New York, N. Y. Device for converting motion .....	285,083	Sept. 18	1140	318 319	24	1113
Stevens, Frank M., assignor to Stevens Locomotive and Machine Company, New York, N. Y. Valve-gear for steam-engines .....	285,064	Sept. 18	1141	319	24	1113
Stevens, Franklin B., and J. L. Bond, Port Huron, Mich., assignors to said Stevens and T. F. Carman, Menlo Park, N. J. Marine temperature-indicator .....	284,774	Sept. 11	761	212	24	1039
Stevens, Henry B., assignor to G. L. Squier, Buffalo, N. Y. Machine for separating coffee, &c. ....	270,501	Jan. 9	816	238	23	169
Stevens, Henry B., assignor to G. L. Squier, Buffalo, N. Y. Sugar-cane mill .....	270,502	Jan. 9	819	239	23	170
Stevens, Henry B., assignor to G. L. Squier, Buffalo, N. Y. Machine for hulling and polishing coffee, rice, &c. ....	286,499	Oct. 9	895	241 242	25	173
Stevens, Henry B., assignor to G. L. Squier, Buffalo, N. Y. Water-wheel .....	286,500	Oct. 9	897	242	25	173
Stevens, Ira, assignor of one-half to J. B. Stocklin, San José, Cal. Fruit-ladder .....	284,920	Sept. 11	931	262	24	1070
Stevens, Irving D. (See Eberhart and Stevens.) .....						
Stevens, James D., et al. (See Peck, Orrin B., assignor.) .....						
Stevens, Joel G., and E. E. Meeker, Belvidere, Ill. Revolving show-case .....	275,283	Apr. 3	509	140	23	1313
Stevens, John, Wauwec, Wis. Wagon-body .....	275,868	Apr. 17	1311	361 362	23	1466
Stevens, John, Neenah, Wis. Automatic grain-weighing machine .....	278,193	May 22	2050	563 564 565	23	1999
Stevens, John, Neenah, Wis. Automatic grain-weighing machine .....	278,194	May 22	2055	566 567	23	1999
Stevens, John, Neenah, Wis. Fountain-brush .....	288,598	Nov. 13	1019	280	25	694
Stevens, John C., Natick, Mass. Machine for setting, swaging, and sharpening saws .....	276,641	May 1	121	32	23	1648
Stevens, John L., assignor to E. Hempstead, Chicago, Ill. Egg-carrier .....	279,199	June 12	735	201	23	2259
Stevens, John S., C. G. Major, and D. P. Edwards, London, England. Lift and hoist .....	282,236	July 31	2410	662 663	24	441
Stevens, Joseph, San Francisco, Cal. Straw-burning boiler .....	271,148	Jan. 23	1626	467	23	328
Stevens, Joshua, Chicopee Falls, Mass. Cutting-nippers .....	287,589	Oct. 30	2303	623	25	448
Stevens Locomotive and Machine Company. (See Stevens, Frank M., assignor.) .....						
Stevens, Lucius M. (See Bradley, Jeremy, assignor.) .....						
Stevens, Miles H. (See Walker, Richard H., assignor.) .....						
Stevens, Moody A., Anoka, Minn. Three-wheeled vehicle .....	281,575	July 17	1540	422	24	282
Stevens, Nathan P., Concord, N. H. Steam-boiler .....	270,915	Jan. 23	1347	388	23	262
Stevens, Nathan P., assignor, by mesne assignments, to himself and L. D. Brown, Concord, N. H. Machine for dressing hoops .....	281,737	July 24	1763	479	24	325
Stevens, Oscar A., and E. L. Du Barry, Washington, D. C. Apparatus for the distillation of ammoniacal liquors .....	282,398	July 31	2610	717	24	476
Stevens, Richard, and W. I. Mann, Braddock, Pa. Lubricator .....	283,361	Aug. 14	1079	303	24	701
Stevens, Samuel N., Asheville, N. C. Gun-stock .....	279,841	June 19	1510	422	23	2396
Stevens, Sidney M., De Kalb, Ill. Door-hanger .....	287,065	Oct. 23	1629	448	25	314
Stevens, Sidney M., De Kalb, Ill., assignor, by mesne assignments, to Washburn & Moen Manufacturing Company, Worcester, Mass., and I. L. Ellwood, De Kalb, Ill. Machine for twisting barbed fence-wire .....	272,095	Feb. 13	635	173	23	561
Stevens, William, Philadelphia, Pa. Hatchway-gate .....	279,610	June 19	1244	345	23	2349
Stevens, William, Philadelphia, Pa. Hatch-gate for elevators .....	279,611	June 19	1245	345	23	2350
Stevens, William, Philadelphia, Pa. Elevator-hatch .....	279,612	June 19	1246	345	23	2350
Stevens, William, Philadelphia, Pa. Hatchway for elevators .....	287,590	Oct. 30	2304	623	25	448
Stevens, William J., New York, N. Y. Joint for railway-rails .....	288,378	Nov. 13	747	203	25	645
Stevens, William X., Washington, D. C. Mechanical toy. (Reissue) .....	10,319	Apr. 24	2154	599	23	1619
Stevens, William X., Washington, D. C. Apparatus for aging whisky .....	272,346	Feb. 13	938	261	23	615
Stevens, William X., Washington, D. C. Mechanical toy .....	274,148	Mar. 20	1161	320	23	1048
Stevenson, Elmer E., Quincy, Minn. Draft-equalizer .....	280,876	July 10	667	188	24	125
Stevenson James B., et al. (See Radford, Thomas, assignor.) .....						
Stevenson, Leonard, Solon, and W. B. Jacobs, Traverse City, Mich. Whiffletree attachment .....	278,288	May 22	2182	600	23	2021
Stevenson, Thomas S., St. Louis, Mo. Wire-rope machine .....	288,677	Nov. 20	1122	308	25	717
Stevenson, William, et al. (See Radford, Thomas, assignor.) .....						
Stevenson, William G., Morenci, Mich. Dental mallet .....	283,828	Aug. 28	1644	463	24	822
Stever, Jeremiah, Bridgeport, assignor of one-half to G. H. Clowes and E. L. Frisbee, Jr., Waterbury, Conn. Fire-escape .....	270,995	Jan. 23	1450	418	23	298
Stever, Jeremiah, assignor to Bridgeport Automatic Safety Ladder and Hardware Company, Bridgeport, Conn. Fire-escape .....	283,163	Aug. 14	820	229 230	24	652
Stever, Jeremiah, assignor of one-half to F. Armstrong, Bridgeport, Conn. Machine for ironing corsets .....	280,238	Oct. 9	556	152 153	25	112
Stover, Sol. F., Fairfield, Iowa. Railway-joint .....	289,465	Dec. 4	108	31, 32	25	906



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Steward, Demetrius M., Cincinnati, Ohio. Electrical insulator	271,994	Feb. 6	506	136	23	528
Steward, Demetrius M., Cincinnati, Ohio. Electrical insulator. (Reissue)	10,344	June 19	1589	445	23	2410
Steward, John F., Plano, Ill. Grain-binder	272,597	Feb. 20	1277	356	23	678
Steward, John F., Chicago, Ill. Grain-binder	272,598	Feb. 20	1279	357	23	678
Steward, John F., Chicago, Ill. Combined harvester and truck	276,642	May 1	122	32	23	1648
Steward, N. Harper. (See Romaine, David, assignor.)						
Steward, Alexander, Philadelphia, Pa. Cuspidor	276,496	Apr. 24	2094	579	23	1607
Steward, Alexander, Philadelphia, Pa. Sheet-metal can	290,135	Dec. 11	941	267	25	1061
Steward, Alexander, Philadelphia, Pa. Coffee and tea pot	290,136	Dec. 11	942	267	25	1061
Steward, Andrew G., Oakland, Cal. Cylinder for thrashers	283,529	Aug. 21	1278	358	24	743
Stewart, Charles, Camden, N. J. Switch and signal mechanism for railways	271,534	Jan. 30	2124	611	23	422
Stewart, Daniel A. (See Staples, Elial M., assignor.)						
Stewart, Daniel E., Guyandotte, W. Va. Pipe-tongs	283,164	Aug. 14	822	230	24	652
Stewart, Edward. (See Kretsinger and Stewart.)						
Stewart, Edward, Battle Creek, assignor of one-half to R. W. Lonsbery, Richland, Mich. Balanced valve	278,058	May 22	1883	515	23	1970
Stewart, Harry C., Harrisburg, Pa. Sewer-trap	274,149	Mar. 20	1162	320	23	1048
Stewart, Helen A., Concord, N. H. Respirator	279,200	June 12	736	202	23	2259
Stewart, Henry, Erie, Pa. Ahacus attachment for school-slates	271,749	Feb. 6	196	55	23	474
Stewart, James T. (See Hunter and Stewart.)						
Stewart, John, New York, N. Y. Umbrella	285,702	Sept. 25	1879	535	24	1253
Stewart, John L., Philadelphia, Pa. Apparatus for producing illuminating or heating gas	288,399	July 31	2612	718	24	477
Stewart, Julius H., San Francisco, Cal. Breech-loading ordnance	286,649	Oct. 16	1094	295	25	215
Stewart, Madison L. (See Winkelmann and Stewart.)						
Stewart, Samuel, Newark, N. J. Station-indicator	288,379	Nov. 13	748	203	25	645
Stewart, Samuel J., assignor of one-half to W. A. Levering, Philadelphia, Pa. Car-tracker	275,728	Apr. 10	1119	306	23	1425
Stewart, Thomas H., New York, N. Y. Side-drawer case for sewing-machines	277,555	May 22	1758	479	23	1947
Stewart, William P., New York, N. Y. Toy knitting-machine	289,578	Dec. 4	259	72	25	933
Stewartson, William B. (See Sindell and Stewartson.)						
Stewartson, William B., assignor to Voigt, Ward & Co., Pittsburg, Pa. Glass shade-holder	273,184	Feb. 27	2021	568	23	816
Stichter, Walter H., Pottsville, Pa. Device for hanging up hats	269,970	Jan. 2	175	50	23	36
Stick, William C., Hanover, Pa. Fertilizer-distributor	281,317	July 17	1826	339	24	229
Stickley, James, Denver, Colo. Molding and treating slag for paving and other purposes	289,939	Dec. 11	702		25	1016
Stickley, William H., assignor, by mesne assignments, to T. D. Olin, Terre Haute, Ind. Vehicle-spring. (Reissue)	10,372	Aug. 21	1533	432	24	791
Stickney, Charles W., Washington, D. C. Ore-separator	270,259	Jan. 9	512	150	23	110
Stickney, Charles W., Washington, D. C. Rock-drill	270,613	Jan. 16	972	281	23	207
Stickney, Charles W., Washington, D. C. Surveying-instrument	272,494	Feb. 20	1149	323	23	656
Stickney, Charles W., Washington, D. C. Ellipsegraph	274,528	Mar. 27	1678	465 466	23	1145
Stickney, Charles W., Washington, D. C. Diaphragm water-meter	285,175	Sept. 18	1258	353	24	1134
Stickney, Henry R., 2d. (See Baxter and Stickney.)						
Stickney, John H., Portsmouth, N. H. Brad-awl	270,258	Jan. 9	511	150	23	110
Stiefenhofer, Franz X., South Easton, Pa. Wheat-scouring apparatus	270,145	Jan. 2	374	109	23	76
Stieringer, Luther, New York, N. Y. Extension-electrolier	272,169	Feb. 13	723	199	23	577
Stieringer, Luther, New York, N. Y. Support for electric-light conductors	278,465	May 29	2431	663	23	2073
Stieringer, Luther, assignor to Edison Electric Light Company, New York, N. Y. Safety-catch for electric-light circuits	281,576	July 17	1541	422	24	282
Stierle, Adam, Philadelphia, Pa. Dumping-scow	278,829	June 5	208	62	23	2158
Stietenroth, Andrew L., Natchez, Miss. Feeder for cotton-gins	278,195	May 22	2059	567	23	2000
Stiker, Flavins P., Toronto, Ontario, Canada. Saccharification of starch	270,260	Jan. 9	513	150	23	110
Stiles, Frederic, assignor of one-half to E. L. Bennett, Binghamton, N. Y. Cigar-coloring machine	273,185	Feb. 27	2022	569	23	816
Stiles, George A., West Gardner, Mass. Rocking-chair	279,886	June 19	1565	438	23	2406
Stiles, George A., West Gardner, assignor to W. Hill, Boston, Mass. Folding chair	284,921	Sept. 11	931	262	24	1070
Stiles, Norman C., Middletown, Conn. Drop-hammer. (Reissue)	10,324	May 8	1145	308	23	1829
Stiles, Norman C., Middletown, Conn. Drop-hammer	270,146	Jan. 2	375	109	23	76
Still, Henry, Beloit, Kans. Scuffle-hoe	289,723	Dec. 4	442	124	25	964
Stillman, George F., Madison, Wis. Micrometer-calipers	279,038	June 5	522	142	23	2212
Stillman, Thomas B. (See Koefoed and Stillman.)						
Stillson, Daniel C., Somerville, Mass. Feed-water heater	277,075	May 8	717	186	23	1754
Stillson, Edward B. (See Yerby and Stillson.)						
Stillson, Edward B., assignor of one-half to J. B. De Lamater, Leslie, Mich. Drag-saw	271,149	Jan. 23	1626	468	23	328
Stilwell, Charles B., Watertown, N. Y., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machine	279,505	June 12	1117	309 310	23	2320
Stilwell, Edwin R., Dayton, Ohio. Feed-water heater and purifier	274,048	Mar. 13	1020	279	23	1017
Stilwell, Edwin R., Dayton, Ohio. Feed-water heater	278,196	May 22	2060	567	23	2000
Stilwell, Emeline C., et al. (See Stilwell, Rickason, assignor.)						
Stilwell, Henry M. (See Kenfield and Stilwell.)						
Stilwell, Ida. (See Kenfield and Stilwell, assignors.)						
Stilwell, Lysander, Newark, N. J. Gas crucible-furnace	275,284	Apr. 3	510	141	23	1313
Stilwell, Rickason, assignor to B. Willard and E. C. Stilwell, New York, N. Y. Electric galvanic mattress	285,852	Oct. 2	88	26	25	18
Stilwell, Rickason, assignor to B. Willard and E. C. Stilwell, New York, N. Y. Applying electrical or galvanic currents to beds, couches, &c.	285,853	Oct. 2	89	27	25	18
Stilwell, Rickason, assignor to B. Willard and E. C. Stilwell, New York, N. Y. Electric mattress-spread	285,854	Oct. 2	90	27	25	18
Stimpson, Edward S., assignor to Dutcher Temple Company, Hopedale, Mass. Loom-temple	288,742	Nov. 20	1207	330	25	731
Stimpson, Edwin B., Brooklyn, N. Y. Fastening for leggings and overgaiters	270,147	Jan. 2	379	110	23	77
Stimpson, Edwin B., Brooklyn, N. Y. Sole-edge-finishing tool	270,148	Jan. 2	380	110	23	77
Stimpson, Edwin B., Brooklyn, N. Y. Leggin	271,150	Jan. 23	1627	468	23	328
Stimson, Harlan P., assignor to H. B. Goodrich, Chicago, Ill. Sewing-machine jack	272,390	Feb. 13	1007	282	23	626
Stimson, Henry D., Haddonfield, N. J. Paper box	289,161	Nov. 27	1710	476	25	830
Stinebring, George W., Shreve, Ohio. Insertible saw-tooth	285,176	Sept. 18	1260	353	24	1134
Stinson, Charles K., Boston, assignor to L. Ladd, Needham, Mass. Clothes-wringer	287,782	Oct. 30	2562	689	25	496
Stirckler, Albert E., assignor to himself, J. W. Stirckler, Worcester, and A. Eppler, Jr., Boston, Mass. Rotary cutter	281,026	Aug. 28	1978	551	24	880
Stirckler, John D., et al. (See Stirckler, Albert E., assignor.)						
Stirewalt, Valentine, Davidson College, N. C. Fly-fan	271,535	Jan. 30	2126	612	23	423
Stirewalt, Valentine, Davidson College, N. C. Churn	276,922	May 1	496	129 130 463	23	1712
Stirk, Albert, Boston, Mass. Embossing-machine	283,829	Aug. 28	1645	463 464	24	822

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Stirk, William E., Leadville, Colo., assignor to A. P. Brayton, San Francisco, Cal. Ore-concentrator.....	286,342	Oct. 9	715	{ 191 192 }	25	140
Stirn & Lyon. (See Marks, Herman P., assignor.)						
Stites, George, assignor to C. Mace, Philadelphia, Pa. Machine for coiling and tempering springs.....	280,529	July 3	233	{ 61 62 63 }	24	42
Stites, George, R. Steel, and S. Austin, Philadelphia, Pa., assignors to United States Spring Car-Motor Construction Company, Camden, N. J. Spring car-motor.....	271,151	Jan. 23	1629	{ 468 469 }	23	328
Stith, Lewis B., Goldsborough, N. C. Cotton-stalk chopper.....	281,577	July 17	1543	422	24	283
Stitt, Washington G., J. Lowbridge, and A. Rosenkranz, assignors of one-half to P. Walter, Jr., Allegheny, Pa. Car starter and brake.....	288,678	Nov. 20	1123	309	25	717
Stitzel, Frederick, Louisville, Ky. Piston-valve.....	279,887	June 19	1566	439	23	2406
Stitzel, Frederick, Louisville, Ky. Car-coupling.....	283,681	Aug. 21	1459	411	24	777
Stitzel, Frederick, assignor of one-half to A. Rentlinger, Louisville, Ky. Gas-pump.....	283,036	Aug. 14	671	189	24	626
Stock, Frank, Jr., assignor of two-thirds to J. L. and P. H. Stock, San José, Cal. Pump-valve.....	286,742	Oct. 16	1213	327	25	235
Stock, Hosea T. (See Hall, Almon, assignor.)						
Stock, Hosea T., Toledo, Ohio. Railway ditching and excavating machine.....	273,631	Mar. 6	501	134	23	920
Stock, Hosea T., Toledo, Ohio. Machinery for swinging cranes.....	283,037	Aug. 14	673	189	24	627
Stock, John L., et al. (See Stock, Frank, Jr., assignor.)						
Stock, P. H., et al. (See Stock, Frank, Jr., assignor.)						
Stockbridge, Virgil D., Washington, D. C. Retention device for umbrellas and parasols.....	286,501	Oct. 9	899	242	25	173
Stockdale, Levi, Zanesville, Ohio. Heater.....	278,466	May 29	2433	663	23	2074
Stocker, John, et al. (See Schmidt, Christian, assignor.)						
Stockford, Benjamin F., Sturgis, Mich. Wrench.....	281,318	July 17	1226	339	24	229
Stocking, Edgar B., Washington, D. C. Making cell-cases.....	276,497	Apr. 24	2085	{ 579 580 581 }	23	1607
Stocking, Edgar B., Washington, D. C., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Making square paper bags.....	279,109	June 5	625	{ 170 171 }	23	2229
Stocking, Zalmon S. (See Lippy and Stocking.)						
Stocking, Zalmon S., Cleveland, Ohio. Feeding mechanism for thrashing-machines.....	289,724	Dec. 4	443	124	25	964
Stocklin, John B. (See Stevens, Ira, assignor.)						
Stockman, George W., Indianapolis, Ind. Absorber for ammonia-refrigerators.....	275,869	Apr. 17	1312	362	23	1466
Stockton, Philip K., St. Helena, Cal. Salky-plow.....	275,956	Apr. 17	1406	388	23	1483
Stockwell, Emory, assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Burglar-proof safe.....	286,088	Oct. 2	378	105	25	69
Stockwell, Emory and H. C., assignors to Yale & Towne Manufacturing Company, Stamford, Conn. Time-lock.....	290,609	Dec. 18	1570	431	25	1177
Stockwell, Herbert C. (See Stockwell, Emory and H. C.)						
Stockwell, Herbert C., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Time-lock.....	280,260	June 26	2020	568	23	2492
Stockwell, Levi W., Cleveland, Ohio. Electric motor.....	284,255	Sept. 4	124	34	24	926
Stockwell, Levi W., assignor to A. Adams, Cleveland, Ohio. Automatic hose-reel. (Reissue.).....	10,412	Nov. 27	1971	548	25	879
Stoddard, Charles A., Providence, R. I. Roller-skate.....	288,508	Nov. 13	913	249	25	674
Stoddard, E. Fowler. (See Nickum, George S., assignor.)						
Stoddard, Eben M., and J. N. Johnson, Norfolk, Va. Stopper for wire rope, &c.....	286,863	Oct. 16	1361	373	25	261
Stoddard, Evan M., et al. (See Buie, Duncan M., assignor.) (Reissue.)						
Stoddard, John H., et al. (See Rice, Darius C., assignor.)						
Stoddard, Oscar, assignor to E. J. Johnson and N. L. Upson, Cincinnati, Ohio. Door-knob attachment.....	280,877	July 10	667	188	24	125
Stoddard, Samuel G. (See Somers and Stoddard.)						
Stoddard, Solomon P., New York, N. Y. Lock.....	271,662	Feb. 6	92	25	23	456
Stoddard, Solomon P., New York, N. Y. Lock.....	271,663	Feb. 6	93	25	23	456
Stoddard, William L., Elvaston, Ill. Hollow auger.....	270,856	Jan. 16	1267	366	23	263
Stoessiger, Augustus C., Chicago, Ill. Stove-platform.....	281,208	July 10	1080	297	24	197
Stoeve, Jeremiah L. (See Forney and Stoeve.)						
Stoffet, Joseph, Seigfried's Bridge, Pa. Fire-escape.....	285,319	Sept. 18	1416	400	24	1163
Stokes, Robert L., Jeffersonville, Ind. Lamp-bracket.....	275,434	Apr. 10	751	200	23	1362
Stoll, Adam J., Sandusky, Ohio. Ice and salt mixing apparatus.....	285,521	Sept. 25	1664	468	24	1212
Stollmeyer, Conrad F., Port of Spain, Trinidad, West Indies. Manufacture of oils from vegetables, &c.....	271,664	Feb. 6	94	.....	23	456
Stollwerck, Gebr. (See Hartman, Eugen F. G., assignor.)						
Stollwerck, Gebr. (See Michaelis, Hugo, assignor.)						
Stollwerck, Gebr. (See Stollwerck, Heinrich, assignor.)						
Stollwerck, Heinrich, assignor to Gebr. Stollwerck, Cologne-on-the-Rhine, Prussia, Germany. Steam-boiler.....	272,347	Feb. 13	940	261	23	615
Stollwerck, Heinrich, assignor to Gebr. Stollwerck, Cologne, Prussia, Germany. Cooling apparatus.....	277,804	May 15	1577	431	23	1910
Stollwerck, Heinrich, assignor to Gebr. Stollwerck, Cologne-on-the-Rhine, Prussia, Germany. Steam-boiler.....	286,864	Oct. 16	1362	{ 373 374 }	25	261
Stolz, Matthew. (See Schmelter, John, assignor.)						
Stonabs, Charles H. (See Smiley and Stombs.)						
Stommel, Julius, assignor of one-half to H. E. Copenhaver, Washington, D. C. Street-pavement.....	283,299	Aug. 14	991	277	24	684
Stone, Charles M., et al. (See Crandal, George L., assignor.) (Reissue.)						
Stone, Daniel E., et al. (See Gilliland, James F., assignor.)						
Stone, Edgar T., Spanish Hollow, Ore. Car-brake.....	272,348	Feb. 13	941	261	23	615
Stone, Gustavus. (See Benoit, Fredrick, assignor.)						
Stone, Heman W., Jr., Morris, Minn. Gear-wheel.....	288,134	Nov. 6	423	119	25	582
Stone, Henry, Irvington, N. J. Cover for chamber-pails, &c.....	287,189	Oct. 23	1785	489	25	343
Stone, Henry S., Orange, and J. M. F. Shepler, Lyon's Station, Ind. Straw-stacking machine.....	271,943	Feb. 6	433	{ 118 119 }	23	517
Stone, James M., Howe, Tex. Cotton-stalk cutter.....	274,670	Mar. 27	1847	515	23	1176
Stone, John H., Hamilton, Ontario, Canada. Tubular lantern.....	273,910	Mar. 13	864	234	23	990
Stone, John W., Independence, Mo. Hay-elevator.....	276,498	Apr. 24	2088	580	23	1608
Stone, Livingston, Charlestown, N. H. Fish-egg-hatching trough.....	277,805	May 15	1578	431	23	1911
Stone, Marvin C., Falls Church, Va. Combined finger-ring and tooth-pick.....	272,985	Feb. 27	1779	498	23	772
Stone, Marvin C., Falls Church, Va. Coat-spring.....	281,578	July 17	1544	423	24	283
Stone, Nathan L., Potsdam, N. Y. Finishing photographic pictures.....	286,343	Oct. 9	716	192	25	140
Stone, Ralph E., Oswego, N. Y. Fruit-bleacher.....	281,940	July 24	2020	553	24	371
Stone, Robert H., Brighton, Victoria. Manufacturing artificial stone.....	280,332	June 26	2114	.....	23	2508
Stone, Roy, New York, N. Y. Hoisting apparatus.....	271,537	Jan. 30	2127	{ 612 613 }	23	423



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Stone, Roy, New York, N. Y. Grapple	271,538	Jan. 30	2131	613	23	423
Stone, Roy, New York, N. Y. Hydraulic excavating-machine	281,415	July 17	1344	371	24	250
Stone, Thomas, <i>et al.</i> (See Dunn, William J., assignor.)						
Stone, Thomas M., Mutual, Ohio. Thill-coupling jacks	287,884	Nov. 6	117	35	25	528
Stone, William A., Lorain, Ohio. Journal and stuffing box	272,170	Feb. 13	725	200	23	577
Stone, William H., <i>et al.</i> (See Crandal, George L., assignor.) (Reissue.)						
Stonebraker, William, Hagerstown, Ind. Hominy-mill	285,085	Sept. 18	1144	320	24	1114
Stonehouse, Robert, <i>et al.</i> (See Holden, Henry H., assignor.)						
Stonemetz, John H., Erie, Pa. Machine for moistening paper	275,957	Apr. 17	1407	388	23	1484
Stonemetz, John H., Erie, Pa. Appliance for making stereotype-plates	275,958	Apr. 17	1408	388	23	1484
Stonemetz, John H., and W. G. Bennett, Erie, Pa. Packing device for paper-folding and similar machines	277,806	May 15	1579	431	23	1911
Stoner Automatic Scale Company. (See Stoner, John B., assignor.)						
Stoner, John B., assignor to Stoner Automatic Scale Company, New York, N. Y. Automatic grain-scale	289,784	Dec. 4	509	141	25	975
Stoney, Francis G. M., London, England. Sluice or flood gate	282,400	July 31	2614	718	24	477
Stoney Landing Company. (See Ravenel, St. Julien, assignor.)						
Stong, Joseph E., Toronto, Ontario, Canada. Gate	273,186	Feb. 27	2023	569	23	816
Stooddy, Jacob, assignor to himself and W. H. Rishel, Ripley, Ohio. Carriage-top setter	273,187	Feb. 27	2023	569	23	816
Stoppic, John J., Belleville, Tex. Coffee-roaster	270,503	Jan. 9	821	239	23	170
Storer, George W., Philadelphia, Pa. Electric valve-gear for steam-engines	281,579	July 17	1544	423	24	283
Storer, Ira A., San Francisco, Cal. Buntline for reefing sails	272,171	Feb. 13	726	200	23	578
Storm, Edward, Poughkeepsie, N. Y. Two-wheeled vehicle	270,504	Jan. 9	821	239	23	170
Storm, Edward, Poughkeepsie, N. Y. Bushing for couplings	270,557	Jan. 16	1268	366	23	263
Stortz, John. (See Spohr, Alfred F., assignor.)						
Story, Alexander, Washington, Iowa. Car-coupling	275,870	Apr. 17	1313	362	23	1466
Story, Ephraim J., assignor of one-half to G. A. Gustin, Washington, D. C. Treating lumber	276,499	Apr. 24	2089	580	23	1608
Stossmeister, Albert W., Newport, Ky. Stove-pipe shelf	284,256	Sept. 4	125	35	24	926
Stouffer, Elijah W., Salida, Colo. Apparatus for treating ores	275,729	Apr. 10	1119	306	23	1425
Stough, Samuel. (See Snyder, Stough, and Ulrick.)						
Stout, Abraham. (See Kiehline, William E., assignor.)						
Stout, Albert L., Middletown, Kans. Flood-gate	281,941	July 24	2021	553	24	371
Stout, Mills & Temple. (See Gilbert, Henry J., assignor.)						
Stout, Mills & Temple. (See Livingston, John, assignor.)						
Stout, Samuel H. (See Calver and Stout.)						
Stout, Stanley S., <i>et al.</i> (See Rintelman, August, assignor.)						
Stovall, Washington L., Winona, Miss. Gate-latch	277,807	May 15	1580	432	23	1911
Stovall, Washington L., Winona, Miss. Gate-latch	290,717	Dec. 25	1717	473	25	1211
Stover, Daniel C. (See Devore and Stover.)						
Stover, Daniel C., Freeport, Ill. Cash-carrier	270,261	Jan. 9	514	151	23	111
Stover, Daniel C., Freeport, Ill. Check-row cord	272,916	Feb. 27	1701	476	23	759
Stover, Daniel C., Freeport, Ill. Grinding-mill	272,917	Feb. 27	1702	476	23	759
Stover, Daniel C., Freeport, Ill. Check-row cord	277,956	May 22	1759	479	23	1947
Stover, Daniel C., Freeport, Ill. Wire-barbing machine	287,683	Oct. 30	2563	689	25	496
Stover, Daniel C., Freeport, assignor to I. L. Ellwood & Co., De Kalb, Ill. Machine for manufacturing barbed fence-wire	278,624	May 29	2619	715	23	2106
Stover, Daniel C., assignor to Stover Manufacturing Company, Freeport, Ill. Grinding-mill	282,682	Aug. 7	248	72	24	542
Stover, Daniel C., Freeport, assignor to I. L. Ellwood & Co., De Kalb, Ill. Wire-barbing machine	285,855	Oct. 2	91	27	25	18
Stover, Isaac L., Centralia, Ill. Steam-boiler-tube cleaner	270,614	Jan. 16	973	281	23	207
Stover, Isaac L., Centralia, Ill. Car-coupling	279,201	June 12	737	202	23	2259
Stover, Isaac L., Centralia, Ill. Fire-escape	283,038	Aug. 14	674	189	24	627
Stover Manufacturing Company. (See Stover, Daniel C., assignor.)						
Stowe, Benjamin L., Brooklyn, assignor to J. V. Reed, New York, N. Y. Car-brake	272,096	Feb. 13	637	173	23	562
Stowe, Benjamin L., Brooklyn, assignor to J. V. Reed, New York, N. Y. Car-brake	272,098	Feb. 13	643	174	23	563
Stowe, Benjamin L., assignor to J. V. Reed, New York, N. Y. Automatic car-brake	272,097	Feb. 13	639	173	23	562
Stowell, Barna T., Somerville, Mass. Steam-condenser	285,703	Sept. 25	1880	536	24	1253
Stowell, John M. (See Cunningham, Albert, assignor.)						
Stowell, Nathan W., Los Angeles, Cal. Mold for making cement pipe	270,704	Jan. 16	1092	312	23	228
Stowell, Nathan W., Los Angeles, Cal. Mold for manufacturing cement pipe. (Reissue.)	10,409	Nov. 20	1473	407	25	782
Stowell, Nellie S., New York, N. Y. Hair-front	279,990	June 26	1699	477	23	2435
Stowers, Nathaniel B., Sandy Point, Me. Driving-rein guide	280,530	July 3	235	63	24	42
Strachan, John, New York, N. Y. Bushing for tube-sheets	278,625	May 29	2623	716	23	2107
Strachan, Robert P., and G. Henshaw, Long Row, Victoria Street, Bristol, England. Card-scoring machine	289,162	Nov. 27	1711	476	25	830
Strack, Charles F., assignor of one-half to A. M. Brackenridge, Fort Wayne, Ind. Rail-way-gate	272,099	Feb. 13	646	175	23	563
Strader Bros. (See Strader and Wittich, assignors.)						
Strader, Levi T. (See Field, Albert D., assignor.)						
Strader, Peter W. (See Wittich and Strader.)						
Strader, Peter W., and F. A. Wittich, assignors to Strader Bros., Ashtabula, Ohio. Washing-machine	273,776	Mar. 13	702	189	23	962
Straehl, Leo, Detroit, Mich. Fire-escape	289,163	Nov. 27	1712	477	25	830
Straight, Clarence H., Bryan, Ohio. Two-wheeled vehicle	276,500	Apr. 24	2090	581	23	1608
Straight, Clark H., assignor of one-half to G. H. Straight, Bristol, R. I. Rubber boot and shoe	270,348	Jan. 9	622	184	23	131
Straight, George H. (See Straight, Clark H., assignor.)						
Straill, George S. (See Earle and Straill.)						
Straitt, C. L. (See Straitt, William, assignor.)						
Straitt, James L., Thomas, Mo. Pipe-tongs	290,810	Dec. 25	1838	508	25	1232
Straitt, Ransom E., Galesburg, Mich. Grain-binder	288,509	Nov. 13	914	250	25	674
Straitt, Thomas M., Troy, N. Y. Corkscrew	279,202	June 12	738	202	23	2259
Straitt, Thomas M., Troy, N. Y. Corkscrew	279,203	June 12	739	203	23	2250
Straitt, William, assignor to C. L. Straitt, Elmira, N. Y. Sulky-plow	275,090	Apr. 3	276	76	23	1273
Straitt, William, Elmira, N. Y., assignor to C. L. Straitt. Hillside-plow	290,610	Dec. 18	1571	432	25	1178
Sraith, Peter, Toronto, Ontario, Canada. Machine for sharpening the knives of reapers and mowers	270,858	Jan. 16	1269	366	23	263
Strand, George H. (See Munson and Strand.)						
Stranders, Walter, New York, N. Y., assignor to E. H. Snow, Orange, N. J. Sliced picture	280,878	July 10	668	188	24	125
Strange Cylinder Saw and Machine Company. (See Strange, Elias W., assignor.)						
Strange, Elias, <i>et al.</i> (See Strange, Emerson C., assignor.)						
Strange, Elias, E. W., and E. C., Taunton, Mass. Manufacture of twist-drills	273,322	Mar. 6	102	31	23	852

## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Strange, Elias W. (See Strange, Elias, E. W., and E. C.)						
Strange, Elias W., <i>et al.</i> (See Strange, Emerson C., assignor.)						
Strange, Elias W., assignor to Strange Cylinder Saw and Machine Company, Taunton, Mass. Set-works for saw-mills	290,137	Dec. 11	943	267	25	1061
Strange, Emerson C. (See Strange, Elias, E. W., and E. C.)						
Strange, Emerson C., assignor of two-thirds to E. and E. W. Strange, Taunton, Mass. Manure-spreader	285,086	Sept. 18	1146	320	24	1114
Straw, John F., New Bedford, and A. W. Taber, Taunton, Mass. Machine for making twist-drills	275,791	Apr. 10	1203	330	23	1439
Straus, Jacob, St. Louis, Mo. Gig or harness saddle	270,505	Jan. 9	823	240	23	170
Strauss, Henry S., assignor to Heilner & Strauss, New York, N. Y. Corset	271,377	Jan. 30	1926	557	32	387
Strauss, Jonas. (See Sperling, Isidor, assignor.)						
Strauss, Leopold, <i>et al.</i> (See Gaynor, Thomas F., assignor.)						
Strauss, William, <i>et al.</i> , executors. (See Reckenderfer, Joseph.)						
Straw, Alonzo W., Milwaukee, Wis. Fabric for lining garments, &c.	271,539	Jan. 30	2132	613	23	424
Straw, Henry, Guilford, Me. Snap-hook	275,537	Apr. 10	879	237	23	1384
Strawn, Halbert J. (See Selby, James H., assignor.)						
Strayer, Ambrose E. (See Groff and Strayer.)						
Strayer, Eber C. and V. Calmar, Iowa. Elevated reservoir, warming-oven, and shelf for stoves.	279,456	June 12	1059	293	23	2311
Strayer, Valentine. (See Strayer, Eber C. and V.)						
Street, Thomas, Richmond, Va. Cigar-maker's implement	290,811	Dec. 25	1838	509	25	1232
Streep, Albert W., Fairbury, Ill. Back-rest	271,944	Feb. 6	434	119	23	517
Street, Robert R., Chicago, Ill. Package for butter or similar substances	276,199	Apr. 24	1708	472	23	1543
Street, Samuel M., Dalton, Ga. Metallic sole-protector	281,209	July 10	1080	297	24	198
Streisguth, Marie, and E. Schnitzler, Philadelphia, Pa. Bandelore toy	279,888	June 19	1568	439	23	2406
Strickland, Benjamin F. (See Moore, Myron E., assignor.)						
Strickle, Jacob W., and H. W. Manning, Huntsville, Ala. Automatic locomotive-whistle attachment	290,718	Dec. 25	1717	{ 473 } { 474 }	{ 25 }	1211
Strickler, Frank B., assignor of two-thirds to P. G. Strickler and L. E. Miles, Janesville, Wis. Hay elevator and carrier	279,889	June 19	1569	439	23	2406
Strickler, Peter G., <i>et al.</i> (See Strickler, Frank B., assignor.)						
Strieby, F. H. (See Shipherd, William C., assignor.)						
Strieby, Frank H. (See Bolton, Strieby, and Rankin.)						
Stringer, Joseph A. (See Dimock, Henry S., assignor.)						
Strobel, Charles, Philadelphia, Pa. Anchor shuttle-box motion for looms	290,138	Dec. 11	945	268	25	1062
Strobel, Charles L., Pittsburg, Pa. Manufacture of eye-bars	277,373	May 8	1064	287	23	1816
Strobel, Frederick. (See Huber and Strobel.)						
Strobridge, Nelson W. (See Knapp, John A., assignor.)						
Stroh, Abraham, Manch Chunk, Pa. Car-spring	270,349	Jan. 9	623	184	23	131
Strohm, Samuel D. (See Crandell, William C., Jr., assignor.)						
Strohm, Samuel D., Philadelphia, Pa. Electrical conductor	277,374	May 8	1066	287	23	1816
Strohm, Samuel D., Philadelphia, Pa. Electrical cable	289,164	Nov. 27	1712	477	25	830
Strohm, Samuel D., Philadelphia, Pa. Electrical cable	289,165	Nov. 27	1714	477	25	831
Strohm, Samuel D., Philadelphia, Pa. Electrical cable	289,166	Nov. 27	1715	478	25	831
Strohm, Samuel D., assignor of one-third to J. Elton, Philadelphia, Pa. Metallic circuit for electrical currents	272,792	Feb. 20	1523	429	23	722
Strohm, Samuel D., assignor of one-third to H. Snyder, Philadelphia, Pa. Electrical conductor	278,289	May 22	2183	601	23	2021
Strong, Caroline M., Springfield, Mass. Combined bustle and hip-pad	286,562	Oct. 9	977	263	25	188
Strong, David A. (See Strong, Henry C., assignor.)						
Strong, Eli, Kalamazoo, Mich. Roller-mill	288,886	Nov. 20	1375	379	25	763
Strong, Elvira L. (See Blackman, Jared C., assignor.)						
Strong, Frederick S., assignor to Carver Cotton Gin Company, East Bridgewater, Mass. Shoe-holding jack	282,128	July 31	2278	625	24	418
Strong, Frederick S., and F. C. Mann, East Bridgewater, Mass. Cotton-seed liner	290,279	Dec. 18	1125	316	25	1101
Strong, George H., Chicago, Ill. Engraver's chuck	270,615	Jan. 16	973	281	23	207
Strong, George H., Chicago, Ill. Adjustable tool-holder	273,632	Mar. 6	502	135	23	920
Strong, George H., Chicago, Ill., assignor to L. W. Tatum, Cleveland, Ohio. Tool-sharpener	277,937	May 22	1760	480	23	1947
Strong, George H., and J. T. Carr, Chicago, Ill., assignors to L. W. Tatum, Cleveland, Ohio. Tool-holder for grindstones	277,958	May 22	1761	480	23	1948
Strong, George S., Philadelphia, Pa. Purifying water	273,777	Mar. 13	704	190	23	962
Strong, George S., Philadelphia, Pa. Purifying feed-water	273,778	Mar. 13	705	190	23	963
Strong, George W. and W. L., San Francisco, Cal. Amalgamator	278,059	May 22	1883	515	23	1970
Strong, Henry C., assignor of one-fourth to D. A. Strong, Chicago, Ill. Speaking-tube	288,887	Nov. 20	1376	379	25	763
Strong, Levi C., assignor of three-fourths to P. Kinnear and C. H. Turner, Albany, N. Y. Bench-plane	275,538	Apr. 10	879	238	23	1384
Strong, Levi C., assignor of three-fourths to P. Kinnear and C. H. Turner, Albany, N. Y. Bench-plane	275,539	Apr. 10	881	238	23	1384
Strong, Sutton, assignor of one-half to J. M. Vickroy, Harmony, Ind. Locking clothes-pin	273,633	Mar. 6	503	135	23	920
Strong, Walter L. (See Strong, George W. and W. L.)						
Strother, William A. and W. M., Lynchburg, Va. Lubricating compound for the plates of tobacco-presses	280,879	July 10	669		24	125
Strother, William M. (See Strother, William A. and W. M.)						
Stroudley, William, Brighton, county of Sussex, and E. J. Houghton, Peckham, county of Surrey, England. Apparatus for electric lighting on railway-trains	288,888	Nov. 20	1378	{ 379 } { 380 }	{ 25 }	763
Strouse, Isaac, New Haven, Conn. Nursing-corset	285,704	Sept. 25	1881	536	24	1253
Strouse, Isaac, New Haven, Conn., assignor to L. Schiele & Co., New York, N. Y. Corset	274,405	Mar. 20	1491	411	23	1107
Strowbridge, Clarence S., Cortland, N. Y. Child's carriage	285,935	Oct. 2	203	57	25	39
Strowger, William D., Steamburg, N. Y., assignor of one-half to S. H. Wallace, Garfield, Pa. Spring bed-bottom	271,945	Feb. 6	435	119	23	517
Strubbe, William G., Cincinnati, Ohio. Hand and saddle valise	271,540	Jan. 30	2132	614	23	424
Strugnell, James H., Toronto, Ontario, Canada. Hand-truck	271,152	Jan. 23	1631	470	23	329
Strype, William G., Wicklow, county of Wicklow, Ireland. Filter-press	274,406	Mar. 20	1492	411	23	1107
Stuart, Alexander, assignor to Springfield Engine and Thresher Company, Springfield, Ohio. Horse-power	277,375	May 8	1067	287	23	1816
Stuart, George H., <i>et al.</i> (See Reichling, Oscar E. H. N., assignor.)						
Stuart, James. (See Kelley, Austin, assignor.)						
Stuart, John, Traer, Iowa. Evaporating apparatus	289,785	Dec. 4	511	141	25	975
Stuart, John E., Newark, N. J. Corner-fastening for frames	277,076	May 8	718	186	23	1754
Stuart, Joseph H., South Paris, Me. Clothes-reel	277,171	May 8	839	221	23	1775
Stuart, Sinclair, <i>et al.</i> (See Wass, Dyson D., assignor.)						
Stuart, Robert J., assignor to Sedgwick & Stuart Manufacturing Company, Poughkeepsie, N. Y. Sheet-paper-feeding machine	282,014	July 24	2107	578	24	385



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Stuart, William F., assignor of one-half to C. E. J. Lang, Cleveland, Ohio. Carriage-top prop.	278,060	May 22	1884	515	23	1970
Stubbe, John, Pittsburg, assignor to T. B. Kerr, Allegheny city, Pa. Wire fence	287,337	Oct. 23	1970	538	25	377
Stubbendorff, Hermann. (See Seery, Thomas F., assignor.)						
Stubbings, Wilson H. (See Blood, Edwin J., assignor.)						
Stuckey, William H., Covington, Ky. Fire-escape	277,376	May 8	1068	287	23	1816
Stuckle, Wilhelm, Worms, Hessen, Germany. Folding slate	279,457	June 12	1060	293	23	2312
Studer, George. (See Peck, Wells M., assignor.)						
Stuebner, Gustavus L., Long Island City, N. Y. Lock for self-dumping coal-tubs	289,940	Dec. 11	703	197	25	1017
Stumpf, Casper V., New York, N. Y. Sofa-bedstead	276,501	Apr. 24	2092	581	23	1609
Stumpff, John. (See Contancin, Scott, and Stumpff.)						
Sturdy, Frederick E., assignor to J. F. Sturdy & Sons, Attleborough, Mass. Chain-bar	281,646	July 17	1631	446	24	297
Sturdy & Sons, J. F. (See Sturdy, Frederick E., assignor.)						
Sturgeon, Thomas, Newlay Grove, Horsforth, near Leeds, county of York, assignor to Galwey & Bainbridge, Warrington, England. Machinery for compressing air	275,959	Apr. 17	1409	389	23	1484
Sturgin, Thomas, Fairview township, Mercer county, Pa. Gate	279,039	June 5	523	142	23	2312
Stürmer, John H., et al. (See Bacon, Charles H., assignor.)						
Stürmer, August, Elberfeld, Prussia, assignor of two-thirds to E. Frohn, Remscheid, and A. Brinck, Berlin, Germany. Method of and apparatus for making anatomical lasts	290,652	Dec. 18	1618	445	25	1186
Sturtevant, Albert P., Norwich, Conn. Fire-escape	276,730	May 1	262	67	23	1669
Sturtevant, Thomas L., Framingham, Mass. Paper cartridge-case	270,996	Jan. 23	1452	418	23	299
Sturtevant, Thomas L., Framingham, Mass. Hydraulic propeller	274,839	Mar. 27	2039	568	23	1209
Stutz, Louis. (See Pfautz, Charles, assignor.)						
Stutz, Sebastian, Allegheny, Pa. Conveyor	289,466	Dec. 4	109	32	25	906
Stutzman, David, Ligonier, Ind. Fruit-drier	284,922	Sept. 11	933	262	24	1070
Styer, Charles. (See Cloud, William H., assignor.)						
Styles, Samuel D., New York, N. Y. Calendar	289,167	Nov. 27	1716	479	25	831
Sudheim, Samuel. (See Eimcke, Gustav O. and W., assignors.)						
Suetterle, John W. (See Bowen and Suetterle.)						
Suit, Samuel T., Suitland, Md. Telegraph-pole	289,320	Nov. 27	1899	529	25	866
Sulgrove, Joseph B., assignor to M. L. Sulgrove, Indianapolis, Ind. Harness-saddle	285,177	Sept. 18	1260	354	24	1134
Sulgrove, Mary L. (See Sulgrove, Joseph B., assignor.)						
Sullings, Hervey, Kalamazoo, Mich. Water-feeder for steam-boilers	279,458	June 12	1061	294	23	2312
Sullings, Hervey, Kalamazoo, Mich. Valve	279,459	June 12	1062	294	23	2312
Sulliot, Hippolyte S., and H. David, Paris, France. Rendering organic substances combustible	271,995	Feb. 6	507		23	528
Sullivan, Albert M. (See Pyle, George C., assignor.)						
Sullivan, Daniel, et al. (See Mac Mahon, Michael, assignor.)						
Sullivan, Daniel, Lincoln, R. I. Safety attachment for boilers	275,091	Apr. 3	277	76	23	1274
Sullivan, Edward, and R. Tobin, Chicago, Ill. Commode	289,168	Nov. 27	1717	479	25	831
Sullivan, George H., Brunswick, Ga. Baling-press	271,153	Jan. 23	1232	470	23	329
Sullivan, John F., assignor to himself and J. Connolly, Brooklyn, N. Y. Ferrule for pipe-joints	278,061	May 22	1885	516	23	1970
Sullivan, John J., Brooklyn, N. Y. Nail-feeder and nailing-machine	289,360	Nov. 27	1949	{ 541 542 }	25	875
Sullivan, John J., Ipswich, and H. D. Baker, Lynn, Mass.; said Baker assignor to said Sullivan. Button-hole sewing-machine	271,666	Feb. 6	95	26	23	457
Sullivan, John J., Ipswich, and H. D. Baker, Lynn, Mass.; said Baker assignor to said Sullivan. Button-hole sewing-machine	279,890	June 19	1570	440	23	2407
Sullivan, John L., Grenada, Miss. Fence	271,665	Feb. 6	95	25	23	456
Sullivan, Josiah, et al. (See Pfandler, John M., assignor.) (Reissue.)						
Sullivan, Michael E., assignor to P. H. Coffin, New Bedford, Mass. Ring-spinning frame	278,197	May 22	2061	568	23	2001
Sullivan, Mortimer, Brooklyn, N. Y. Electric lock	277,628	May 15	1376	371	23	1874
Sult, Alfred. (See Repass, William H., assignor.)						
Summers, De Witt C., Summer's Mills, Tex. Device for packing cotton, &c.	280,333	June 26	2115	593	23	2508
Summers, Edgar. (See Schmachtenberger, Ottomer, assignor.)						
Sumner, Dwight C., Worcester, Mass. Cloth-shearing machine	282,401	July 31	2615	718	24	477
Sumner, Dwight C., Worcester, Mass. Cloth-shearing machine	282,402	July 31	2616	719	24	477
Sumner, Herbert. (See Ashbury, Sumner, Lees, and Sanderson.)						
Sumner, Herbert, Manchester, county of Lancaster, England, assignor of three-fourths to T. Ashbury, W. Lees, and R. W. B. Sanderson. Gas-motor engine	278,198	May 22	2062	{ 568 569 }	23	2001
Sumner, Joshua, Colorado Springs, Colo. Screen for protecting the eyes of horses	287,885	Nov. 6	118	35	25	528
Sunderland, Lee W., assignor of one-half to W. Lehr, Bremen, Ind. Copy-holder for printers	283,039	Aug. 14	675	190	24	627
Sunderman, John H., Quincy, Ill. Top	282,129	July 31	2279	625	24	418
Sunderman, John H., Quincy, Ill. Top	287,591	Oct. 30	2305	624	25	448
Superior Drive Screw Company. (See Davis and Blake, assignors.)						
Suplee, Hannah G., New York, N. Y. Sewing-machine needle	277,629	May 15	1378	372	23	1874
Suplee, Henry H., Philadelphia, Pa. Steam-boiler	271,541	Jan. 30	2134	614	23	424
Supple, William F. (See Wray, Simon T., assignor.)						
Surprenant, Joseph W., and J. E. Ferguson, Astoria, Oreg. Hydraulic pile-driver	283,300	Aug. 14	991	277	24	685
Surratt, M. (See Garrett, Jackson B., assignor.)						
Susman, Edward, Pittsburg, Pa. Umbrella drip-cup	288,889	Nov. 20	1381	381	25	764
Sutch, John B., and W. C. McElheny, Pittsburg, Pa. Roller-die	274,840	Mar. 27	2039	568	23	1209
Sutcliffe, Henry and W., Halifax, county of York, England, assignors to H. C. Meyer & Co., New York, N. Y. Water-closet tank or cistern	277,172	May 8	839	221	23	1775
Sutcliffe, Lichfield W., Birmingham, county of Warwick, assignor of one-half to W. E. Parkes, Soho Hill, Handsworth, county of Stafford, England. Self-feeding and smoke-consuming furnace	274,990	Apr. 3	135	38	23	1249
Sutcliffe, Wright. (See Sutcliffe, Henry and W.)						
Suter, Frederick, Suhr, assignor to Wetter Brothers, St. Gall, Switzerland. Producing open-work fabrics	280,094	June 26	1828	514	23	2458
Sutherland, Daniel A., Lynn, Mass. Welt-guide for sewing-machines	282,798	Aug. 7	388	{ 109 110 }	24	568
Sutter, Joseph. (See Mayer and Sutter.)						
Sutterley, Gilbert T., Philadelphia, Pa. Sheet-metal cuspidor	275,285	Apr. 3	512	141	23	1313
Suttie, William J., New York, N. Y. Nose-piece for eyeglasses	284,257	Sept. 4	126	35	24	926
Sutton, Benjamin F., New York, N. Y., assignor to D. C. Perkins, Providence, R. I. Atomizer	281,942	July 24	2092	553	24	371
Sutton, Eugene S., Menomonee, Wis. Sand-band	283,301	Aug. 14	992	277	24	685
Sutton, John, Islip, N. Y. Screening and sizing machine	279,286	June 12	832	231	23	2276
Sutton, John W., New York, N. Y. Apparatus for removing the water-hair from seal and other skins	276,923	May 1	497	130	23	1712
Svensen, Christian, Clinton, Iowa. Roof	270,859	Jan. 16	1270	366	23	263
Svoboda, Frank, Kewanee, Wis. Neck-yoke attachment	282,471	July 31	2707	744	24	492
Swab, Joseph F., Cedar Rapids, Iowa. Hauling-can	282,353	Aug. 7	134	40	24	524

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Swain, Alva H., Winchester, Ind. Post-hole anger.....	269,895	Jan. 2	86	26	23	19
Swain, Charles M. (See Bond, Joseph, Jr., assignor.)						
Swain, Hadwen, Denver, Colo. Newspaper wrapping and addressing machine.....	274,529	Mar. 27	1680	{ 466 467 }	23	1145
Swainson, Per. (See Lindell, Theodore, assignor.)						
Swallow, Isaac W., Kingston, Pa. Grate-bar for locomotives.....	288,599	Nov. 13	1021	280	25	695
Swan, Alfred, Gateshead, county of Durham, England. Molding bulbs for incandescent electric lamps, &c.....	275,730	Apr. 10	1121	307	23	1426
Swan, Alfred, Gateshead, county of Durham, England. Glass bulb or globe for incandescent electric lamps.....	276,924	May 1	500	.....	23	1713
Swan, Alfred, Gateshead, county of Durham, England. Roll for flattening the ends of terminal wires.....	276,982	May 1	583	153	23	1726
Swan, Alfred, Gateshead, county of Durham, England. Manufacture of incandescent lamps.....	282,472	July 31	2708	745	24	492
Swan, Caleb H., Worcester, Mass. Trimming and burnishing machine.....	276,925	May 1	501	{ 130 131 }	23	1713
Swan, Ernest E., Texas, Mich. Plow-wheel.....	273,779	Mar. 13	796	190	23	963
Swan, Frederick A. (See Bosworth and Swan.)						
Swan, Fredrick A., and C. B. Bosworth, Boston, Mass. Cut-out for dangerous electric currents.....	274,150	Mar. 20	1163	321	23	1049
Swan, Frederick A., and C. B. Bosworth, Boston, Mass. Electric cut-out.....	274,151	Mar. 20	1164	321	23	1049
Swan, George E., Beaver Dam, Wis. Spring for the soles and heels of boots and shoes.....	272,172	Feb. 13	727	201	23	578
Swan, George E., Beaver Dam, Wis. Spring-heel for boots and shoes.....	288,274	Nov. 13	606	165	25	621
Swan, James, Seymour, Conn. Auger.....	279,204	June 12	740	203	23	2260
Swan, James, Seymour, Conn. Auger-bit.....	283,040	Aug. 14	676	190	24	627
Swan, James, Seymour, Conn. Auger.....	285,440	Sept. 25	1571	442	24	1195
Swan, James, Seymour, Conn. Auger-bit.....	290,812	Dec. 25	1840	509	25	1232
Swan, Peleg, Litchfield, Mich. Animal-poke.....	287,190	Oct. 23	1785	490	25	344
Swaney, David A., assignor to N. West, Pittsburg, Pa. Putting up blankets.....	287,394	Oct. 23	2041	555	25	388
Swank, David W., Anderson, Ind. Saw-guard.....	273,404	Mar. 6	213	57	23	870
Swank, Marquis D. L. (See Ethell and Swank.)						
Swank, Marquis D. L., and J. T. Thornley, Anderson, Ind. Stop-valve.....	280,413	July 3	91	24	24	19
Swank, Marquis D. L., and J. T. Thornley, Anderson, Ind. Piston-rod packing.....	285,441	Sept. 25	1573	442	24	1195
Swanson, Nels, assignor of two-thirds to J. V. Lewis and J. T. Richards, Chicago, Ill. Knockdown coffin.....	284,986	Sept. 11	1010	284	24	1085
Swanton, John G., New York, N. Y., assignor of one-half to J. D. O'Connor, Stamford, Conn. Counter for pool.....	269,896	Jan. 2	87	26	23	19
Swart, Martin E., Denver, Colo. Car-coupling.....	290,656	Dec. 18	1624	446	25	1187
Swartwout, Lorenzo B., Three Rivers, Mich. Water-wheel.....	289,169	Nov. 27	1718	479	25	831
Swartwout, Willard B., Three Rivers, Mich. Lumber-trimming machine.....	279,040	June 5	523	143	23	2212
Swartout, William H., Salineville, assignor of three-fourths to C. A. Gregg, Moore's Salt Works, and W. Dallas, Salineville, Ohio. Motor.....	272,349	Feb. 13	942	261	23	615
Swartz, Edwin T. (See Tubbs and Swartz.)						
Swartz, George A., Orangeville, Ill. Fire-escape ladder.....	283,530	Aug. 21	1279	358	24	743
Swartz, W. R., et al. (See Harper, John, assignor.)						
Swayze, Stephen J., and J. C. Lane, Sag Harbor, N. Y. Railway time-signal.....	286,156	Oct. 2	459	125	25	85
Sweanor, George, assignor of one-half to E. W. Beuthner, Montreal, Quebec, Canada. Ammonia-engine.....	284,987	Sept. 11	1012	{ 284 285 }	24	1085
Sweatt, Atherton, Webster, N. H. Butter-box.....	286,157	Oct. 2	461	125	25	85
Sweatt, Leroy A., assignor of one-half to J. Fatjo, Santa Clara, Cal. Wheeled scraper.....	276,303	Apr. 24	1836	511	23	1564
Sweeney, Andrew J., Pana, Ill. Gate.....	281,647	July 17	1632	446	24	297
Sweeney, George W., assignor to J. A. Hamilton for himself and as trustee, New York, N. Y. Car-axle box.....	279,506	June 12	1122	{ 310 311 }	23	2320
Sweeney, John M., Wheeling, W. Va. Cut-off valve for steam-engines.....	274,530	Mar. 27	1682	467	23	1146
Sweeney, Morgan J., assignor to J. and E. McLoughlin, New York, N. Y. Movable outline drawing and design.....	285,442	Sept. 25	1574	443	24	1195
Sweeney, Oliver, Philadelphia, Pa. Reservoir-lamp.....	277,808	May 15	1581	432	23	1911
Sweeney, Peter, assignor of one-third to L. Morgan, New York, N. Y. Car-axle box.....	270,262	Jan. 9	515	151	23	111
Sweeney, Peter, assignor to J. A. Hamilton, trustee, New York, N. Y. Car-axle box.....	291,006	Dec. 25	2092	{ 576 577 }	25	1273
Sweeny, James A., Washington, D. C. Coffee-roaster.....	278,199	May 22	2064	599	23	2001
Sweet, Alonzo. (See Slater, Warren G., assignor.)						
Sweet, Charles R., Portsmouth, Ohio. Road-engine.....	284,147	Aug. 28	2061	571	24	894
Sweet & Clark Manufacturing Company. (See Sweet, Miles, assignor.)						
Sweet, D. Fred, Hastings, Mich. Electric clock.....	272,100	Feb. 13	649	{ 176 177 }	23	564
Sweet, D. Fred, Hastings, Mich. Electric clock.....	273,634	Mar. 6	504	{ 135 136 }	23	920
Sweet, D. Fred, Hastings, Mich. Primary electric clock.....	284,578	Sept. 4	513	143	24	990
Sweet, Daniel E., Chicago, Ill. Device for fastening envelopes, &c.....	279,991	June 26	1699	477	23	2435
Sweet, George N., assignor to S. R. Harris and W. H. Cowdery, Ashtabula, Ohio. Rake-straightening device.....	277,077	May 8	719	187	23	1754
Sweet, John E., Syracuse, N. Y. Valve-gear.....	275,871	Apr. 17	1314	362	23	1466
Sweet, Joseph L., et al. (See Becker, Frank, assignor.)						
Sweet, Joseph L., et al. (See White, Jarvis N. B., assignor.)						
Sweet, Lebeus, Wellsville, assignor of two-thirds to J. Wyckoff and R. T. Tuttle, Perry, N. Y. Harvester.....	277,078	May 8	720	187	23	1755
Sweet, Miles, assignor to Sweet & Clark Manufacturing Company, Troy, N. Y. Wood-boring machine.....	289,170	Nov. 27	1720	479	25	832
Sweet, Orange M., Forestville, N. Y. Step-ladder.....	273,188	Feb. 27	2024	569	23	817
Sweet, Parker H., Jr., Washington, D. C. Machine for attaching buttons.....	274,407	Mar. 20	1493	411	23	1107
Sweet, Parker H., Jr., Washington, D. C. Button-attaching instrument.....	292,130	July 31	2220	626	24	419
Sweet, Parker H., Jr., Washington, D. C., assignor to Heaton Button Fastener Company, Providence, R. I. Button-fastener.....	273,405	Mar. 6	214	58	23	870
Sweet, Parker H., Jr., Washington, D. C., assignor to Heaton Button Fastener Company, Providence, R. I. Button-setting instrument.....	274,841	Mar. 27	2040	568	23	1209
Sweet, Parker H., Jr., Washington, D. C., assignor to Heaton Button Fastener Company, Providence, R. I. Button-fastener.....	275,435	Apr. 10	752	200	23	1363
Sweet, Parker H., Jr., Washington, D. C., assignor to Heaton Button Fastener Company, Providence, R. I. Instrument for attaching buttons to fabrics.....	288,135	Nov. 6	423	119	25	582
Sweet, Parker H., Jr., Washington, D. C., assignor to Heaton Button Fastener Company, Providence, R. I. Instrument for attaching buttons.....	288,136	Nov. 6	424	120	25	582
Sweet, Parker H., Jr., Washington, D. C., assignor to Heaton Button Fastener Company, Providence, R. I. Button-fastener.....	290,139	Dec. 11	948	268	25	1062
Sweet, Parker H., Jr., Washington, D. C., assignor to W. A. Boland, Lynn, Mass. Machine for attaching buttons to shoes. (Reissue).....	10,373	Aug. 21	1534	433	24	792



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Sweet, Thomas A., Cambria, Cal. Wheel-barrow.....	279,613	June 19	1247	346	23	2350
Sweet, William F., Elnira, assignor of one-half to A. L. Bartholomew, Seely Creek, N. Y. Vehicle-spring.....	289,361	Nov. 27	1952	{ 542 } 543	{ 25 } 25	876
Sweeten, Wilbert L., Camden, N. J. Combined bat and ball.....	286,570	Oct. 9	987	266	25	190
Sweetland, Alvah, Syracuse, N. Y. Curtain-fixture.....	274,049	Mar. 13	1021	250	23	1017
Sweetland, Frank, Edwardsburg, Mich. Car-coupling link.....	278,626	May 29	2624	716	23	2107
Sweetland, Jerome B., Pontiac, Mich. Ore-pulverizer.....	271,285	Jan. 30	1803	523	23	365
Sweetser, Edward S., Wakefield, Mass. Stove-pipe thimble.....	280,880	July 10	669	189	24	125
Sweetser, Horatio, assignor to H. Sweetser, Jr., New York, N. Y. Paper-hanger's roller.....	290,813	Dec. 25	1840	500	25	1232
Sweitzer, Harry W., Rural Valley, Pa. Can-soldering machine.....	281,648	July 17	1633	446	24	297
Swem, John B., Braddock, Pa. Duplex writing-table.....	277,959	May 22	1762	480	23	1948
Swenson, Jonas, Aurora, Nebr. Churn.....	283,302	Aug. 14	993	278	24	685
Swenson, Loren, Cresco, Iowa. Extension-ladder.....	284,683	Sept. 11	645	182	24	1019
Swenson, Nils O., Lead City, Dak. Ter. Tynere for forges.....	283,435	Aug. 21	1173	329	24	723
Swenson, Nils O., Chicago, Ill. Tynere.....	285,367	Sept. 18	1476	416	24	1173
Swett, Edward E., Biddeford, Me. Portable ladder.....	280,685	July 3	417	117	24	74
Swett, Edward E., Biddeford, Me. Apparatus for blowing fog-horns, &c.....	280,686	July 3	417	118	24	74
Swett, Sullivan C., and A. McCreary, Washington, D. C. Grappling device.....	289,971	Jan. 2	176	51	23	36
Swett, Sylvester G. (See Mendum and Swett.)						
Swift, Allen W., Elmira, N. Y. Lubricator.....	272,793	Feb. 20	1524	429	23	722
Swift, Allen W., Elmira, N. Y. Lubricator.....	283,931	Aug. 28	1767	499	24	844
Swift, Allen W., Elmira, N. Y. Lubricator.....	284,340	Sept. 4	220	62	24	942
Swift, Charles N., New York, N. Y. Tobacco-moistening pad.....	280,140	Dec. 11	949	268	25	1062
Swift, Charles N., New York, N. Y. Tobacco-moistening tray.....	280,141	Dec. 11	949	268	25	1062
Swift, D. Wheeler and H. D., Worcester, Mass. Protecting elevator-shafts and their hatchways.....	273,323	Mar. 6	104	31	23	852
Swift, Henry D. (See Swift, D. Wheeler and H. D.)						
Swift, Horace E., assignor to himself, C. Benson, and S. T. Willets, Providence, R. I. Bedstead-fastening.....	271,996	Feb. 6	508	136	23	528
Swift, Joseph H., Brooklyn, N. Y. Box-nailing machine.....	289,941	Dec. 11	704	{ 198 } 199	{ 25 } 25	1017
Swift, Nathaniel D., Petrolia, Ontario, Canada. Table-tray.....	283,362	Aug. 14	1080	303	24	701
Swift, W. J., et al. (See Bushfield, Samuel B., assignor.)						
Swindell, Henry, Allegheny city, Pa. Reversing-valve for furnaces and device for operating the same.....	277,079	May 8	721	{ 187 } 188	{ 23 } 23	1755
Swindell, William, Allegheny city, Pa. Coal-hopper.....	270,149	Jan. 2	381	110	23	77
Swindell, William, Allegheny city, Pa. Regenerator-furnace.....	282,586	Aug. 7	136	40, 41	24	524
Swindell, William, Pittsburg, Pa. Regenerative furnace.....	285,522	Sept. 25	1665	{ 468 } 469	{ 24 } 24	1213
Swindells, George. (See Williamson and Swindells.)						
Swindells, John. (See Williamson and Swindells.)						
Swindler, William C., Belleville, Ind. Straw-stacking machine.....	277,080	May 8	723	189	23	1755
Swindler, William C., Belleville, Ind. Straw-stacking machine.....	282,799	Aug. 7	389	110	24	568
Swingle, Alfred, San Francisco, Cal. Machine for shelling peas.....	288,743	Nov. 20	1208	330	25	732
Swingle, George, 4th, Roseville, Ohio. Fence-post.....	275,286	Apr. 3	513	141	23	1314
Swink, Clinton H., Dublin, Pa. Wagon-jack.....	287,191	Oct. 23	1786	490	25	344
Swink, Irving H., Dublin, Pa. Culinary steamer.....	282,587	Aug. 7	137	41	24	524
Switzer, Joseph, assignor of one-half to G. J. Wagner, Massillon, Ohio. Apparatus for feeding shavings to furnaces.....	286,344	Oct. 9	718	192	25	140
Switzer, William C., Comanche, Tex. Post-hole digger.....	274,531	Mar. 27	1683	467	23	1146
Switzler, Lewis M., Columbia, Mo. Calendar.....	276,643	May 1	123	33	23	1648
Swoboda, Adolph, Cairo, Ill. Expandable barrel-cover.....	278,670	May 29	2677	733	23	2116
Swope, Francis M., assignor to Seymour Manufacturing Company, Seymour, Ind. Scythensnath fastening.....	283,932	Aug. 28	1768	500	24	845
Swope, Horace G. (See Rude and Swope.)						
Swope, Isaac, St. Louis, Mo. Barrel.....	285,320	Sept. 18	1417	400	24	1163
Sword, James B., Philadelphia, Pa. Device for wetting gummed papers.....	272,350	Feb. 13	943	262	23	615
Sykes, Charles P., Calabasas, Ariz. Ter. Combined railway and cattle water-supply.....	289,040	Nov. 27	1570	433	25	804
Sykes, Richard. (See Macray and Sykes.)						
Sykes, Sylvester W., Passaic, N. J. Sweep-strap connection for picker-sticks of looms.....	286,971	Oct. 16	1501	413	25	285
Sykes, Thomas B., assignor of one-half to W. M. Dight, Mercer, Pa. Wagon-tongue.....	272,794	Feb. 20	1525	429	23	722
Symonds, Clarence M., assignor to G. H. Tay & Co., San Francisco, Cal. Canister.....	277,630	May 15	1379	372	23	1874
Symonds, Daniel R. (See Deering and Symonds.)						
Taaffe, Francis X., Baltimore, Md., and C. H. Koyle, Cobourg, Ontario, Canada. Underground line.....	278,627	May 29	2625	717	23	2107
Taber, Albert W. (See Strange and Taber.)						
Taber, Franklin P., assignor of two-thirds to J. A. Cook and C. W. Conklin, Auburn, N. Y. Evaporating-pan.....	277,855	May 15	1637	446	23	1921
Taber, Freeman A., Boston, Mass. Lamp.....	278,373	May 29	2319	634	23	2053
Taber, Horace, Manistee, Mich. Clapboard-sawing machine.....	279,287	June 12	834	231	23	2276
Tabony, Joseph H., New Orleans, La. Fanning attachment for sewing-machines.....	271,542	Jan. 30	2135	614	23	424
Tabor, Clark A., assignor to himself and F. E. Tabor, Rockville, R. I. Stop-motion for railway-heads.....	288,137	Nov. 6	425	120	25	582
Tabor, Frank E. (See Tabor, Clark A., assignor.)						
Tabor, Harris, Allegheny, Pa. Governor.....	276,304	Apr. 24	1838	512	23	1565
Tabout, Pierre C. E., Paris, France. Fire-extinguisher.....	286,502	Oct. 9	900	243	25	173
Tacy, Samuel H., New York, N. Y. Hood for electric lamps.....	277,507	May 8	1068	388	23	1816
Taddicken, Henry B., Muscatine, Iowa. Vessel for measuring ice-cream.....	283,165	Aug. 14	822	230	24	653
Taff, Albert H., Winchester, N. H. Wagon-jack.....	288,275	Nov. 13	606	166	25	621
Taft, George C., Worcester, Mass. Drilling-machine.....	288,510	Nov. 13	915	250	25	674
Taft, George W., Abington, Conn. Machine for making and repairing roads.....	276,093	Apr. 17	1573	{ 433 } 434	{ 23 } 23	1511
Taft, Gustavus E., and H. F. Woodmaney, Whitinsville, Mass. Bearing for spinning-frame spindles.....	284,775	Sept. 11	762	212	24	1039
Taggart, Francis, Brooklyn, N. Y. Apparatus for disintegrating grain, &c.....	279,842	June 19	1510	{ 422 } 423	{ 23 } 23	2396
Taggart, Francis, Brooklyn, N. Y. Apparatus for pulverizing grain, ores, &c.....	283,830	Aug. 28	1647	464	24	822
Tague, Francis M., and J. T. Power, Indianapolis, Ind. Cash-register.....	283,531	Aug. 21	1280	358	24	743
Tague, Sherman A. (See Cochran, John, Jr., assignor.)						
Tainter, Sumner, Washington, D. C. Electric conductor.....	289,725	Dec. 4	445	{ 124 } 125	{ 25 } 25	964
Tait, Felix B., and J. Gross, Decatur, Ill. Combined check-rower and corn-planter.....	287,976	Nov. 6	234	66, 67	25	548
Tait, William J., Jersey City, N. J. Baluster.....	278,200	May 22	2067	570	23	2002
Tait, William J., Jersey City, N. J. Spiral fluting and molding machine.....	284,512	Sept. 4	432	123	24	977

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Talbot, Frank H., and F. Brown, Cleveland, Ohio. Bicycle-lantern.....	281,580	July 17	1547	424	24	283
Talbot, William. (See Ardrey, Robert, assignor.)						
Talbot, William R. (See Bailey and Talbot.)						
Talbott, Jesse L., and C. J. Hiter, Elizabethtown, Ky. Fruit-gatherer.....	287,977	Nov. 6	236	67	25	549
Talbott, John D., Barnesville, Ohio. Ironing-board.....	271,667	Feb. 6	97	26	23	457
Talcoff, Albert L., assignor to F. Robbins, Boston, Mass. Combination pocket-case.....	286,650	Oct. 16	1095	295	25	215
Talcoff, Walter O. (See Budlong and Talcoff.)						
Talcott, William A., et al. (See Whitney, Charles, assignor.)						
Taliaferro, Bilbeck H., Saltillo, Miss. Quilting-frame.....	289,171	Nov. 27	1720	480	25	832
Taliaferro, Sinclair. (See Fowler, Joseph C., assignor.)						
Tallmadge, Henry C., Cincinnati, Ohio. Device for tightening banjo-heads.....	288,679	Nov. 20	1125	309	25	718
Tallman, Charles H., Bellaire, Ohio. Oil-can.....	285,705	Sept. 25	1882	536	24	1253
Tallman, David S., assignor of one-half to W. T. Hanford, Reno, Nev. Device for drawing out spokes from wheel-hubs.....	288,511	Nov. 13	916	250	25	675
Tallman, George F., Deposit, N. Y. Feather-renovator.....	272,795	Feb. 20	1526	430	23	723
Tallman, Ira E., Paterson, N. J. Calculating-machine.....	287,192	Oct. 23	1787	491	25	344
Tallman, John C., assignor to Warner Brothers, Bridgeport, Conn. Corset.....	279,041	June 5	525	143	23	2213
Tallman, S. S. & G. D. (See Ritchel, Charles F., assignor.)						
Tallman, Stephen P., Dunellen, N. J. Stock-car.....	274,991	Apr. 3	137	39	23	1249
Tallman, Stephen P., Dunellen, N. J. Draw-bar for railway-cars.....	280,414	July 3	92	25	24	19
Tallman, Stephen P., Dunellen, N. J. Stock-car.....	288,680	Nov. 20	1125	310	25	718
Talmage, George J. (See Scott and Talmage.)						
Talpey, Joseph A., Somerville, Mass. Sink.....	273,780	Mar. 13	707	191	23	963
Tams, James. (See Stein and Tams.)						
Tams, James, Chambersburg, N. J. Pottery-mold.....	285,321	Sept. 18	1418	401	24	1164
Tams, John, Longton, county of Stafford, England. Regulating the containing capacity of drinking-vessels, &c.....	289,467	Dec. 4	111	33	25	906
Tandler, Eduard, Grand Rapids, Mich. Steam-engine.....	278,062	May 22	1886	516	23	1970
Tandy, Thomas. (See Clarke, Charles, assignor.)						
Taneyhill, Francis M., Barnesville, Ohio. Car-axle lubricator.....	274,152	Mar. 20	1165	321	23	1049
Tanner, Alfred B., assignor to Sargent & Co., New Haven, Conn. Spring-hinge.....	271,946	Feb. 6	436	120	23	517
Tanner, John C., Huntington, W. Va., assignor to R. Dudgeon, New York, N. Y. Hydraulic jack.....	271,154	Jan. 23	1635	470	23	320
Tanner, William J., London, county of Middlesex, England. Apparatus for washing and separating gold and silver from their ores.....	285,523	Sept. 25	1666	469	24	1213
Tappeiner, John C., Bisbee, Ariz. Ter. Assay-furnace.....	272,599	Feb. 20	1283	357	23	679
Tapscott, Edmund, et al. (See Grundy, Arthur, assignor.)						
Tarbell, William H., Lansingburg, N. Y. Vehicle-spring.....	274,098	Mar. 13	1090	300	23	1029
Tarbox, James E., Lynn, Mass. Register for wheel-carriages.....	286,743	Oct. 16	1214	327	25	235
Tarbox, James E., assignor of one-half to S. M. Porter, Lynn, Mass. Heel-burnishing machine.....	270,150	Jan. 2	382	111	23	78
Tarbox, Kate L., New York, N. Y. Embroidery.....	279,042	June 5	525	143	23	2213
Tarbox, Myron H. (See More and Tarbox.)						
Tarr, Charles M., Gloucester, Mass. Pointer for blackboards and maps.....	283,041	Aug. 14	677	190	24	627
Tarr, Gardiner L., assignor to Hopedale Machine Company, Hopedale, Mass. Creel for spooling and warping machines.....	287,338	Oct. 23	1971	538	25	377
Tarr, George W., New York, N. Y. Derrick.....	275,540	Apr. 10	883	239	23	1385
Tarr, Joseph S., Cleveland, Ohio. Combined corn-sheller, feed-grinder, and horse-power.....	272,495	Feb. 20	1151	323	23	656
Tarver, Fleming E., Hephzibah, Ga. Cotton-planter.....	283,682	Aug. 21	1460	411	24	778
Tasker, Joseph R. (See Feldmann, Hermann B., assignor.)						
Tasker, Stephen P. M. (See Feldmann, Hermann B., assignor.)						
Tasker, Stephen P. M. (See Murphy, Albert L., assignor.)						
Tasker, Stephen P. M. (See Rogers, T. Mellon, assignor.)						
Tasker, Stephen P. M., Philadelphia, Pa. Pulverizing-machine.....	274,050	Mar. 13	1022	280	23	1017
Tasker, Stephen P. M., Philadelphia, Pa. Hopper for pulverizing-machines.....	274,051	Mar. 13	1026	281	23	1018
Tate & Co. (See Sleeper, Charles F., assignor.)						
Tate, Humphrey D. (See Smith, Victor, assignor.)						
Tate, William, and W. T. Johnson, Winston, N. C. Grain and seed separator and grader.....	290,944	Dec. 25	2002	552	25	1260
Tateum, Thomas E., Worcester, Mass. Door-securer.....	280,261	June 26	2021	568	23	2492
Tatham, Benjamin, New York, N. Y. Machine for marking linear measurements upon fabrics.....	273,189	Feb. 27	2025	570	23	817
Tatham, Roger, Rochdale, county of Lancaster, England. Coiler for carding-machines, &c.....	271,155	Jan. 23	1635	471	23	329
Tatham, William, Philadelphia, Pa. Protecting plumbago crucibles.....	281,159	July 10	1009		24	185
Tatum, Charles A., et al. (See Leake, Lewis C., assignor.)						
Tatum, Charles A. (See Weinhausen, Henry, assignor.)						
Tatum & Co., Samuel C. (See Tatum, Samuel C., Jr., assignor.)						
Tatum, John W., Chester, Pa. Paper box.....	285,706	Sept. 25	1883	536	24	1254
Tatum, Lawrence W. (See Carr, John I., assignor.)						
Tatum, Lawrence W. (See Strong, George H., assignor.)						
Tatum, Lawrence W. (See Strong and Carr, assignors.)						
Tatum, Samuel C., Jr., assignor to S. C. Tatum & Co., Cincinnati, Ohio. Sewing-machine treadle.....	276,502	Apr. 24	2093	581	23	1609
Tatum, Samuel C., assignor to S. C. Tatum & Co., Cincinnati, Ohio. Pattern and flask for producing castings.....	282,403	July 31	2617	719	24	477
Tauber, Johann C., Plain City, Ohio. Machinery for converting motion.....	275,436	Apr. 10	753	201	23	1363
Taunton Iron Works Company. (See White, Leonard A., assignor.)						
Tavener, Robert W., West Bay City, Mich., assignor of one-half to D. B. Hyde, Boston, Mass. Extension-table.....	278,830	June 5	209	62	23	2159
Tavener, Robert W., assignor of one-half to A. D. Catlin, West Bay City, Mich. Nailing-machine.....	290,493	Dec. 18	1414	390	25	1151
Tavshanjian, Ohannes S., Constantinople, Turkey. Smoke and spark conveyer.....	281,581	Feb. 17	1548	424	24	284
Tay & Co., George H. (See Symonds, Clarence M., assignor.)						
Tay, Hans, Arcola, Ill. Hame-fastener.....	281,582	July 17	1551	424	24	284
Taylor, Andrew W., Salisbury, Mo. Hay-rake.....	281,943	July 24	2023	554	24	372
Taylor, Andrew W., assignor of one-half to R. Winfree, Salisbury, Mo. Hay-stacker.....	274,842	Mar. 27	2041	568	23	1210
Taylor, Andrew W., assignor of one-half to R. Winfree, Salisbury, Mo. Corn-harvester.....	274,843	Mar. 27	2042	569	23	1210
Taylor, Benjamin, Morrilton, Ark. Car-coupling.....	289,172	Nov. 27	1721	480	25	832
Taylor Brothers. (See Sprague, Austin V. M., assignor.)						
Taylor, Bruce, assignor of one-half to F. W. Miller, Wooster, Ohio. Jointed brace for carriage-tops.....	281,944	July 24	2024	554	24	372
Taylor, Cebra L., Greenville, Conn. Fastener for knob-spindles.....	275,287	Apr. 3	514	141	23	1314
Taylor, Charles, assignor of two-thirds to J. and E. James, Montreal, Quebec, Canada. Plastic compound for roofing.....	270,151	Jan. 2	383		23	78



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Taylor, Charles A. (See Buckins and Taylor.)						
Taylor, Charles F., Chico, Cal. Balanced valve	283,532	Aug. 21	1221	358	24	743
Taylor, Charles F., Springfield, Mass. Process of and apparatus for treating rags for paper-stock	286,503	Oct. 9	901	{ 243 244 }	{ 25 25 }	{ 174 174 }
Taylor, Charles F., Springfield, Mass. Method of and apparatus for treating rags for paper-stock	287,482	Oct. 30	2154	585	25	418
Taylor, Charles H., Woburn, Mass. Machine for shaving leather	277,631	May 15	1379	372	23	1874
Taylor, Charles W., Portsmouth, N. H. Cooking-utensil	274,408	Mar. 20	1494	412	23	1107
Taylor, Chester R., Jackson, Mich. Running-gear	278,290	May 22	2184	601	23	2021
Taylor Company, J. K. (See Taylor, James K., assignor.)						
Taylor, Daniel B. (See Smart, George, assignor.)						
Taylor, Daniel B., St. Louis, Mo. Ventilator	282,800	Aug. 7	390	110	24	568
Taylor, Edgar H., Ash Valley, Kans. Stock-gate for railways	279,672	June 19	1325	367	23	2363
Taylor, Edmund B., College Hill, Mass. Machine for washing hats in the process of manufacture	278,467	May 29	2434	664	23	2074
Taylor, Edward H. (See McConnell and Taylor.)						
Taylor, Edward J., Alaska, W. Va., and C. L. Pagenhart, Boyceville, Va.; said Pagenhart assignor to said Taylor. Road-engine	270,999	Jan. 23	1453	419	23	299
Taylor, Elmore W., Detroit, Mich. Advertising device, card and picture holder	274,052	Mar. 13	1027	281	23	1018
Taylor, Enoch L., Philadelphia, Pa. Railway-tie	286,651	Oct. 16	1096	295	25	215
Taylor, Francis C., Danbury, Conn., assignor to W. J. Kelley, Philadelphia, Pa. Cartridge and wiper	270,616	Jan. 16	974	281	23	207
Taylor, Frederick. (See Belcher, Walter A., assignor.)						
Taylor, Frederick. (See Bisbee and Dudley, assignors.)						
Taylor, Frederick, et al. (See Ladd, Austin S., assignor.)						
Taylor, George. (See Byers and Taylor.)						
Taylor, George W. and A. R. Cox, Belton, S. C. Fire-extinguisher	275,731	Apr. 10	1122	307	23	1426
Taylor, Harrison H. (See Hubel and Taylor.) (Reissue.)						
Taylor, Harrison H., Detroit, Mich., assignor of two-thirds to G. G. Clarkson, Rochester, N. Y., and F. M. Clarkson, Detroit, Mich. Metal-screw machine	274,153	Mar. 20	1166	{ 321 322 }	{ 23 23 }	{ 1049 1049 }
Taylor, Harrison H., assignor to F. A. Hubel, Detroit, Mich. Capsule-machine	275,092	Apr. 3	279	76	23	1274
Taylor, Harrison H., assignor to F. A. Hubel, Detroit, Mich. Capsule-machine	276,094	Apr. 17	1576	{ 434 435 }	{ 23 23 }	{ 1512 1512 }
Taylor, Henry, and J. F. C. Elfers, Brooklyn, assignors of one-third to C. Cornelsen, New York, N. Y. Feather duster	280,531	July 3	235	63	24	42
Taylor, Hiram W., Ramsey, Ill. Gate	285,524	Sept. 25	1668	470	24	1213
Taylor, Horace, Canandaigua, N. Y. Calendar	290,280	Dec. 18	1126	317	25	1101
Taylor, I. M., et al. (See Farwell, Willard B., assignor.)						
Taylor, Jackson, Newberry, S. C. Side-bar spring	286,089	Oct. 2	380	105	25	69
Taylor, James. (See Reed, Hudson H., assignor.)						
Taylor, James K., Boston, Mass., assignor to J. K. Taylor Company, Concord, N. H. Spark-ejector for locomotives	281,160	July 10	1010	282	24	185
Taylor, James K., Boston, Mass., assignor to J. K. Taylor Company, Concord, N. H. Ventilator for locomotive cinder-chambers	282,404	July 31	2618	719	24	477
Taylor, James L., Ishpeming, Mich. Pipe-wrench	287,193	Oct. 23	1789	491	25	344
Taylor, James S. (See Wood and Taylor.)						
Taylor, James S., Danbury, Conn. Scalding napped hats and sizing or felting hat and other fabrics	277,081	May 8	724	189	23	1756
Taylor, James S., Danbury, Conn. Hat scalding and felting machine	279,243	June 19	1514	424	23	2396
Taylor, James S., Danbury, Conn. Hat sizing or felting machine	280,095	June 26	1828	514	23	2458
Taylor, John. (See Lowcock and Taylor.)						
Taylor, John. (See Van Wie and Taylor.)						
Taylor, John, Birmingham, county of Warwick, England. Device for holding marking-chalk.	272,986	Feb. 27	1779	498	23	772
Taylor, John, Halifax, Nova Scotia, Canada. Apparatus for purifying foul ammoniacal liquors	275,541	Apr. 10	884	239	23	1385
Taylor, Lemuel and M., Jordan, Wis. Wire fence	278,291	May 22	2185	601	23	2021
Taylor, Levi, Osceola, Iowa. Gas-machine	286,265	Oct. 16	1364	374	25	262
Taylor, Miner. (See Taylor, Lemuel and M.)						
Taylor, Robert E. and W. A., Brownsville, Tenn. Fence	276,095	Apr. 17	1578	435	23	1513
Taylor, Robert H., Tonganoxie, Kans. Corn-harvester	280,687	July 3	419	118	24	75
Taylor, Rufus M. (See Starbuck and Taylor.)						
Taylor, Serell, Chicago, Ill. Quarter-hoot for horses	275,872	Apr. 17	1315	363	23	1467
Taylor, Stewart, Hyde Park, Ill. Skid	288,376	Nov. 13	607	166	25	621
Taylor, T. Chalkley, Philadelphia, Pa. Packing caustic alkali	270,997	Jan. 23	1452	.....	23	299
Taylor, T. Chalkley, Philadelphia, Pa. Packing caustic alkali	270,998	Jan. 23	1453	.....	23	299
Taylor, Theodore. (See Baer, Miner, and Taylor.)						
Taylor, Theodore F. (See Smith and Taylor.)						
Taylor, Theodore F., Brooklyn, N. Y. Chemical telegraph	289,173	Nov. 27	1722	480	25	832
Taylor, Thomas, Washington, D. C. Process of and apparatus for treating cotton-seed	276,305	Apr. 24	1840	512	23	1565
Taylor, Thomas, Washington, D. C. Treating cotton-seed	289,041	Nov. 27	1571	{ 433 434 }	{ 25 25 }	{ 805 805 }
Taylor, Thomas, Casanova, Va., assignor of one-half to G. B. Lawrason, New Orleans, La. Mechanical movement	285,178	Sept. 18	1261	354	24	1134
Taylor, Thomas A. (See Whitman and Taylor.)						
Taylor, Thomas B., Millersburg, Ohio. Combination-tool for housekeepers	271,000	Jan. 23	1455	419	23	299
Taylor, Thomas P., Bridgeport, Conn. Manufacture of base-balls	277,809	May 15	1582	432	23	1911
Taylor, Warren H., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Post-office lock-box	284,988	Sept. 11	1013	285	24	1085
Taylor, William. (See Beeman, Taylor, and King.)						
Taylor, William, assignor of two-thirds to L. C. Pershing and S. Bissell, Pittsburg, Pa. Nail or spike	272,600	Feb. 20	1284	357	23	679
Taylor, William, assignor of two-thirds to L. C. Pershing and S. Bissell, Pittsburg, Pa. Machine for making wire nails	273,190	Feb. 27	2027	{ 570 571 }	{ 23 23 }	{ 817 817 }
Taylor, William, assignor to Angular Steel Nail Company, (limited,) Pittsburg, Pa. Spike	278,628	May 29	2627	717	23	2107
Taylor, William, assignor to Angular Steel Nail Company, (limited,) Pittsburg, Pa. Machine for making spikes and bolts	278,629	May 29	2628	{ 718 719 }	{ 23 23 }	{ 2107 2107 }
Taylor, William, and F. King, London, England. Plate for batteries	290,611	Dec. 18	1572	432	25	1178
Taylor, William A. (See Taylor, Robert E. and W. A.)						
Taylor, William B. (See Furman, Olliver P., assignor.)						
Taylor, William B., Waltham, Mass. Head-rest for car-seats	283,533	Aug. 21	1282	359	24	743
Taylor, William H., New York, N. Y. Gas-generating apparatus	284,776	Sept. 11	763	{ 212 213 }	{ 24 24 }	{ 1040 1040 }
Taylor, William H., Richmond, Va., assignor, by mesne assignments, to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Artificial tooth	278,468	May 29	2435	664	23	2074

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Taylor, William J. (See Clark and Taylor.)						
Taylor, William M., and I. P. Merrill, Parsons, Kans.; said Merrill assignor to said Taylor. Churn	289,786	Dec. 4	512	142	25	975
Taylor, Winfield S., Trenton, N. J. Drip-pan for windows	289,174	Nov. 27	1723	480	25	832
Teachman, Luke N., Lincoln, Nebr. Wood-preserving composition	277,810	May 15	1583		23	1911
Teal, B. Frank, Philadelphia, Pa. Hair-pin	269,897	Jan. 2	88	26	23	19
Teal, B. Frank, Philadelphia, Pa. Freight-car door	276,644	May 1	124	33	23	1648
Teal, B. Frank, Philadelphia, Pa. Grain-car door	280,688	July 3	420	118	24	75
Teal, Benjamin F., Paterson, N. J. Car-coupling	279,614	June 19	1248	346	23	2350
Teall, Augustus T., Jr., assignor of one-third to W. and C. E. Manning, Rochester, N. Y. Car-coupling	288,600	Nov. 13	1022	280 281	25	695
Teasdale, James M., Howell, Mich. Fruit-drier	279,844	June 19	1517	424	23	2397
Tébar, Jesus M., Caracas, Venezuela. Surveyor's leveling-rod	284,613	Sept. 4	434	123	24	977
Tebbetts, Lewis B., St. Louis, Mo. Index	288,277	Nov. 13	608	166	25	621
Tebbetts, Lewis B., St. Louis, Mo. Index	288,278	Nov. 13	608	166 167	25	621
Tebow, Theodore, Nicholasville, Ky. Machine for dressing hemp, flax, and other fibrous substances	290,494	Dec. 18	1415	391	25	1151
Tecktonius, Emil, Kenosha, Wis. Side spring for vehicles	279,507	June 12	1124	311	23	2321
Teed, Cyrus E. (See Andrews and Teed.)						
Tecters, Elisha P., Alliance, Ohio. Lock	272,796	Feb. 20	1526	430	23	723
Tegardino, James E., Chicago, Ill. Fountain-pen	278,201	May 22	2068	570	23	2002
Tellier, Charles, Paris, France. Rapidly extracting caloric from or communicating it to liquids	275,437	Apr. 10	756	201 202	23	1363
Telschow, Robert, Berlin, Germany. Illuminating apparatus for dental purposes	274,671	Mar. 27	1848	515	23	1176
Temple, Bernard M. (See Crowley and Temple.)						
Temple, Charles E. (See Crawford and Temple.)						
Temple, Henry, assignor of one-half to W. H. McCready, Grand Rapids, Mich. Thill-coupling	279,043	June 5	527	143	23	2213
Temple, Morris D., Chicago, Ill. Chain-pump fixture	274,409	Mar. 20	1495	412	23	1107
Temple, Morris D., Chicago, Ill. Pump	285,443	Sept. 25	1574	443	24	1196
Temple, Morris D., Chicago, Ill. Drop check-valve	290,281	Dec. 18	1128	317	25	1101
Temple, Morris D., Chicago, Ill. Rubber bucket for chain-pumps	290,282	Dec. 18	1129	317	25	1101
Templeton, William E., Chicago, Ill. Combined filter, cooler, and refrigerator	280,881	July 10	670	189	24	125
Tener, Commodore P. (See Roush and Tener.)						
Tennant, William, Faribault, Minn. Roller grinding-mill	275,542	Apr. 10	885	239	23	1385
Tennant, William, Faribault, Minn. Roller grinding-mill	275,543	Apr. 10	888	240	23	1386
Tennison, Milton, North Greece, N. Y. Machine for grinding plow-points	275,792	Apr. 10	1205	330	23	1440
Terhune, Edgar, et al. (See Carman, John W., assignor.)						
Terhune, John. (See Holt, Thomas, Jr., assignor.)						
Teriant, Octave J., Rutland, Vt. Necktie-fastener	289,175	Nov. 27	1724	481	25	832
Terlinden, Jules M. X., Brussels, Belgium. Rotary engine	271,156	Jan. 23	1638	471 472	23	330
Terne, Bruno, assignor of three-fourths to D. and E. P. Bangh, Philadelphia, Pa. Treating tank-waters of slaughter-houses	282,411	July 31	2628	721	24	479
Terramorse, Frank F., East Portland, Ore. Water-proof fabric for making gossamer clothing	284,514	Sept. 4	434		24	978
Terras, Jean M., Lyons, France. Vehicle	287,886	Nov. 6	118	35	25	528
Terry, Ira C., St. Louis, Mo. Car-truck	270,152	Jan. 2	364	111	23	78
Terry, Ira C., St. Louis, Mo. Car-truck	270,153	Jan. 2	364	111	23	78
Terry, Ira C., assignor of one-half to A. Warren, St. Louis, Mo. Car-truck	278,292	May 22	2186	601 602	23	2021
Terry, James M., Pontiac, Mich. Car-coupling	275,438	Apr. 10	757	202	23	1363
Terry, Le Grand, Dundee, N. Y. Rail and rail-support for barn-doors	282,237	July 31	2412	663	24	441
Terry, Le Grand, Horseheads, N. Y. Knob-lock	288,512	Nov. 13	917	250	25	675
Terry, Louis C., Columbus, Miss. Cotton-bale header	282,801	Aug. 7	391	110	24	569
Terry, Napoleon B., Pensacola, Fla. Fire-escape	274,410	Mar. 20	1496	412	23	1107
Terry, Samuel H., Chicago, Ill. Cable-tube for traction-railways	270,506	Jan. 9	824	240	23	171
Terry, Samuel H., Chicago, Ill. Car-brake	270,507	Jan. 9	826	240 241	23	171
Terry, Samuel H., Chicago, Ill. Transmitting power from cable-ways	270,509	Jan. 9	836	243	23	173
Terry, Samuel H., Chicago, Ill. Track and switch for cable roads	270,510	Jan. 9	838	243	23	173
Terry, Samuel H., Guthrie, Mo. Traction rope railway	270,508	Jan. 9	828	241 242	23	172
Terry, Thomas J., Ashland, Mo. Thill-coupling	283,933	Aug. 28	1769	500	24	845
Tessy, Charles H., Leadville, Colo. Bulletin-board	278,630	May 29	2631	719	23	2108
Test, Alpheus, Richmond, Ind. Sod-cutter	272,496	Feb. 20	1152	324	23	656
Test, Alpheus, Richmond, Ind. Sod-cutter	286,652	Oct. 16	1097	295	25	215
Testman, Johan C., Wisner, Nebr. Hay-stacker	277,378	May 8	1070	288	23	1817
Tetamore, Frank L., and S. E. Fordham, Brooklyn, N. Y. Fastener for retaining the heads and bottoms in barrels	275,544	Apr. 10	890	240	23	1386
Tetamore, Frank L., and S. E. Fordham, Brooklyn, N. Y. Tool for applying barrel-head fastenings	284,923	Sept. 11	934	263	24	1070
Teter, John. (See Snell, Jasper, assignor.)						
Teter, William L., Philadelphia, Pa. Process of and apparatus for cleaning grain. (Re-issue)	10,275	Jan. 23	1703	492	23	339
Teter, William L., Philadelphia, Pa., assignor to Eclipse Improved Wheat Cleaning Machine Company, Camden, N. J. Mode of and mechanism for cleaning grain	286,744	Oct. 16	1215	328	25	935
Tetley, James B., Pittsburg, Pa. Parallel dividers	279,460	June 12	1063	294	23	2312
Tetlow & Brother, Henry. (See Tetlow, Daniel, assignor.)						
Tetlow, Daniel, assignor to H. Tetlow & Brother, Philadelphia, Pa. Microscope	287,978	Nov. 6	237	68	25	549
Teuscher, Charles. (See Clark, George, assignor.)						
Teuteberg, William, Omaha, Nebr. Inside blind	289,176	Nov. 27	1724	481	25	833
Tevis, Edwin L., assignor of seven-tenths to J. N. Whelen, Philadelphia, Pa. Safety-gate for car-platforms	289,726	Dec. 4	448	125	25	964
Tewksbury, George C. (See Reynolds and Tewksbury.)						
Textile Manufacturing Company. (See Brooks, John C., assignor.)						
Thackston, Richard D., assignor of one-half to H. I. Coe, St. Louis, Mo. Self-closing hatchway	271,157	Jan. 28	1640	472	23	330
Thackston, Richard D., assignor of one-half to H. I. Coe, St. Louis, Mo. Self-closing hatchway	274,844	Mar. 27	2043	569	23	1210
Thalheimer, Albert, Reading, Pa. Plant-protector	273,911	Mar. 13	805	285	23	900
Thatcher, Frederick B., and J. W. Johnson, assignors of one-fourth to A. L. Moffitt, New Britain, and W. F. Hurd, Bridgeport, Conn. Bottle-stopper	283,436	Aug. 21	1174	330	24	724
Thatcher, Hervey D., and H. P. Barnhart, Potsdam, N. Y. Hand device for milking cows	282,083	Aug. 7	249	72	24	543
Thatcher, Walter S., Waverly, N. Y. Mattress-frame	286,866	Oct. 16	1367	374	25	262



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Thau, Henry, New York, N. Y. Magneto call .....	290,495	Dec. 18	1417	392	25	1152
Thayer, Albert, and M. J. Connelly, Roxbury, Mass. Compressed-air brake .....	283,534	Aug. 21	1282	359	24	743
Thayer, E. Newton. (See Smith, James A., assignor.) .....						
Thayer, Eli, Worcester, Mass. Steam-pump .....	274,154	Mar. 20	1169	323	23	1050
Thayer, Eli, Worcester, Mass. Hydraulic valve .....	274,155	Mar. 20	1170	323	23	1050
Thayer, George B. (See Tobey and Thayer.) .....						
Thayer, George B., Boston, Mass., assignor to himself and G. H. Wood. Elevator.....	283,831	Aug. 28	1648	{ 464 465 }	{ 24 24 }	{ 823 823 }
Thayer, Horatio B. and T. G. Wright, Boston, Mass. File .....	283,832	Aug. 28	1650	465	24	823
Thayer, James F., Providence, R. I. Button-setting instrument .....	272,918	Feb. 27	1703	476	23	759
Thayer, James F., Providence, R. I. Instrument for setting buttons .....	272,919	Feb. 27	1704	477	23	760
Thayer, James F., Providence, R. I. Button-fastener .....	276,645	May 1	125	33	23	1645
Thayer, James F., Providence, R. I. Button-fastener .....	277,082	May 8	726	190	23	1756
Thayer, James F., assignor to Heaton Button Fastener Company, Providence, R. I. Button-setting instrument .....	274,053	Mar. 13	1028	281	23	1018
Thayer, James F., and F. A. Smith, Jr., Providence, R. I. Tool-holder .....	274,232	Mar. 20	1271	351	23	1068
Thayer, James F., and F. A. Smith, Jr., Providence, R. I. Treadle and connection .....	274,992	Apr. 3	130	39	23	1249
Thayer, William E., Williamsburg, Mass. Ratchet tool-holder .....	291,007	Dec. 25	2094	577	25	1274
Thayer, William S., Owego, N. Y. Gag-runner .....	284,258	Sept. 4	127	35	24	926
Thayer, William S., Owego, N. Y. Car-coupling .....	286,745	Oct. 16	1218	329	25	236
Thebrath, Charles M. (See Behrens, William H., assignor.) .....						
Theilmann, Henry, Cincinnati, Ohio. Bung for the preservation of beer .....	277,960	May 22	1763	480	23	1948
Theisen, Eduard, Lindenau, near Leipsic, Saxony, Germany. Apparatus for condensing steam and heating fluids .....	285,936	Oct. 2	203	57, 58	25	39
Thermo Gas Carbonizer Company. (See Copeland, Charles F., assignor.) .....						
Therrien, Louis C., assignor of seventeen twenty-fourths to A. Lavallée and A. Ouimet, Montreal, Quebec, Canada, and T. Garceau, Boston, Mass. Stringing pianos .....	283,279	Nov. 13	609	177	25	622
Thickins, John C., Hinsdale, Mass. Oil-can .....	274,054	Mar. 13	1029	282	23	1018
Thierman, John H., Louisville, Ky. Process of and apparatus for rectifying spirits .....	284,087	Aug. 28	1979	551	24	880
Thigpen, Job, Greenville, Ala. Car-coupling .....	277,379	May 8	1070	288	23	1817
Thimonnier, Etienne, Fils, and C. Vernay, Lyons, France; said Thimonnier assignor to said Vernay. Single-thread sewing-machine .....	287,592	Oct. 30	2306	{ 624 625 }	{ 25 25 }	{ 448 448 }
Thiollier, Antonin, Villeboeuf de Roche la Molière, assignor of one-half to A. Ancel, Chateau de Bouches D'Uzere, Canton de Craon, Mayenne, France. Process of and apparatus for extracting metals from their ores .....	272,391	Feb. 13	1008	283	23	626
Thissell, E. A., et al. (See Coram, John C., assignor.) .....						
Thissell, Earl A., assignor to Dennis Cash Carrier Company, Lowell, Mass. Cash-carrier .....	286,504	Oct. 9	904	244	25	174
Thissell, George W., Winters, Cal. Codding-moth trap and tree-protector .....	275,093	Apr. 3	281	77	23	1274
Thode, Gustav A., Holstein, Iowa. Traction-engine .....	287,593	Oct. 30	2310	625	25	449
Thoens, Burchard, assignor of one-half to M. Schwartz, New Orleans, La. Ice-machine .....	284,515	Sept. 4	435	{ 123 124 }	{ 24 24 }	{ 978 978 }
Thoens, Burchard, assignor of one-half to M. Schwartz, New Orleans, La. Gas-valve for ice-machines .....	289,727	Dec. 4	449	125	25	965
Thom, Theodor, Richland, Minn. Lifting-jack .....	287,066	Oct. 23	1629	448	25	314
Thomas, Aaron F. (See Barnard and Thomas.) .....						
Thomas, Abner D., Morrilton, Ark. Cotton elevator and distributor .....	275,960	Apr. 17	1411	389	23	1485
Thomas, Abner D., Morrilton, Ark. Cotton-conveyer .....	281,319	July 17	1227	340	24	230
Thomas, Alvin S., Findlay, Ohio. Hinge for gates .....	289,870	Dec. 11	623	173	25	1002
Thomas, Banner. (See Duvall, Grafton H., assignor.) .....						
Thomas, Boyel S., assignor to Coo Brothers, Waverly, Ill. Animal-poke .....	275,732	Apr. 10	1122	307	23	1426
Thomas, C. L. (See Thompson, Melchesedeck, V., assignor.) .....						
Thomas, Daniel J. (See Thomas, John P. and D. J.) .....						
Thomas, Eddy T., New York, N. Y. Sewing-machine .....	276,503	Apr. 24	2093	{ 581 582 }	{ 23 23 }	{ 1609 1609 }
Thomas, Eddy T., New York, N. Y. Attachment-holder for sewing-machines .....	277,083	May 8	727	190	23	1756
Thomas, Eddy T., New York, N. Y. Sewing-machine .....	277,084	May 8	728	190	23	1756
Thomas, Eddy T., assignor to A. H. Jocelyn, New York, N. Y. Attachment-holder for sewing-machines .....	273,635	Mar. 6	506	136	23	921
Thomas, Eddy T., New York, N. Y., assignor to Williams Manufacturing Company, Montreal, Canada. Sewing-machine. (Reissue.) .....	10,269	Jan. 9	915	{ 263 264 }	{ 23 23 }	{ 188 188 }
Thomas, Eddy T., New York, N. Y., assignor to New Home Sewing Machine Company, Orange, Mass. Sewing-machine .....	281,649	July 17	1634	446	24	298
Thomas, Eddy T., New York, N. Y., assignor to New Home Sewing Machine Company, Orange, Mass. Button-sewing attachment for sewing-machines .....	281,650	July 17	1635	447	24	298
Thomas, Eddy T., New York, N. Y., assignor to New Home Sewing Machine Company, Orange, Mass. Presser-foot for sewing-machines .....	285,937	Oct. 2	205	58	25	40
Thomas, Eddy T., New York, N. Y., assignor to Weed Sewing Machine Company, Hartford, Conn. Sewing-machine .....	287,339	Oct. 23	1972	538	25	377
Thomas, Eddy T., New York, and H. L. Brevoort, Brooklyn, N. Y., assignor to Johnston Ruffler Company, Ottumwa, Iowa. Ruffler for sewing-machines .....	270,512	Jan. 9	842	245	23	174
Thomas, Eddy T., New York, N. Y., assignor to C. W. Williams Manufacturing Company, Montreal, Canada. Sewing-machine shuttle .....	287,887	Nov. 6	119	35	25	528
Thomas, Edward C. G., Epsom, county of Surrey, England. Breakwater .....	283,683	Aug. 21	1461	411	24	778
Thomas, Edward J., Oakland, Cal. Feed-cup .....	280,532	July 3	236	63	24	42
Thomas, Edwin E., assignor of one-half to W. S. Hamilton, Minneapolis, Minn. Animal-trap .....	269,972	Jan. 2	176	51	23	37
Thomas, Edwin R. (See Cowdery and Thomas.) .....						
Thomas, Eleazer, Pawtucket, R. I. Machine for making molds for castings .....	282,588	Aug. 7	138	41	24	524
Thomas, Eugene H. (See Johnson and Thomas.) .....						
Thomas, Floyd W., Jacksonville, Tex. Buckle .....	275,545	Apr. 10	891	241	23	1386
Thomas, Francis, assignor to Davis, Gould & Co., Cincinnati, Ohio. Vehicle-seat .....	290,223	Dec. 18	1130	{ 317 318 }	{ 25 25 }	{ 1101 1101 }
Thomas, Frank A., Cedar Rapids, Iowa. Halter-clasp .....	273,191	Feb. 27	2030	571	23	818
Thomas, George H., Springfield, Mass. Sewing-machine shuttle .....	273,781	Mar. 13	707	191	23	963
Thomas, George W., assignor to J. I. Vogler, Baltimore, Md. Machine for bringing paste substances into conical form .....	276,096	Apr. 17	1579	{ 435 436 }	{ 23 23 }	{ 1513 1513 }
Thomas, H., et al. (See Roberts, Benjamin F., assignor.) .....						
Thomas, Henry C., Rock View, N. Y. Insulated metallic roof .....	283,166	Aug. 14	823	230	24	653
Thomas, James, Catauqua, Pa. Cut-off mechanism .....	272,797	Feb. 20	1529	430	23	723
Thomas, James S., assignor of one-half to E. Smith, New Orleans, La. Lamp-sign .....	274,411	Mar. 20	1497	413	23	1108
Thomas, John, Cedar Rapids, Iowa. Buckle .....	273,636	Mar. 6	507	136	23	921
Thomas, John, Cedar Rapids, Iowa. Buckle .....	273,637	Mar. 6	508	136	23	921
Thomas, John, Cedar Rapids, Iowa. Buckle .....	274,412	Mar. 20	1498	413	23	1108
Thomas, John, Beckenham, county of Kent, England. Feeding-bottle .....	275,288	Apr. 3	515	142	23	1314
Thomas, John A., Montfort, Wis. Compound for hog-cholera .....	281,161	July 10	1011		24	185

*Alphabetical list of patentees—Continued.*

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Thomas, John B., Indiana, Pa. Odometer.....	273,638	Mar. 6	509	137	23	921
Thomas, John F., and W. Baker, Ilion, N. Y. Device for truing axles .....	270,916	Jan. 23	1348	388 389	23	282
Thomas, John G., Newark, Ohio. Fire-escape .....	284,088	Aug. 28	1981	532	24	881
Thomas, John G., Little Falls, N. Y. Car-axle box .....	288,890	Nov. 20	1381	381	25	764
Thomas, John H., Springfield, Ohio. Sulky hay-rake .....	272,351	Feb. 13	944	262	23	615
Thomas, John K., Columbus, Ohio. Vapor-burning cooking-stove .....	271,158	Jan. 23	1641	472	23	330
Thomas, John P. and D. J., Turner's Falls, Mass. Mortar-tub.....	280,415	July 3	93	25	24	19
Thomas, John R. (See Cordesman and Thomas.)						
Thomas, John R., Cincinnati, Ohio. Sand-drum for sandpapering-machines .....	275,733	Apr. 10	1123	307	23	1426
Thomas, John R., H. J. Cordesman, Cincinnati, and F. Danner, Home City, assignors to Cordesman & Egan Company, Cincinnati, Ohio. Sandpapering-machine .....	287,340	Oct. 23	1973	539	25	377
Thomas, John T., Dayton, Ky. Paving-block .....	285,444	Sept. 25	1576	443	24	1196
Thomas, John W., Jersey City, N. J., assignor to himself, C. M. Whitmire, Buffalo, and C. S. Houghtaling, New York, N. Y. Stove .....	273,912	Mar. 13	866	235	23	990
Thomas, Joseph, Hoboken, N. J. Quilting-machine .....	289,579	Dec. 4	260	73	25	933
Thomas, Joseph, and B. Betzer, Kingston, Ohio. Detachable horseshoe .....	289,177	Nov. 27	1725	481	25	833
Thomas, Joseph D., assignor to L. F. Requa, New York, N. Y. Manufacture of covered or insulated wire .....	271,750	Feb. 6	197	55, 56	23	474
Thomas, Joseph M., assignor to B. C. Smith, Auburn, N. Y. Composition for brass electroplating .....	273,324	Mar. 6	105	.....	23	852
Thomas, Joseph W., and J. D. Ostot, assignors to Thomas, Ludlow & Rodgers, Springfield, Ohio. Fertilizer-distributor .....	279,044	June 5	528	144	23	2213
Thomas, Joshua, Cleveland, Ohio. Journal-box .....	279,461	June 12	1063	294	23	2312
Thomas, Joshua, Cleveland, Ohio. Oil-still .....	282,239	July 31	2413	664	24	441
Thomas, Levi H. (See Auble, William A., assignor.)						
Thomas, Ludlow & Rodgers. (See Thomas and Ostot, assignors.)						
Thomas, Nathaniel E. (See Harris, Milo, assignor.)						
Thomas, Ransom B., Toledo, Ohio. Apparatus for handling ice .....	277,811	May 15	1583	432	23	1912
Thomas, Richard, Carbondale, Ill. Coke-furnace and apparatus connected therewith .....	276,504	Apr. 24	2095	582	23	1609
Thomas, Richard J., Milwaukee, Wis. Oil-cup .....	287,979	Nov. 6	238	65	25	549
Thomas, Samuel A., Charleston, Mo. Revolving wrench .....	287,194	Oct. 23	1790	491	25	344
Thomas, Samuel E., Brooklyn, N. Y. Waste-trap .....	286,746	Oct. 16	1219	329	25	236
Thomas, Sidney G., Tedworth Square, county of Middlesex, England. Bessemer converter .....	274,055	Mar. 13	1030	282	23	1019
Thomas, Wilber, Quincy, Ill. Apparatus for painting fence-pickets by dipping .....	284,684	Sept. 11	646	182	24	1019
Thomas, Wilber, Quincy, Ill. Picket fence .....	284,685	Sept. 11	648	183	24	1020
Thomas, William, New York, N. Y. Photographic camera .....	272,173	Feb. 13	728	201	23	578
Thomas, William B. (See Botsford, William B., assignor.)						
Thomas, William B., Philadelphia, Pa. Hose-jumper .....	287,341	Oct. 23	1975	540	25	378
Thomas, William H. (See Campbell, William W., assignor.)						
Thomas, William M., assignor of one-half to G. H. Knight, Cincinnati, Ohio. Electro-magnetic motor .....	279,045	June 5	530	144 145	23	2213
Thomas, William M., assignor of one-half to S. W. Skinner, Cincinnati, Ohio. Electric-arc lamp .....	278,293	May 22	2187	602	23	2021
Thomas, William M., assignor of one-half to S. W. Skinner, Cincinnati, Ohio. Electric-arc lamp .....	283,042	Aug. 14	677	190 191	24	627
Thomas, William M., assignor of one-half to S. W. Skinner, Cincinnati, Ohio. Electric railway and locomotive .....	288,513	Nov. 13	918	251	25	675
Thomason, Frank D., Chicago, Ill. Adjustable hook .....	274,672	Mar. 27	1849	515	23	1176
Thomass, Herman, Brooklyn, N. Y. Mechanical toy .....	281,320	July 17	1230	340	24	230
Thomc, Samuel W. (See Root and Reilly, assignors.)						
Thommen, Gedeon, Walden, Switzerland. Watch .....	289,728	Dec. 4	450	126	25	965
Thompson, A. C. (See Eatherton, Henry H., assignor.)						
Thompson, Albert G., Mystic River, Conn. Bolt for doors .....	271,001	Jan. 23	1456	419	23	299
Thompson, Alfred. (See De Ferranti and Thompson.)						
Thompson, Asa C. (See Eatherton, Henry H., assignor.)						
Thompson, Asa W., Monmouth, Ill. Check-rower .....	289,468	Dec. 4	112	33	25	906
Thompson, Asa W., Monmouth, Ill., assignor to Thompson, McCullough & Company, of Illinois. Check-rower .....	277,856	May 15	1638	446	23	1921
Thompson, Benjamin, Buffalo, N. Y. Duplex telegraph .....	286,867	Oct. 16	1367	375	25	262
Thompson, Charles, Corvallis, Oreg. Drag-saw .....	271,159	Jan. 23	1643	472	23	330
Thompson, Charles B., St. Catharines, Ontario, Canada. Bobbin-winder for sewing-machines .....	282,412	July 31	2629	722	24	479
Thompson, Charles O. (See Glazier, Ira W., assignor.)						
Thompson, Charles O., Terre Haute, Ind., assignor to Avery Lactate Company, Portsmouth, N. H. Manufacture of lactic acid and lactates .....	290,284	Dec. 18	1132	.....	25	1102
Thompson, Charles S., assignor of one-half to J. Wanamaker, Philadelphia, Pa. Game apparatus .....	286,868	Oct. 16	1369	375	25	262
Thompson, Colin M. (See Reynolds, William R., assignor.)						
Thompson, David W., Englewood, Ill., assignor of one-third to Miller & Bingham, Troy, N. Y. Combined button-fly lap and staying-piece .....	276,926	May 1	503	131	23	1713
Thompson, David W., Englewood, Ill., assignor of one-third to J. Miller, Troy, N. Y. Combined button-lap and stay-piece for garment-slits .....	289,469	Dec. 4	113	34	25	907
Thompson, Edward, Hokah, Minn. Making pulp from wood and other fibrous material .....	287,980	Nov. 6	240	68	25	549
Thompson, Edward, Hokah, Minn. Grain-drying process and appliance .....	290,719	Dec. 25	1719	474	25	1211
Thompson, Edward W., assignor of two-thirds to J. W. Bennett and A. M. Moore, Lowell, Mass. Tag .....	271,378	Jan. 30	1927	557	23	387
Thompson, Edward W., and A. M. Moore, assignors of one-third to J. W. Bennett, Lowell, Mass. Mail-bag catcher and deliverer .....	271,543	Jan. 30	2136	614	23	424
Thompson, Elias, Commercial Point, Ohio. Truss-pad .....	286,090	Oct. 2	382	105	25	70
Thompson, Eliphaz D. (See Coburn and Thompson.)						
Thompson, Frank, <i>et al.</i> (See Cline, John B., assignor.)						
Thompson, Frank H., assignor to Benedict & Burnham Manufacturing Company, Waterbury, Conn. Insulated wire for electrical purposes .....	274,845	Mar. 27	2044	570	23	1210
Thompson, Fred P., Fredericton, New Brunswick, Canada. Sleigh-shafts .....	281,162	July 10	1012	283	24	186
Thompson, George B., <i>et al.</i> (See King, Sidney D., assignor.)						
Thompson, George F., Oshkosh, Wis. Thill-coupling .....	281,583	July 17	1552	425	24	284
Thompson, George H., Plattsmouth, assignor of one-fourth to J. E. Blake, Omaha, Nebr. Fire-escape .....	282,413	July 31	2630	722	24	480
Thompson, George W., Brooklyn, N. Y. Dress-pillow .....	274,673	Mar. 27	1849	515	23	1176
Thompson, Henry A., Farmington, Me. Wrench .....	286,653	Oct. 16	1097	296	25	215
Thompson, Henry G. (See Mower, Samuel E., assignor.)						
Thompson, Henry V., Bushton, Ill. Cultivator .....	288,514	Nov. 13	919	251	25	675
Thompson, Hugh M., St. Louis, Mo. Amalgamator .....	282,131	July 31	2280	626	24	419



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Thompson, Jacob B. (See Rickman and Thompson.)						
Thompson, James F. (See Allen, Richard, assignor.)						
Thompson, James F., Tuscola, Ill. Plastering compound	286,165	Oct. 2	469		25	88
Thompson, James H., Omaha, Nebr. Hand-cultivator	290,142	Dec. 11	950	269	25	1062
Thompson, James M., San Francisco, Cal. Ore-roasting furnace	281,945	July 24	2024	554	24	372
Thompson, James P., Milwaukee, Wis. Draft-bar for sleighs	270,514	Jan. 9	845	246	23	175
Thompson, Jesse, Rushville, Ind. Gate	282,238	July 31	2413	663	24	441
Thompson, John, assignor to Bucyrus Foundry and Manufacturing Company, Bucyrus, Ohio. Traveling crane and derrick	272,987	Feb. 27	1780	498	23	772
Thompson, John, assignor to Bucyrus Foundry and Manufacturing Company, Bucyrus, Ohio. Traveling crane, derrick, &c.	272,988	Feb. 27	1781	499	23	772
Thompson, John, Newcastle-upon-Tyne, county of Northumberland, England. Apparatus for hauling upon slipways	278,631	May 29	2631	719 720	23	2108
Thompson, John A., Monticello, N. Y. Baggage-check	281,163	July 10	1013	283	24	186
Thompson, John C., East Liverpool, Ohio. Cover for earthenware vessels	282,802	Aug. 7	392	111	24	569
Thompson, John G., Cuba, Ill. Mine-railway	290,143	Dec. 11	951	269	25	1063
Thompson, John M., Trumansburg, N. Y. Amalgamator	290,815	Dec. 25	1842	510	25	1233
Thompson, John P., Phenix, Md. Loom-shuttle	284,089	Aug. 28	1983	552	24	881
Thompson, John R., Union County, Ky. Churn	271,544	Jan. 30	2137	615	23	425
Thompson, Josiah W., Milton, assignor of one-half to S. B. Locklin, Boston, Mass. Window-screen	290,496	Dec. 18	1418	302	25	1152
Thompson, Marv E., New York, N. Y. Hair head-dress or wave	276,306	Apr. 24	1841	512	23	1565
Thompson, McCullough & Company. (See Thompson, Asa W., assignor.)						
Thompson, Melchesedeck Y., assignor of one-half to C. L. Thomas, Arkadelphia, Ark. Fire-place	274,846	Mar. 27	2045	570	23	1210
Thompson, Nathan, Brooklyn, N. Y. Stopper for bottles and jars	279,891	June 19	1571	440	23	2407
Thompson, Newell A. (See Foster, John P. C., assignor.)						
Thompson, Norman C. (See Flemiken, Theodore M., assignor.)						
Thompson, Norman C. (See Hall, Asa, assignor.)						
Thompson, Perley & Waite. (See Stevens, Asher B., assignor.)						
Thompson, Philip B., Jr. (See Thompson, Richard H. S., assignor.)						
Thompson, Ransom D., Dumas, Miss. Cotton-press	284,259	Sept. 4	128	35, 36	24	926
Thompson, Richard, New York, assignor to G. H. Clarke, Brooklyn, N. Y. Damper-regulator	272,989	Feb. 27	1782	499	23	773
Thompson, Richard H. S., Lexington, assignor of one-half to P. B. Thompson, Jr., Harrodsburg, Ky. Incandescent electric lamp	280,337	June 26	2121	595	23	2509
Thompson, Robert G., White Cottage, Ohio. Car-coupling	274,847	Mar. 27	2046	570	23	1211
Thompson, Robert L., Boulder, Colo. Ore-roasting furnace	282,803	Aug. 7	393	111	24	569
Thompson, Robert W., East Rockport, assignor of one-half to E. H. Saxton, Cleveland, Ohio. Grooming-glove	277,173	May 8	840	222	23	1776
Thompson, Salmon, and W. E. Farrell, Masonville, Iowa. Car-signal	278,831	June 5	210	62	23	2159
Thompson, Samuel R., Brookline, Mass. Elevated railway and car	270,513	Jan. 9	844	246	23	175
Thompson, Samuel R., Brookline, Mass., assignor, by mesne assignments, to New York Bung and Bushing Company, New York, N. Y. Bung and bushing. (Reissue)	10,368	Aug. 14	1089	305	24	702
Thompson, Sheldon E., Meadville, Pa. Snap-hook	278,469	May 29	2436	664	23	2074
Thompson, Sidney C. (See Colt, James B., assignor.)						
Thompson, Thomas J., Beaver Falls, Pa. Insertible saw-tooth	286,091	Oct. 2	382	106	25	70
Thompson, Thomas J., Jr., Chicopee, Mass. Shaking and dumping grate	282,684	Aug. 7	251	73	24	543
Thompson, Washington C., Covington, Ky. Cotton scraper and cultivator	290,814	Dec. 25	1841	509 510	25	1233
Thompson, William H., assignor of one-half to I. S. Gordon and W. E. Kurtz, Indianapolis, Ind. Carriage-top joint	290,144	Dec. 11	952	269	25	1063
Thompson, William P. (See Cockcroft, Thomas, assignor.)						
Thompson, William P., Philadelphia, Pa. Sectional steam-generator	281,946	July 24	2027	555	24	372
Thompson, William P., Philadelphia, Pa. Feed-water heater and purifier	282,804	Aug. 7	394	111 112	24	569
Thompson, Andrew. (See Shepard, Hoag, and Thomson.)						
Thomson, Benjamin L., London, England. Sheathing for ships' bottoms	272,352	Feb. 13	946	262	23	616
Thomson, Cathcart. (See Nichols, Frederic B., assignor.)						
Thomson, Cathcart. (See Nichols and Thomson.)						
Thomson & Co., W. S. (See Marshall, Nathaniel, assignor.)						
Thomson, Elihu, assignor to American Electric Company, New Britain, Conn. Commutator for dynamo-electric machines	271,947	Feb. 6	436	120	23	517
Thomson, Elihu, assignor to American Electric Company, New Britain, Conn. Electric-current regulator	271,948	Feb. 6	438	120 121	23	518
Thomson, Elihu, assignor to American Electric Company, New Britain, Conn. Electro-magnetic retarding device	272,353	Feb. 13	947	263	23	615
Thomson, Elihu, assignor to American Electric Company, New Britain, Conn. Electric-arc lamp	272,920	Feb. 27	1706	477	23	760
Thomson, Elihu, assignor to American Electric Company, New Britain, Conn. Air-blast attachment for commutators of dynamo-electric machines	273,406	Mar. 6	214	58	23	870
Thomson, Elihu, assignor to American Electric Company, New Britain, Conn. Electric-arc lamp	274,413	Mar. 20	1499	413 414	23	1108
Thomson, Elihu, assignor to American Electric Company, New Britain, Conn. Safety self-closing shunt-switch for electric-light circuits	275,289	Apr. 3	516	142	23	1314
Thomson, Elihu, assignor to American Electric Company, New Britain, Conn. Safety self-closing shunt-switch for electric-light circuits	275,290	Apr. 3	518	142	23	1314
Thomson, Elihu, assignor to Thomson-Houston Electric Company, New Britain, Conn. Electric lamp	283,437	Aug. 21	1175	330	24	724
Thomson, Elihu, New Britain, Conn., assignor to Thomson-Houston Electric Company. Dynamo-electric machine	281,416	July 17	1345	372	24	250
Thomson, Elihu, New Britain, Conn., assignor to Thomson-Houston Electric Company, Boston, Mass. Electric commutator or switch	283,167	Aug. 14	823	231	24	653
Thomson, Elihu, New Britain, Conn., assignor to Thomson-Houston Electric Company, Boston, Mass. Electric lamp	283,168	Aug. 14	825	231	24	653
Thomson, Elihu, New Britain, Conn., assignor to Thomson-Houston Electric Company, of Connecticut. Safety device for electric-arc lamps	289,580	Dec. 4	262	73, 74	25	933
Thomson-Houston Electric Company. (See Houston, Edwin J., assignor.)						
Thomson-Houston Electric Company. (See Thomson, Elihu, assignor.)						
Thomson, John. (See Barton and Thomson.)						
Thomson, John, Hartford, Conn. Combined cutting-pliers and punch	283,833	Aug. 28	1651	465	24	823
Thomson, John, assignor to M. T. Barton, Brooklyn, N. Y. Differential register	274,674	Mar. 27	1850	516	23	1176
Thomson, John, assignor to M. T. Barton, Brooklyn, N. Y. Diaphragm-meter	274,848	Mar. 27	2047	571	23	1211
Thomson, John, Brooklyn, assignor to M. T. Barton, New York, N. Y. Differential register	285,322	Sept. 18	1420	401	24	1164

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Thomson, Judson L., Syracuse, N. Y. Shoe-clasp .....	272,101	Feb. 13	651	177	23	564
Thomson, Judson L., Syracuse, N. Y. Toe-piece for rubber shoes .....	272,601	Feb. 20	1285	358	23	679
Thomson, Judson L., Syracuse, N. Y. Combined whip-socket and rein-holder .....	274,675	Mar. 27	1852	516	23	1176
Thomson, Judson L., Syracuse, N. Y. Shoe-clasp .....	280,533	July 3	236	64	24	42
Thomson, Judson L., Syracuse, N. Y. Shoe-clasp .....	280,534	July 3	238	64	24	43
Thomson, Judson L., Syracuse, N. Y. Metallic boot-strap .....	282,240	July 31	2415	664	24	442
Thomson, Judson L., Syracuse, N. Y. Shoe-clasp .....	282,241	July 31	2416	664	24	442
Thomson, Judson L., Syracuse, N. Y. Rein-holder .....	285,525	Sept. 25	1669	470	24	1214
Thomson, Judson L., Syracuse, N. Y. Buckle .....	290,816	Dec. 25	1844	510	25	1293
Thomson, Langdon & Co. (See Bishop, James M., assignor.)						
Thomson, Peter G., Cincinnati, Ohio. Toy .....	270,511	Jan. 9	842	{ 243 244 245 }	23	174
Thomson, Peter G., Cincinnati, Ohio. Toy .....	276,097	Apr. 17	1530	436	23	1513
Thorn, Henry A. A., London, England. Cartridge-crimper .....	290,370	Dec. 18	1238	349	25	1121
Thorn Wire Hedge Company. (See Briggs, Orlando P., assignor.)						
Thorn Wire Hedge Company. (See Turner and Durkee, assignors.)						
Thorne, Charles E., Springfield, Ohio. Harvester .....	284,686	Sept. 11	649	183	24	1020
Thorne, Joseph, Port Richmond, N. Y. Type setting and distributing machine .....	283,934	Aug. 28	1769	{ 500 501 }	24	845
Thorne, Richard. (See Bailey, James G., assignor.)						
Thorne, William H. (See Bancroft and Thorne.)						
Thornely, Frederic, <i>et al.</i> (See Shoemaker, Jacob, assignor.)						
Thorngate, Charles W. (See McKim, George W., assignor.)						
Thornley, Jasper T. (See Swank and Thornley.)						
Thornton, Benjamin F., <i>et al.</i> (See Hershey and Hitchcock, assignors.)						
Thornton, Edwin P., Yellow Springs, Ohio. Harness .....	281,738	July 24	1765	480	24	325
Thornton, James, assignor of one-fourth to H. G. Dobbins, Wellsville, N. Y. Trace-buckle .....	274,849	Mar. 27	2050	572	23	1211
Thornton, James, assignor of one-fourth to H. G. Dobbins, Wellsville, N. Y. Whip-socket .....	274,850	Mar. 27	2051	572	23	1211
Thornton, James, assignor of one-fourth to H. G. Dobbins, Wellsville, N. Y. Halter .....	277,380	May 8	1071	289	23	1817
Thornton, James, assignor of one-fourth to H. G. Dobbins, Wellsville, N. Y. Whip-socket .....	285,707	Sept. 25	1884	537	24	1254
Thornton, John, Jr., Brooklyn, N. Y. Expanding reamer .....	282,685	Aug. 7	252	73	24	543
Thornton, Robert. (See Naylor and Thornton.)						
Thornton, Samuel P. (See Peddle and Thornton.)						
Thornton, William, and A. Ferris, Elkhart, Ind. Automatic gate .....	288,601	Nov. 13	1024	281	25	695
Thorp, Elliott G., Boston, Mass. Scrap-book .....	273,202	May 22	2069	570	23	2002
Thorp, George, South Bay City, Mich. Vise .....	286,345	Oct. 9	719	192	25	140
Thorp, Henry H., Cleveland, Ohio. Type .....	274,993	Apr. 3	140	39	23	1249
Thorp, James H. (See Hudson, Harry A., assignor.)						
Thorp, James H., Baltimore, Md. Artificial stone .....	278,671	May 29	2677	733	23	2116
Thorp, Samuel, <i>et al.</i> (See Seymour and Bannigan, assignors.)						
Thorpe, Charles N., <i>et al.</i> (See Grace, Harry R., assignor.)						
Thorpe, Charles N., <i>et al.</i> (See Mueller, Theodore, assignor.)						
Thorpe, Elihu M., Wapella, Ill. Automatic grain-meter .....	281,164	July 10	1013	284	24	186
Thorpe, Hattie E., French Creek, W. Va. Hair-holder .....	284,341	Sept. 4	921	63	24	942
Thorpe, Henry A., and R. H. Pfaff, Ashtabula, Ohio. Carriage-top prop-block .....	286,239	Oct. 9	558	153	25	113
Thorpe, Philip, New York, N. Y. Machine for mixing flour and other substances .....	276,646	May 1	126	33, 34	23	1649
Thorpe, Wilbur, St. Joseph, Mo. Mechanical key-board attachment for musical instruments .....	281,947	July 24	2029	555	24	373
Thowless, Orlando, Newark, N. J. Manufacture of bags, &c., for protecting jewelry .....	286,346	Oct. 9	719	.....	25	141
Threlfall, Thomas, assignor to J. Watson, San Francisco, Cal. Rock-drilling machine .....	282,686	Aug. 7	253	73, 74	24	543
Threlfall, Thomas, assignor to J. Watson, San Francisco, Cal. Rock-drilling machine .....	282,687	Aug. 7	256	74	24	543
Thresher, Clarence P., Winona, Minn. Paddle-wheel .....	275,291	Apr. 3	522	143	23	1315
Thronson, Joel A., Dayton, Wash. Ter. Harrow .....	278,632	May 29	2633	720	23	2108
Thum, Otto, Grand Rapids, Mich. Fly-paper .....	278,294	May 22	2191	603	23	2022
Thurber, Edwin S., Boston, Mass. Horseshoe .....	270,154	Jan. 2	385	112	23	78
Thurber, Edwin S., Boston, Mass. Horseshoe and calk therefor .....	274,851	Mar. 27	2052	572	23	1211
Thurber, Edwin S., Boston, Mass. Shoe for the hoofs of animals .....	274,852	Mar. 27	2053	572	23	1211
Thurber, Edwin S., Boston, Mass. Horseshoe .....	274,853	Mar. 27	2054	573	23	1212
Thurber, Edwin S., Boston, Mass. Horseshoe .....	276,647	May 1	128	34	23	1649
Thurber, Henry C. (See Moore, Cortland E., assignor.)						
Thurber, Horace K. (See Jones, Jacob G., assignor.)						
Thurber, Theodore, Auburn, N. Y. Car-wheel .....	287,888	Nov. 6	120	36	25	529
Thurmond, William H., Forsyth, Ga. Car-coupling .....	289,729	Dec. 4	451	126	25	965
Thurzó, Georg N., Vienna, Austria-Hungary. Rubber holder for crutches, heels, &c. ....	282,132	July 31	2283	626	24	419
Thwing, Z. C., <i>et al.</i> (See Bowen, William J., assignor.)						
Tibbals, John S., San Francisco, Cal. Joint for earthenware pipes .....	285,179	Sept. 18	1262	354	24	1134
Tibbals, John S., San Francisco, Cal. Back-water gate for sewers .....	285,180	Sept. 18	1263	355	24	1134
Tibbets, John F., Barton, Kans., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Harvester .....	286,505	Oct. 9	905	244	25	174
Tibbits, John B. (See Ball, Clinton M., assignor.)						
Tibbits, John B. (See Seeley, Charles A., assignor.)						
Tibbits, John B., Hoosic, N. Y. Balance-wheel .....	280,096	June 26	1829	514	23	2458
Tibbits, John B., Hoosic, N. Y. Electric-arc lamp .....	285,445	Sept. 25	1577	443	24	1196
Tibbits, John B., Hoosic, N. Y. Electric-arc lamp .....	287,067	Oct. 23	1631	449	25	315
Tibbles, Charles E. (See Lemnox, David, assignor.)						
Tibbles, Charles E., Burlington, Iowa. Journal-bearing .....	275,292	Apr. 3	523	143	23	1315
Tibbles, Charles E., assignor to Tibbles Sewing Machine Company, Burlington, Iowa. Sewing-machine .....	274,056	Mar. 13	1031	{ 282 283 284 }	23	1019
Tibbles, Charles E., assignor to Tibbles Sewing Machine Company, Burlington, Iowa. Sewing-machine .....	274,057	Mar. 13	1035	{ 284 285 }	23	1019
Tibbles, Charles E., assignor to Tibbles Sewing Machine Company, Burlington, Iowa. Treadle for sewing-machines .....	274,058	Mar. 13	1039	286	23	1020
Tibbles Sewing Machine Company. (See Tibbles, Charles E., assignor.)						
Tichenor, Anson C., Alameda, Cal., assignor to E. K. Valentine, Cuming County, Nebr. Treating alcoholic liquors with electricity .....	280,882	July 10	671	189	24	125
Tidd, Milton, assignor of one-half to J. C. Vreeland, Seneca Falls, N. Y. Vehicle-wheel hub .....	279,892	June 19	1573	441	23	2407
Tidemann, Henry G., assignor of one-half to Helmbacher Forge and Rolling Mills Company, St. Louis, Mo. Link-bending machine .....	280,097	June 26	1831	{ 515 516 }	23	2458
Tiers, Alexander H., <i>et al.</i> (See Pendleton, John H., assignor.)						
Tiers, Cornelius, <i>et al.</i> (See Pendleton, John H., assignor.)						
Tiffany, Albert R., Dayton, Ohio. Paper vessel .....	279,992	June 26	1700	477	23	2435
Tiffany, David B., Xenia, Ohio. Fishing-stake .....	279,508	June 12	1125	311	23	2321



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Tiffany, John C., Xenia, Ohio. Division-mat for oil-presses .....	275,961	Apr. 17	1412	{ 389 390 }	{ 23 }	1485
Tiffany, Joseph C., et al. (See Chipman, William W., assignor.)						
Tihon, Pierre, Lyons, France. Electric lamp .....	278,832	June 5	211	63	23	2159
Tilden, James A. (See Prentiss and Tilden.)						
Tillett, James W., Fairview, Ohio. Fire-escape .....	289,730	Dec. 4	452	126	25	965
Tilley, Arthur. (See Morton and Tilley.)						
Tilley, Edward J., Tompkinsville, N. Y. Planting-machine .....	269,898	Jan. 2	69	26, 27	23	19
Tilley, Samuel, and J. M. Sanford, Brookline, Mo. Mowing and reaping machine .....	269,899	Jan. 2	93	27	23	20
Tillou, Walter G., and J. W. Clapp, New Haven, Conn., assignors to C. I. Kane and R. E. Lester, New York, N. Y. Warp stop-motion for looms .....	289,871	Dec. 11	624	{ 173 174 }	{ 25 }	1002
Tillou, Walter G., and J. W. Clapp, New Haven, Conn., assignors to C. I. Kane and R. E. Lester, New York, N. Y. Shuttle-motion for looms .....	290,285	Dec. 18	1133	318	25	1102
Tillou, Walter G., and J. W. Clapp, New Haven, Conn., assignors to C. I. Kane and R. E. Lester, New York, N. Y. Harness-motion for looms .....	290,286	Dec. 18	1134	318	25	1102
Tillou, Walter G., and J. W. Clapp, New Haven, Conn., assignors to C. I. Kane and R. E. Lester, New York, N. Y. Take-up motion for looms .....	290,287	Dec. 18	1136	319	25	1102
Tilton, Hubert P., Albion, Me., and R. E. Tilton, Brackton, Mass. Steam-generator .....	272,798	Feb. 20	1530	431	23	723
Tilton, Leonard, Brooklyn, N. Y. Blind-stop .....	277,381	May 8	1073	289	23	1817
Tilton, Rufus E. (See Tilton, Hubert P. and R. E.)						
Timby, Theodore F., Brooklyn, N. Y. Steam-cooker .....	273,913	Mar. 13	866	235	23	990
Timby, Theodore R., Nyack, N. Y. Combined amalgamator and separator .....	281,631	July 17	1637	447	24	298
Time Telegraph Company. (See Bailey, Henry L., assignor.)						
Time Telegraph Company. (See Gray, Adelbert W., assignor.)						
Time Telegraph Company. (See Hinimer, Vitalis, assignor.)						
Timmons, J. M., et al. (See Grove and Steely, assignors.)						
Timmons, T. J., et al. (See Grove and Steely, assignors.)						
Timms, Benjamin F. (See Timms, Harvey N., assignor.)						
Timms, Harvey N., Kent, assignor of one-half to B. F. Timms, Lena, Ill. Cultivator-shovel .....	275,546	Apr. 10	891	241	23	1386
Timms, James, Columbus, Ohio. Brake-shoe .....	275,547	Apr. 10	892	241	23	1386
Timms, James, Columbus, Ohio. Car-axle box .....	277,382	May 8	1074	289	23	1818
Timoney, Robert E., and C. R. Brown, Patten, Me. Dust-pan .....	288,280	Nov. 13	610	167	25	622
Tingle, William H., Dayton, Ohio. Flower-stand .....	284,090	Aug. 28	1983	552	24	881
Tingley, John, Philadelphia, Pa. Heel-trimming machine .....	290,817	Dec. 25	1845	511	25	1233
Tinker, Charles O., Ashtabula, Ohio. Machine for making auger-blanks .....	280,098	June 26	1833	516	23	2459
Tinker, Charles O., Ashtabula, Ohio. Roller-die for making auger and bit blanks .....	286,972	Oct. 16	1502	413	25	285
Tinker, Franklin H. (See Fuller, Claude V., assignor.)						
Tinker, Giles K. (See Gardner, Le Roy, and Tinker.)						
Tinkham, Alden R. (See Clough, Enos M., assignor.)						
Tinkham, Alden R., et al. (See Mitchell, James C., assignor.)						
Tinney, Cornelius. (See Hankin and Tinney.)						
Tinsley, W. W. (See Hussey, John J., assignor.)						
Tirre, William, et al. (See Barditzky, Herman, assignor.)						
Tirre, William. (See Brandenburger, Tirre, and Barditzky.)						
Tirrell, Jacob P. (See Blodgett, Read, and Tirrell.)						
Tirrell, Jacob P., Somerville, assignor to W. R. Nutting, Boston, Mass. Automatic circuit-opener .....	283,303	Aug. 14	994	{ 278 279 }	{ 24 }	685
Tisch, Charles, Jr. (See Ripczynski and Tisch.)						
Tisdale, Charles D., Boston, Mass., assignor, by mesne assignments, to American Railway Signal Company, New York, N. Y. Railway signal apparatus .....	273,639	Mar. 6	510	137	23	921
Tisdale, William S., New York, N. Y. Lamp, candlestick, &c. ....	275,293	Apr. 3	523	143	23	1315
Tise, Charles H. (See Tise, Jacob C. and C. H.)						
Tise, Jacob C. and C. H., Winston, N. C. Friction-brake for pulleys, &c. ....	273,914	Mar. 13	868	236	23	991
Tissier, Charles G. (See Tissier, Peter and C. G.)						
Tissier, Peter and C. G., Selma, Ala. Cartridge-extractor for breech-loading guns .....	289,787	Dec. 4	513	142	25	975
Tittle, Cyrus P., Johnstown, Pa. Rail-straightening machine .....	283,535	Aug. 21	1283	359	24	744
Titus, Andrew, Springfield, Mass. Mop-head .....	275,294	Apr. 3	524	143	23	1315
Titus, James M., assignor to G. A. Mannie & Co., Petersburg, Va. Machine for cutting box-patterns .....	272,354	Feb. 13	949	{ 263 264 137 138 199 200 }	{ 23 }	616
Titus, John C., Marion, Ohio. Steam-boiler .....	273,640	Mar. 6	511	{ 137 138 199 200 }	{ 23 }	921
Titus, Luther H., San Gabriel, Cal. Portable ladder for gathering fruit .....	289,942	Dec. 11	706	{ 199 200 }	{ 25 }	1017
Titus, Odeon H., assignor of one-half to J. M. Poole Company, Wilmington, Del. Machine for reducing wheat and other grain .....	286,973	Oct. 16	1503	413	25	285
Titzell, William W., Allegheny, assignor to himself and A. Meyer, Bridgewater, Pa. Manufacture of nails .....	288,958	Nov. 20	1464	404	25	779
Tix, Ernest, Denver, Colo. Adjustable table .....	270,263	Jan. 9	516	151	23	111
Tobey, Henry A., Dayton, Ohio. Folding table .....	285,526	Sept. 25	1670	470	24	1214
Tobey, Horace P. (See Cary, James H., assignor.)						
Tobey, Horace P., Wareham, and G. B. Thayer, Boston, Mass., assignors to Golden Gate Concentrator Company, Augusta, Me. Ore separator and amalgamator .....	287,195	Oct. 23	1791	{ 491 492 }	{ 25 }	345
Tobey, Lyman, Naples, N. Y. Wick-tube for lamp-burners .....	278,295	May 22	2192	603	23	2022
Tobias, Cyrus, Freeport, Ill., assignor to himself, M. Hettinger, F. Gund, C. O. Collmann, and E. Mayer. Metallic crusher-pad .....	273,641	Mar. 6	512	138	23	922
Tobias, Henry H., Chicago, Ill. Parcel-carrier .....	286,654	Oct. 16	1098	296	25	215
Tobin, Michael, Baldwinville, N. Y. Packing tobacco in cases .....	290,818	Dec. 25	1847	511	25	1234
Tobin, Robert. (See Sullivan and Tobin.)						
Tolin, Thomas, Sioux Falls, Dak. Ter. Chamfering-machine .....	276,927	May 1	505	131	23	1713
Todd, Abraham, and L. H. McKee, Constantia, N. Y. Fire-escape .....	277,433	May 8	1136	306	23	1827
Todd, Alexander B., Philadelphia, Pa. Brake-shoe .....	283,438	Aug. 21	1177	331	24	724
Todd, George N., Little Rock, Ark. Cotton-picker .....	271,160	Jan. 23	1644	473	23	330
Todd, George N., Fort Smith, Ark. Cotton-harvester .....	275,094	Apr. 3	282	77	23	1274
Todd, George N., Fort Smith, Ark. Cotton-harvester .....	285,856	Oct. 2	92	27, 28	25	19
Todd, Henry B., Meriden, Conn. Cutting-nippers .....	285,446	Sept. 25	1578	444	24	1196
Todd, Ira G., Bridgeport, Conn. Drill-chuck .....	282,015	July 24	2110	578	24	385
Todd, James, Pittsburg, assignor of one-half to J. Clemens, Erie, Pa. Clothes-wringer .....	272,990	Feb. 27	1763	499	23	773
Todd, Marshall, Danville, Ind. Interest-calculator .....	271,949	Feb. 6	442	121	23	518
Todd, Samuel K., Engene, Ind. Machine for hulling and cleaning wheat .....	276,200	Apr. 24	1709	{ 472 473 }	{ 23 }	1543
Todd, Samuel K., Engene, Ind. Machine for hulling and cleaning grain .....	290,288	Dec. 18	1137	319	25	1102
Todd, William E., Philadelphia, Pa. Follow-up for condenser-tubes .....	288,891	Nov. 20	1362	381	25	764
Toedt, Frederick W., Glenwood, Iowa. Sheet-metal punch .....	278,633	May 29	2633	720	23	2108

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Togus, Theodore M. (See Boynton and Togus.)						
Toffler, Anna. (See Toffler, Simon, assignor.)						
Toffler, Simon, assignor to A. Toffler, New York, N. Y. Floor-mat	276,983	May 1	584	153	23	1726
Tolbert, Martain L., Eldon, Iowa. Riding-saddle	283,043	Aug. 14	681	191	24	628
Tolbert, Martain L., Eldon, Iowa. Stock-feeder	284,091	Aug. 28	1984	553	24	881
Toledo Mower and Reaper Company. (See Davis, John S., assignor.)						
Toll, Fredrik, and W. Weber, Chicago, Ill. Shoe	281,739	July 24	1766	480	24	325
Tolman, Elijah, assignor to Reed & Barton, Taunton, Mass. Spoon and fork	285,769	Sept. 25	1979	561	24	1268
Tolman, James P., West Newton, Mass. Machine for making cordage, webbing, &c.	276,201	Apr. 24	1711	473	23	1543
Toman, Philip, Brookville, Ohio. Portable fence	274,532	Mar. 27	1684	467	23	1146
Tomkins, Cornelius T., New York, N. Y. Storage-battery	279,046	June 5	532	145	23	2214
Tomkins, Cornelius T., New York, N. Y. Storage-battery	284,342	Sept. 4	223	63	24	942
Tomlin, Albert B., Fort Collins, Colo. Twine holder and lifter	289,581	Dec. 4	265	74	25	934
Tomlinson, Benjamin W., and A. Balch, assignors to P. W. Gage, trustee, New York, N. Y. Newspaper wrapping, addressing, and sorting machine	272,355	Feb. 13	952	265 266	23	616
Tomlinson, G. F. (See Case, Charles P., assignor.)						
Tomlinson, H. R. (See Johnson, Adelbert L., assignor.)						
Tomlinson Spring and Axle Works, R. (See Lewis, Charles, assignor.)						
Tomlinson, William. (See Curry, Joseph P., assignor.)						
Tomey, James, New York, N. Y. Electric burglar-alarm	289,470	Dec. 4	115	34	25	907
Tomey, James, New York, N. Y. Electric burglar-alarm	289,471	Dec. 4	120	34, 35	25	908
Tompkins, E. H. Cady, Glen's Falls, N. Y. Car-coupling	287,483	Oct. 30	2155	586	25	419
Tompkins, George S. (See Cram and Tompkins.)						
Tompkins, Samuel E., Newark, N. J. Harness-saddle	286,347	Oct. 9	720	193	25	141
Tondeur, Cleon, Ithaca, N. Y. Oil-burner	278,374	May 29	2320	635	23	2054
Tonks, Joseph. (See Whitmore and Tonks.)						
Toole, Richard O., Perth Amboy, N. J. Steering apparatus	282,805	Aug. 7	396	112	24	569
Toombs, James E., Tyner, Utah Ter. Windmill	273,642	Mar. 6	513	138	23	922
Toombs, William, Logan, Utah Ter. Car-replacer	287,738	Oct. 30	2504	674	25	485
Topham, Phineas, Newark, N. J. Violin-bridge	278,634	May 29	2634	720	23	2108
Topmiller, Bernard, assignor of one-half to S. Obermayer and J. Heinzheimer, Cincinnati, Ohio. Steam-boiler furnace	274,854	Mar. 27	2055	573	23	1212
Toppam, Charles, Salem, Mass., assignor of two-thirds to G. F. Senter, New York, N. Y. Paint	272,102	Feb. 13	652		23	564
Toppam, James S., et al. (See Allen, Samuel F., assignor.)						
Toppam, James S., et al. (See Freeman, Thomas R., assignor.)						
Torras, Joseph, Red River Landing, La. Levee	283,684	Aug. 21	1462	411	24	778
Torrance, Joseph T., Chicago, Ill. Manufacture of steel nails	288,138	Nov. 6	426		25	582
Torrance, Levi N., and R. T. Reid, Shawneetown, Mo. Saw-sharpening gage	286,348	Oct. 9	721	193	25	141
Torrey Automatic Brake Company. (See Guernsey, William B., assignor.)						
Torrey Automatic Brake Company. (See Guernsey and Turner, assignors.)						
Torrey Automatic Brake Company. (See Turner, William B., assignor.)						
Torrey, Dolphus, New York, N. Y. Locomotive and train brake	276,928	May 1	506	132	23	1713
Torrey, Dolphus, New York, N. Y. Automatic take-up for car-brakes	276,929	May 1	508	132	23	1714
Torrey, Dolphus, New York, N. Y. Automatic car-brake	276,930	May 1	509	132 133 134	23	1714
Torrey, Dolphus, New York, N. Y. Car-brake	276,931	May 1	512	133 134	23	1714
Torrey, Dolphus, New York, N. Y. Car-brake	276,932	May 1	515	134	23	1715
Torrey, Dolphus, New York, N. Y. Car-brake	276,933	May 1	519	135	23	1715
Torrey, Dolphus, New York, N. Y. Car-brake	276,934	May 1	521	135	23	1716
Torrey, Dolphus, New York, N. Y. Car-brake	276,935	May 1	522	135 136	23	1716
Torrey, Dolphus, New York, N. Y. Car-brake	276,936	May 1	525	136	23	1716
Torrey, Dolphus, New York, N. Y. Car-brake	276,937	May 1	526	136	23	1716
Torrey, Dolphus, New York, N. Y. Car-brake	276,938	May 1	528	137	23	1717
Torrey, Dolphus, New York, N. Y. Car-brake	287,889	Nov. 6	193	36	25	529
Torrey, Ingersoll T., Beeton, Ontario, Canada. Combination-tool	285,708	Sept. 25	1885	537	24	1254
Torrey, Joseph R. (See Wilson, John A., assignor.)						
Torrey, Joseph R., Worcester, Mass. Razor-strop	272,356	Feb. 13	956	266	23	617
Torrey, Joseph R., Worcester, Mass. Razor-strop	272,357	Feb. 13	956	266	23	617
Torrey, Joseph R., Worcester, Mass. Razor-strop	279,615	June 19	1249	346	23	2350
Torrey, Joseph R., Worcester, Mass. Razor-strop	279,616	June 19	1250	347	23	2351
Torrey, Joseph R., Worcester, Mass. Razor-strop	288,380	Nov. 13	749	204	25	645
Torrey, Joseph R., Worcester, Mass. Razor-strop	288,381	Nov. 13	750	204	25	646
Torst, William, Bingham Cañon, Utah Ter. Fire-escape	283,439	Aug. 21	1177	331	24	724
Tostevin, David. (See Bryant and Tostevin.)						
Totham, James. (See Miller, Richard W., assignor.)						
Tottoli, William A. (See Sheeler, William H., assignor.)						
Touchet, Louis A., Cambridge, Mass. Fare-register	278,754	June 5	98	28	23	2140
Touchet, Louis A., Cambridge, Mass. Passenger-register	286,349	Oct. 9	722	193 194	25	141
Tougas, Louis T., Milford, Mass. Apparatus for and method of cutting elastic soles or heels	277,085	May 8	729	191	23	1757
Tousey, Donald F., assignor of one-half to J. F. Canney, Minneapolis, Minn. Gage-cock	274,994	Apr. 3	140	40	23	1250
Toutsley, Edgar M., Albion, N. Y. Binding attachment for harvesters	283,935	Aug. 28	1775	501	24	846
Toussaint, Christian, New York, N. Y., assignor to M. and A. Gerstendorfer, Hoboken, N. J. Vial or bottle	274,995	Apr. 3	142	40	23	1250
Towan, James H., assignor of one-half to A. Keach, Charlestown, Mass. Gas-lighting apparatus	280,689	July 3	421	119	24	75
Tower, George B. N., New York, N. Y., assignor of one-half to E. L. Lambie, Washington, D. C. Steam-pump	270,515	Jan. 9	846	246	23	175
Tower, John J. (See Poole, Samuel, assignor.)						
Tower, John J., Brooklyn, N. Y. Lemon-squeezer	271,002	Jan. 23	1456	420	23	299
Tower, John J., Brooklyn, N. Y. Police-nippers	276,307	Apr. 24	1842	512	23	1566
Tower, John J., Brooklyn, N. Y. Pipe-wrench	280,099	June 26	1835	516	23	2459
Tower, Lewis C., and J. Lamont, Rochester, N. Y. Razor-strop	271,997	Feb. 6	508	136	23	528
Towl, Ebenezer B., Franktown, Nev. Hay rake and loader	277,174	May 8	841	222	23	1776
Towle, John J., Dixfield, Me. Fruit-drier	284,579	Sept. 4	514	143	24	990
Towne, L. W., et al. (See Henry, John C., assignor.)						
Towne, William J. (See Elliott and Towne.)						
Townes, Quincy A., Lynn, Mass. Machine for nailing heel-lifts	276,648	May 1	129	34	23	1649
Townsend, Beason J. J., St. Louis, Mo. Step for street-cars	280,883	July 10	672	189	24	126
Townsend, Charles W., Charleston, S. C. Car-coupling	284,260	Sept. 4	129	36	24	926
Townsend, George T., Warren, Ohio. Undertaker's cooling-board	277,961	May 22	1763	481	23	1948



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Townsend, Henry E., Hadley, Mich. Lifting-machine.	271,545	Jan. 30	2138	615	23	425
Townsend, Joseph, <i>et al.</i> (See McGregor, Rob Roy, assignor.)						
Townsend, William E., Jr., Brooklyn, N. Y. Protector attachment for electrical conductors.	278,635	May 29	2635	721	23	2109
Townsend, William H., assignor of two-thirds to S. T. Machette and J. M. Meiere, Philadelphia, Pa. Soap.	281,807	July 24	1859		24	343
Trabue, Isaac H., Louisville, Ky. Coupling-link.	270,860	Jan. 16	1270	367	23	263
Trabue, William, Louisville, Ky. Loading-gate for magazine-guns.	276,308	Apr. 24	1843	513	23	1566
Tracht, John A., Galion, Ohio. Hot-bed and other frames for plants.	282,242	July 31	2416	664	24	442
Tracy, Andrew, Richland, Iowa. Shuttle-carrier for sewing-machines.	270,617	Jan. 16	975	282	23	207
Tracy, George S., <i>et al.</i> (See Johnson, William H., assignor.)						
Tracy, Harriet R., New York, N. Y. Fire-escape.	272,103	Feb. 13	652	177	23	564
Tracy, William H. II., assignor to J. Miller, Troy, N. Y. Shirt.	270,264	Jan. 9	517	152	23	111
Tracy, William P., Grand Rapids, Mich. Nut-lock.	280,690	July 3	432	119	24	75
Träder, Frank L. (See Vadersen and Träder.)						
Trafton, Alfred S., Portsmouth, N. H. Fire-escape.	277,175	May 8	842	222	23	1776
Train, Edgar H., Helena, Mont. Ter. Shoe-fastener.	275,295	Apr. 3	525	144	23	1315
Trammer, Charles W., Great Falls, Md. Fishway.	286,869	Oct. 16	1370	375	25	263
Trane, James A., La Crosse, Wis. Steam-trap.	286,506	Oct. 9	906	245	25	175
Traphagan, George W., Glen's Falls, N. Y. Cap or shield for buckle-straps of carriage-tops.	290,289	Dec. 18	1138	319	25	1103
Traphagan, George W., Glen's Falls, N. Y. Sheet-metal fastener.	290,290	Dec. 18	1139	320	25	1103
Trapp, Edward A., New York, N. Y. Locomotive.	278,470	May 29	2436	664	23	2074
Trask, James E., Salem, Mass. Building-cement.	271,950	Feb. 6	443		23	519
Trant, Justus A., assignor to Stanley Rule and Level Company, New Britain, Conn. Beading tool.	284,777	Sept. 11	764	213 214	24	1040
Trautmann, John F., St. Louis, Mo. Horse-collar.	277,857	May 15	1640	446	23	1922
Travers, Vincent P. (See Road, Albert O., assignor.)						
Travis, S. Augusta. (See Burton, George D., assignor.)						
Travis, William C., Gilman, Ill., assignor of one-half to W. H. Francisco, Defiance, Ohio. Car-brake.	287,395	Oct. 23	2042	555	25	389
Traxler, Lester, Butler, Ohio. Portable saw-mill.	271,546	Jan. 30	2139	615	23	425
Traylor, Robert W., Richmond, Va. Journal bearing and box.	286,563	Oct. 9	978	263	25	188
Trazz, Jean B., Grenoble, France. Apparatus for sulphuring plants.	290,145	Dec. 11	953	269	25	1063
Trease, John W., Londonville, Ohio. Whiffletree-iron.	288,681	Nov. 20	1127	310	25	718
Treat, Charles H. (See Baughart and Treat.)						
Treat, Francis H., Joliet, Ill. Machine for making barbed fence-wire.	276,505	Apr. 24	2096	582	23	1610
Treat, Francis H., Joliet, Ill. Machine for straightening railway-rails.	286,655	Oct. 16	1099	296 297	25	215
Treat, Isaac G., Reading, Pa. Ice-creeper.	286,240	Oct. 9	559	153	25	113
Treat, Jairus J., Detroit, Mich. Grain-car door.	280,972	July 10	786	218	24	144
Treber, John, Cynthiana, Ohio. Wine and cider press.	271,161	Jan. 33	1646	473	23	331
Trees, Cyrus E., <i>et al.</i> (See Meltzer and Baker, assignors.)						
Trees, Erhan E., <i>et al.</i> (See Meltzer and Baker, assignors.)						
Trees, James W., <i>et al.</i> (See Meltzer and Baker, assignors.)						
Trefethen, Saltmarsh & Willey. (See Higley, Eben N., assignor.)						
Treftz, J. Fredrick, Chicago, Ill. Step-ladder.	274,855	Mar. 27	2056	573	23	1212
Tregurtha, James, Boston, Mass. Machine for spreading surfacing material upon cloth and other flexible material.	279,462	June 12	1065	295	23	2312
Tregurtha, James, Malden, assignor, by mesne assignments, to Adjustable Telephone Support Company, Boston, Mass. Telephone-switch.	289,178	Nov. 27	1726	481 482	25	833
Tregurtha, James, Malden, assignor, by mesne assignments, to Adjustable Telephone Support Company, Boston, Mass. Support for telephones.	289,179	Nov. 27	1730	482	25	834
Tregurtha, James, Malden, assignor, by mesne assignments, to Adjustable Telephone Support Company, Boston, Mass. Support for telephones.	289,180	Nov. 27	1734	482	25	834
Tregurtha, James, Malden, assignor, by mesne assignments, to Adjustable Telephone Support Company, Boston, Mass. Telephone-switch.	289,321	Nov. 27	1900	529	25	867
Treman, Howard L., Hector, N. Y. Bolster-plate for vehicles.	270,265	Jan. 9	518	152	23	111
Tremblay Zotique, Haverhill, Mass. Tool-handle.	274,414	Mar. 20	1501	414	23	1108
Trench, Ira J., assignor of one-half to C. F. La Mont, New York, N. Y. Revolving advertising device.	272,174	Feb. 13	730	201	23	578
Trenear, John G., Huntington, W. Va. Car-coupling.	271,951	Feb. 6	444	121	23	519
Trenholm, James N. (See Langtry, Richard, assignor.)						
Trenholm, Savage D., Charleston, S. C. Car-coupling.	285,181	Sept. 18	1264	355	24	1134
Trenk, Heinrich, Berlin, Germany, assignor of two-thirds to J. and C. Ballatschano, Bucharest, Roumania. Process of and composition for waterproofing leather, &c.	274,059	Mar. 13	1040		23	1020
Trenton Iron Company. (See Hewitt, William, assignor.)						
Trenton Iron Company. (See Withington, James, assignor.)						
Trerwiler, Charles, and T. Bast, Hennepin, Ill., assignors to F. P. Lawrence, Racine, Wis. Two-wheeled vehicle.	276,309	Apr. 24	1844	513	23	1566
Trescot, Eliza N. (See Trescot, Stephen B., assignor.)						
Trescot, Stephen B., assignor of one-half to E. N. Trescot, Pendleton, S. C. Winter covering for door-steps.	271,205	Jan. 23	1701	491 367 368	23	339
Tresselt, Oscar W., Fort Wayne, Ind. Roller grain-mill.	279,673	June 19	1336	368	23	2363
Trested, Richard H., Greenville, N. J. Hat or other head-covering.	270,155	Jan. 2	385	112	23	78
Trested, Richard H., Greenville, N. J. Hat.	280,262	June 26	2022	569	23	2492
Trested, Richard H., Greenville, N. J. Insole for boots and shoes.	284,092	Aug. 23	1986	533	24	882
Trexler, James L., Mertztown, Pa. Truck for moving plows.	275,375	May 29	2321	635	23	2054
Tribb, Alfred, Denbigh Road, Nottingham, county of Middlesex, England. Secondary battery.	284,343	Sept. 4	224	63	24	942
Trick, Wilkins, <i>et al.</i> (See Hutchings, Richard J., assignor.)						
Trieller, Peter J., assignor to A. Meinecke & Son, Milwaukee, Wis. Toy gun.	285,368	Sept. 18	1478	416	24	1173
Trieloff, Ernst, Cassel, Prussia, Germany. Tobacco-pipe.	288,382	Nov. 13	751	204	25	646
Trier, Frank, London, county of Middlesex, England, assignor to A. C. Baldwin, Boston, Mass. Lathe for dressing stone.	283,685	Aug. 21	1463	412	24	778
Triggs, Frank J., assignor to G. E. Messer, Boston, Mass. Boot-blackening case.	276,542	Apr. 24	2144	596	23	1617
Triggs, William P., East Portland, Oreg. Harrow.	286,974	Oct. 16	1504	414	25	285
Trimble, Andrew T., New Brighton, Pa., assignor to Pittsburg Hinge Company, (limited.) Link-winding machine.	270,861	Jan. 16	1271	367	23	263
Trimble, John S. (See Lutz, George W., assignor.)						
Trimmer, Benjamin T., Rochester, N. Y. Machine for bolting flour and cleaning middlings.	287,890	Nov. 6	125	37	25	529
Trinkaas, Philipp, West Stratford, Conn. Feeding cartridge-shell blanks.	285,182	Sept. 18	1266	355	24	1135

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Trinkle, John W. (See Parsons and Trinkle.)						
Tripler, Charles E., New York, N. Y. Process of and apparatus for amalgamating ores	287,981	Nov. 6	241	68, 69	25	549
Tripp, Augustus F., Buffalo, N. Y. Cover for vessels	288,139	Nov. 6	428	120	25	582
Tripp, Benjamin H. (See Ball and Tripp.)						
Tripp, Bradford H., Gallatin, Mo. Shock-hauler	282,806	Aug. 7	396	112	24	570
Tripp, Frank, Sr., Upper Sandusky, Ohio. Wagon-tongue support	282,405	July 31	2619	719	24	478
Tripp, Henry A. and W., East Williamson, N. Y. Apple-slicer	283,686	Aug. 21	1465	{ 412 413 }	{ 24	779
Tripp, James, New York, N. Y., assignor to C. T. and E. F. Beckwith, Oberlin, Ohio. Sewing-machine shuttle	276,731	May 1	263	67	23	1669
Tripp, James, New York, N. Y., assignor to C. T. and E. F. Beckwith, Oberlin, Ohio. Sewing-machine	282,406	July 31	2620	720	24	478
Tripp, James, New York, N. Y., assignor to C. T. and E. F. Beckwith, Oberlin, Ohio. Sewing-machine	282,407	July 31	2621	720	24	478
Tripp, James, New York, N. Y., assignor to C. T. and E. F. Beckwith, Oberlin, Ohio. Sewing-machine	282,408	July 31	2623	720	24	478
Tripp, James, New York, N. Y., assignor to C. T. and E. F. Beckwith, Oberlin, Ohio. Sewing-machine	282,409	July 31	2624	721	24	479
Tripp, James, New York, N. Y., assignor to C. T. and E. F. Beckwith, Oberlin, Ohio. Sewing-machine tension device	282,410	July 31	2626	721	24	479
Tripp, Walter. (See Tripp, Henry A. and W.)						
Tripe, Sylvanus L. (See Bliss, Abel H., assignor.)						
Tripe, Sylvanus L., assignor of one-half to A. H. Bliss, Chicago, Ill. Apparatus for amalgamating and separating gold, &c., from their ores	271,162	Jan. 23	1647	474	23	331
Trites, John S., Mencton, New Brunswick, Canada. Railway-signal	279,463	June 12	1066	295	23	2312
Trites, John S., Mencton, New Brunswick, Canada, assignor of one-half to E. G. Russell, St. Paul, Minn. Tram-order signal	271,547	Jan. 30	2141	616	23	425
Tritt, Charles W., et al. (See Gilbert, Frank, assignor.)						
Trott, John R., and J. W. McElvain, Auburn, Ill. Automatic register	281,652	July 17	1638	{ 447 448 }	{ 24	298
Trott, Samuel, and F. A. Hamilton, Halifax, Nova Scotia, Canada. Submarine telegraph-cable	271,548	Jan. 30	2142	616	23	426
Trotter, William, Jr., Oyster Bay, N. Y. Making luminous paper	274,415	Mar. 20	1502	233	23	1109
Trotter, William, Jr., Oyster Bay, N. Y. Making luminous paper	277,383	May 8	1075	233	23	1818
Trousdale, Alexander, assignor of one-half to J. Trousdale, St. Louis, Mo. Mechanical device for changing reciprocating to rotary motion	272,602	Feb. 20	1285	358	23	679
Trousdale, James. (See Trousdale, Alexander, assignor.)						
Trouvelot, George H. E., assignor to himself and E. B. Welch, Cambridge, Mass. Induction-coil	273,643	Mar. 6	514	139	23	922
Trowbridge, Alfred A., Danbury, Conn. Optometer	276,732	May 1	264	67	23	1669
Trowbridge, John H., New York, N. Y. Machine for exercising and developing the muscles of mankind	282,589	Aug. 7	139	42	24	525
Trowbridge, Martin L., Greenfield, Wis. Supplementary tire for wagon-wheels	271,998	Feb. 6	509	137	23	528
Truax, John L. (See Arnold, Oliver, assignor.)						
Truax, John L., Worcester, Mass. Machine for cutting pipe	282,473	July 31	2708	{ 745 746 }	{ 24	492
True, David, Salisbury, Mass. Boat-knee. (Reissue)	10,270	Jan. 9	917	264	23	188
True, David, Salisbury, Mass. Socket for boat-knees. (Reissue)	10,345	June 19	1591	445	23	2410
True, David, Salisbury, Mass. Carriage-wrench	271,549	Jan. 30	2143	616	23	426
True, David, Salisbury, Mass. Boat-knee	272,603	Feb. 20	1286	358	23	679
True, David, Salisbury, Mass. Carriage-wrench	279,993	June 26	1701	477	23	2435
True, David, Salisbury, Mass. Boat-knee	280,884	July 10	673	190	24	126
True, David, Salisbury, Mass. Boat-knee	286,870	Oct. 16	1370	375	25	263
True, John A., and E. Smith, Newburyport, Mass. Car-starter	290,720	Dec. 25	1721	475	25	1212
True, Oliver J., Port Clinton, and H. H. Houghton, Elyria, Ohio. Automatic switch-stand	271,999	Feb. 6	510	137	23	528
Truesdell, Frank S. (See Hull and Truesdell.)						
Trull, Benjamin R., Hominy Creek, N. C. Mechanical power	278,376	May 29	2322	635	23	2054
Truman, R. (See Beebe, Lyman C., assignor.)						
Trumble, Walter N., Greenwood, Nebr. Windmill	276,939	May 1	532	138	23	1717
Trump, John G., Richville, Mich. Cultivator	287,196	Oct. 23	1796	492	25	345
Trump, Joseph, Huntsville, Ala. Plow	283,687	Aug. 21	1466	413	24	779
Trump, Lottie A., et al. (See Alexander, Samuel G., assignor.)						
Trumper, Charles. (See Hildenbrand, Klein, and Trumper.)						
Truslow, James L., Jr. (See Bruns, Friedrich A., assignor.)						
Tryner, James P., Denver, Colo. Razor-guard	290,146	Dec. 11	954	270	25	1063
Tryon, Benjamin, Cossackie, assignor to E. H. Lacombe, New York, N. Y. Ice-plow	273,192	Feb. 27	2030	571	23	818
Tryon, E. K., Jr. (See Zimmerling, Charles, assignor.)						
Tubbs & Co., C. H., et al. (See Pluche, James F., assignor.)						
Tubbs, George W., Phoenix, N. Y. Stove-pipe thimble	279,205	June 12	741	203	23	2260
Tubbs, Horace M., and E. T. Swartz, assignors to C. E. Hires, Philadelphia, Pa. Machine for filling bottles	288,744	Nov. 20	1209	331	25	732
Tucker, Charles, Mattapan, Mass. Covered wagon	279,047	June 5	534	145	23	2214
Tucker, Columbus B., Angerona, W. Va., and J. Tucker, Coolville, Ohio. Car-coupling	271,379	Jan. 30	1928	557	23	387
Tucker, Frederick O., Hartford, Conn. Weft stop-motion for looms	273,193	Feb. 27	2031	{ 571 572 }	{ 23	818
Tucker, Gaylon L., assignor of two-thirds to J. Battle, Detroit, Mich. Heating feed-water	287,982	Nov. 6	244	69	25	550
Tucker, George, et al. (See Andrews, Oscar, assignor.)						
Tucker, Irett F., Sumner, Mich. Vehicle-spring	275,439	Apr. 10	758	202	23	1364
Tucker, John, New York, N. Y. Grease-trap for sinks	285,770	Sept. 25	1980	561	24	1268
Tucker, John, New York, N. Y. Grease-trap	286,975	Oct. 16	1505	414	25	285
Tucker, Josephus. (See Tucker, Columbus B. and J.)						
Tucker, Morris W., Sumner, Mich. Vehicle-spring	272,922	Feb. 27	1709	478	23	760
Tucker, Park B., Hamilton, Bermuda. Urethral-stricture instrument	282,590	Aug. 7	140	42	24	525
Tucker, Richard H., East Orange, N. J. Electro-magnetic regulator	272,799	Feb. 20	1531	431	23	724
Tucker, Stephen D., New York, N. Y. Piston-packing	271,003	Jan. 23	1457	420	23	299
Tucker, Stephen D., New York, N. Y. Machine for trimming stereotype-plates	271,380	Jan. 30	1929	558	23	387
Tucker, Stephen D., New York, N. Y. Printing-machine	272,604	Feb. 20	1286	{ 358 359 }	{ 23	679
Tucker, Sylvester J., and E. F. Kelly, Richmond, Va. Percentage-calculator	280,772	July 3	543	151	24	96
Tucker, William, East Brookfield, Mass. Machine for twisting auger-bits	283,304	Aug. 14	996	{ 279 280 }	{ 24	686
Tucker, William, assignor of one-half to J. Hobbs, East Brookfield, Mass. Apparatus for casting couplings for shafts	272,800	Feb. 20	1532	431	23	724



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Tucker, William H., Clio, Tex. Stump-puller.....	276,506	Apr. 24	2098	583	23	1610
Tucker, William H., Washington, D. C. Support for bill-file holders.....	290,497	Dec. 18	1419	{ 392 393 393 394 }	{ 25	1152
Tucker, William H., Washington, D. C. File-box.....	290,498	Dec. 18	1421	{ 297 298 298 299 }	{ 25	1152
Tucker, William W., assignor to Pratt & Whitney Company, Hartford, Conn. Knurling-tool.....	290,612	Dec. 18	1573	432	25	1178
Tuckett, George T., Hamilton, Ontario, Canada. Tin tobacco-caddy.....	272,921	Feb. 27	1708	478	23	760
Tuckfield, Charles B., Salt Lake City, Utah Ter. Candlestick.....	283,536	Aug. 21	1284	359	24	744
Tudor, Frederic, Boston, Mass. Steam and hot-water heating apparatus.....	278,036	May 29	2635	721	23	2109
Tudor, Frederic, Boston, Mass. Apparatus for heating by exhaust-steam.....	283,537	Aug. 21	1285	360	24	744
Tufts, James W. (See Brown, John, assignor.)						
Tufts, James W. (See Gonzales, Manuel, assignor.)						
Tufts, Nathaniel, Boston, Mass. Ship-lantern.....	276,733	May 1	266	67	23	1670
Tufts, Nathaniel, Boston, Mass. Lantern.....	277,086	May 8	730	191	23	1757
Tugwell, Rufus R., Brownsville, Tenn. Cotton-press.....	281,210	July 10	1081	{ 297 298 298 299 }	{ 24	198
Tull, James, Lafayette, Ind. Folding table.....	287,739	Oct. 30	2504	675	25	485
Tullis, John K., Glasgow, county of Lanark, Scotland. Belting.....	290,147	Dec. 11	954	270	25	1063
Tully, Bernard, Washington, D. C. Swing.....	282,934	Aug. 7	540	{ 152 153 }	{ 24	596
Tully, T. De Quincy, assignor to Daisy Sewing Machine Company, Cleveland, Ohio. Sewing-machine.....	280,773	July 3	543	151	24	96
Turney, Charles H., assignor of one-half to Hancock & Hancock, Austin, Tex. Bell-cord coupling.....	270,705	Jan. 16	1093	313	23	228
Tunfzer, Robert, Görlitz, Prussia, Germany. Heating apparatus.....	283,440	Aug. 21	1178	331	24	724
Tunkar, Francis, Omaha, Neb. Girder picket fence.....	284,687	Sept. 11	650	183	24	1020
Tunnichiff, John C. (See Brown and Tunnichiff.)						
Tupper, Hardy E., W., and J. A., Bury township, assignors of one-half to A. and C. W. Ross, Livingston township, Compton county, Quebec, Canada. Evaporator.....	271,550	Jan. 30	2144	616	23	426
Tupper, Harvey L., Rockford, Ill. Recess-plane.....	272,801	Feb. 20	1534	431	23	724
Tupper, John A., Salt Lake City, Utah Ter. Electric cut-off.....	286,158	Oct. 2	461	125	25	86
Tupper, Joseph A. (See Tupper, Hardy E., W., and J. A.)						
Tupper, William. (See Tupper, Hardy E., W., and J. A.)						
Turbiaux, Jacques E., Paris, France. Revolver.....	273,644	Mar. 6	516	139	23	922
Turley, Marshall, Council Bluffs, Iowa. Horse-collar. (Reissue).....	10,431	Dec. 25	2105	580	25	1276
Turley, Marshall, Council Bluffs, Iowa. Nut-lock.....	282,688	Aug. 7	258	74	24	544
Turley, Talton B., La Mine, Mo. Animal-trap.....	271,952	Feb. 6	444	122	23	519
Turnan, William B., Waldron, Ark. Valve-gear for steam-engines.....	283,538	Aug. 21	1287	360	24	744
Turnball, D. B. (See Bokop, Henry D., assignor.)						
Turner, Alexander, Franklin, Ind. Truck for moving harvesters.....	276,734	May 1	267	68	23	1670
Turner, Caleb R., et al. (See Evans, Thomas, assignor.)						
Turner, Caleb R., Brooklyn, N. Y. Sink-cleaner.....	285,771	Sept. 25	1983	561	24	1268
Turner, Charles, Lynn, assignor of three-fourths to R. S. Merrill, Boston, Mass. Welt-guide for sewing-machines.....	273,915	Mar. 13	869	236	23	991
Turner, Charles H., et al. (See Strong, Levi C., assignor.)						
Turner, Charles W., Senatobia, Miss. Cotton-cleaner.....	275,095	Apr. 3	284	78	23	1275
Turner, Chester B., Detroit, Mich. Cut-off valve.....	286,747	Oct. 16	1220	329	25	236
Turner, Donlee B., Chicago, Ill. Composition to insulate, preserve, and protect wire for electrical purposes.....	283,044	Aug. 14	682	.....	24	628
Turner, Edward M., Knoxville, Tenn. Fruit-drier.....	276,202	Apr. 24	1713	474	23	1544
Turner, Edward M., Knoxville, Tenn. Oil-can pump.....	283,834	Aug. 28	1652	{ 465 466 }	{ 24	823
Turner, Edward W., et al. (See Alfson, Andrew, assignor.)						
Turner, Frederick W., St. Albans, England. Gas-engine.....	289,362	Nov. 27	1954	543	25	876
Turner, George H. (See Cornelius and Turner.)						
Turner, George H., Bristol, Conn. Trunk-fastener.....	284,148	Aug. 28	2062	572	24	894
Turner, George P., Meadville, Mo. Corn-planter.....	270,350	Jan. 9	624	184	23	131
Turner, Horace. (See Cohnen, Frank, assignor.)						
Turner, Isaac P., assignor to Earl & Wilson, Troy, N. Y. Cuff.....	269,973	Jan. 2	178	51, 52	23	37
Turner, Isaac P., and F. S. Searle, assignors to J. K. P. Pine, Troy, N. Y. Collar.....	279,994	June 26	1702	478	23	2435
Turner, James C., Sterling, Kans. Shot-holder.....	277,384	May 8	1075	289	23	1818
Turner, James P., Davenport township, Scott county, Iowa. Onion-cultivator.....	280,416	July 3	94	25	24	19
Turner, John, Grosse Isle, Mich. Railway-track layer.....	275,096	Apr. 3	285	78	23	1275
Turner, John, Boston, Mass. Breech-loading fire-arm.....	287,740	Oct. 30	2505	675	25	485
Turner, John P. (See Johnson and Turner.)						
Turner, John T., assignor to himself, J. T. and L. R. Turner, Sing Sing, N. Y. Stone-dressing machine.....	281,211	July 10	1082	298	24	198
Turner, Jonathan T., et al. (See Turner, John T., assignor.)						
Turner, Leonard R., et al. (See Turner, John T., assignor.)						
Turner, Luther G., New York, N. Y., assignor to Turner & Seymour Manufacturing Company, Torrington, Conn. Shade-pull.....	280,334	June 26	2116	593	23	2509
Turner, Orran E., and F. L. Chamberlin, Cleveland, Ohio. Automatic oil-cup.....	290,499	Dec. 18	1422	394	25	1153
Turner, Oscar W. (See Morey, Franklin, assignor.)						
Turner, Seth, and G. B. Durkee, assignors to Thorn Wire Hedge Company, Chicago, Ill. Machine for stringing barbs upon wires.....	281,653	July 17	1641	{ 448 449 }	{ 24	299
Turner & Seymour Manufacturing Company. (See Turner, Luther G., assignor.)						
Turner, Thomas G., New York, N. Y. Switch for electric lights.....	275,440	Apr. 10	759	202	23	1364
Turner, Thomas M., Cincinnati, Ohio. Package-carrier.....	270,917	Jan. 23	1349	389	23	282
Turner Truck Company. (See Turner, William H., assignor.)						
Turner, William A., assignor to J. Davol, Providence, R. I. Atomizer.....	276,940	May 1	533	138	23	1717
Turner, William B. (See Guernsey and Turner.)						
Turner, William B., assignor of one-half to C. Beard, New York, N. Y. Car-brake.....	278,833	June 5	214	63, 64	23	2159
Turner, William B., assignor of one-half to C. Beard, New York, N. Y. Automatic car-brake.....	278,834	June 5	216	64	23	2160
Turner, William B., assignor of one-half to C. Beard, New York, N. Y. Automatic car-brake.....	278,835	June 5	219	65	23	2160
Turner, William B., New York, N. Y., assignor of one-third to Torrey Automatic Brake Company, of New York. Locomotive-brake.....	278,471	May 29	2437	665	23	2074
Turner, William C. (See Fisher, Asahel H., assignor.)						
Turner, William H., assignor to Hadley Manufacturing Company, Indianapolis, Ind. Cover for self-binding harvesters.....	270,862	Jan. 16	1273	367	23	264
Turner, William H., assignor to Turner Truck Company, Indianapolis, Ind. Attachment for harvesters.....	284,778	Sept. 11	765	214	24	1040
Turner, William M., Pensacola, Fla. Ratchet-drill.....	270,516	Jan. 9	847	247	23	175

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Turney, David B., Nebo, Ark. Broom.....	288,959	Nov. 20	1465	405	25	779
Turney, William S. (See Long and Turney.)						
Turpie Brothers. (See Moore, James C., assignor.)						
Turpin, Thomas B. (See George and Turpin.)						
Turver, William W., Parkdale, Ontario, Canada. Pessary.....	288,140	Nov. 6	428	120	25	582
Tustin, William I., San Francisco, Cal. Ore-pulverizing mill.....	288,745	Nov. 20	1210	331	25	732
Tuttle, Hosmer, Cedar Rapids, Iowa. Straw-band grain-binder.....	280,335	June 26	2117	593 594 595	23	2509
Tuttle, John W., Watertown, Mass. Attaching device for tags.....	283,169	Aug. 14	829	231	24	653
Tuttle, Richard T. (See Madson, Cornelius, assignor.)						
Tuttle, Richard T., et al. (See Benedict, Richard W., assignor.)						
Tuttle, Richard T., et al. (See Sweet, Lebbeus, assignor.)						
Tuttle, William, Dowagiac, Mich. Chill for chilling metal.....	272,497	Feb. 20	1153	324	23	656
Tverskoy, Nicholas N., assignor of one-half to P. P. Weimer, St. Petersburg, Russia. Ro-	273,916	Mar. 13	870	236 237	23	991
tary engine and pump.....						
Tweed, Charles H., Allegheny, Pa. Fire-escape.....	284,688	Sept. 11	651	181	24	1020
Tweedale, Samuel, Accrington, county of Lancaster, England. Machine for spinning fibers.....	283,048	Aug. 14	683	193 192	24	628
Tweeddale, William, Brooklyn, N. Y. Water-closet.....	279,045	June 5	535	146	23	2214
Tweedy, Edmund, Danbury, Conn. Hat-curling machine.....	281,321	July 17	1231	340 341	24	230
Tweedy, Edmund, Danbury, Conn. Device for holding hat-bodies upon expansible hat-	283,363	Aug. 14	1081	304	24	701
blocks.....						
Tweedy, Edmund, Danbury, Conn. Hat-curling machine.....	283,726	Aug. 21	1515	427 428	24	788
Tweedy, John, Vernon, Ind. Churn.....	282,935	Aug. 7	542	153	24	597
Twiggs, John W. (See Porter, John H., assignor.)						
Twining, George W. (See Brastow and Twining.)						
Twombly, Frank S., Barton Landing, Vt. Cartilage-driving detector.....	280,535	July 3	239	64	24	43
Twombly, O., et al. (See Huse, Warren D., assignor.)						
Tyack, Henry, Grass Valley, Cal. Baling-press.....	273,407	Mar. 6	217	58, 59	23	870
Tyack, Henry, Grass Valley, Cal. Wine and cider press.....	290,653	Dec. 18	1620	445 446	25	1186
Tylee, Felix, Cleveland, Ohio. Heating-furnace.....	274,676	Mar. 27	1853	516	23	1176
Tyler, Aaron P., Chicago, Ill., assignor to J. H. Foote, New York, N. Y. Mute for wind	285,183	Sept. 18	1267	355	24	1135
musical instruments.....						
Tyler, Charles D., Jr. (See Creagan, John, assignor.)						
Tyler, Charles H., St. Louis, Mo. Covering for tables, &c.....	279,110	June 5	631	171	23	2230
Tyler, Charles H., St. Louis, Mo. Office-desk.....	257,068	Oct. 23	1633	449	25	315
Tyler, Merrill A., Rockland, Mass. Heel-trimming machine.....	282,591	Aug. 7	141	42	24	525
Tymeson, Eugene. (See Skinner and Tymeson.)						
Tynan, Joseph E., Paterson, N. J. Silk-throwing machine.....	275,548	Apr. 10	893	241 242	23	1387
Tynan, Joseph E., Paterson, N. J. Bobbin-spindle and support therefor.....	279,674	June 19	1326	368	23	2363
Tyrrell, Edward, Cincinnati, Ohio. Pencil-holder.....	290,291	Dec. 18	1139	320	25	1103
Tyson, Bryan, Washington, D. C. Amalgamator and concentrator.....	270,156	Jan. 2	386	112 113	23	78
Uchtman, George. (See Niemiller, Charles, assignor.)						
Udell, Calvin G., North Indianapolis, Ind. Show-stand.....	290,371	Dec. 18	1239	349	25	1122
Udell, Calvin G., North Indianapolis, Ind. Folding table.....	290,500	Dec. 18	1423	394	25	1153
Udell, Calvin G., North Indianapolis, Ind. Clothes-drier.....	290,501	Dec. 18	1425	395	25	1153
Uehling, Edward A., Sharpsville, Pa. Gas-seal for blast-furnaces.....	273,194	Feb. 27	2033	572	23	818
Ufer, Friedrich A., Dresden, Saxony, Germany. Folding, bath, and invalid chair.....	286,871	Oct. 16	1371	376	25	263
Ufford, Stephen R. S., Batavia, assignor of one-half to J. M. Innes, Aurora, Ill. Pillow-	288,515	Nov. 13	920	252	25	675
sham holder.....						
Uhler, Clarence H., Lebanon, Pa., assignor of one-half to J. C. Uhler, New York, N. Y.	286,159	Oct. 2	462	126	25	86
Blank for checks and other negotiable papers.....						
Uhler, J. Clement. (See Uhler, Clarence H., assignor.)						
Uhlig, Richard W., assignor to J. Reckendorfer, New York, N. Y. Lead or crayon holder.....	276,543	Apr. 24	2144	596	23	1617
Uhlinger, William P., Philadelphia, Pa. Loom-shuttle.....	288,602	Nov. 13	1025	281	25	695
Ujhely, Heinrich, Vienna, Austria-Hungary. Decolorizing and deodorizing heavy mineral	290,788	Dec. 4	515	.....	25	975
oils.....						
Ulrich, Frederick, Peru, Ind. Wagon-axle.....	278,755	June 5	99	28	23	2140
Ulrich, Justus, Pfungstadt, Germany, assignor to A. Schwarz, New York, N. Y. Con-	271,551	Jan. 30	2145	617 618	23	426
tinuous malt-kiln.....						
Ulrich, William, Rock Falls, Ill. Fire-escape.....	275,962	Apr. 17	1413	390	23	1485
Ulrich, William J., East Hartford, Conn. Vehicle-seat.....	279,288	June 12	835	231	23	2276
Ulrick, Charles E., and T. Williams, Philadelphia, Pa. Automatic cylinder-cock.....	270,266	Jan. 9	519	152	23	111
Ulrick, Toney D. (See Snyder, Stough, and Ulrick.)						
Ülsmann, Hermann, Königschütte, Prussia, Germany, assignor to E. Cooper, New York,	273,917	Mar. 13	873	.....	23	991
N. Y. Manufacture of furnace-linings.....						
Umbdenstock, Michael, Chicago, Ill. Rack for advertising-cards.....	272,000	Feb. 6	511	137	23	528
Umberger, Everett W. (See Heldreth and Umberger.)						
Umpleby, William H., Trenton, N. J. Water-closet.....	280,417	July 3	95	25	24	19
Unangst, Christopher T., Swartswood, N. J. Portable horse-power for operating fire-engines.....	287,891	Nov. 6	128	37, 38	25	530
Unenrich, Ferdinand F. P., assignor to O. Jettinger, Sandusky, Ohio. Die for making boes.....	278,203	May 22	2070	570	23	2002
Underground Electric Cable Company. (See McMahon, William and T. G., assignors.)						
Underhill, Franklin. (See Harrison and Underhill.)						
Underwood, Flavius J., North Springfield, Mo. Rotary colter.....	290,148	Dec. 11	955	270	25	1063
Underwood, Frank M. (See Ackerman, Mitchell, and Underwood.)						
Underwood, Harold G., et al. (See Rintelman, August, assignor.)						
Underwood, John R., and G. W. Daniels, Nash County, N. C. Pinion-lifter or apparatus	272,605	Feb. 20	1289	359	23	680
for gearing and ungearing mills and other machinery.....						
Underwood, Wells A. (See McMillan, Duncan, assignor.)						
Underwood, Wells A., et al. (See Simmons, Thomas A., assignor.) (Reissue.)						
Underwood, Wells A., Wooster, Ohio. Box-loop for hame-tugs.....	277,434	May 8	1137	306	23	1828
Unexcelled Fireworks Company. (See Ritchel, Charles F., assignor.)						
Ungemach, Theobald F., Zanesville, Ohio. Sewing-machine shuttle.....	271,552	Jan. 30	2148	618	23	426
Ungemach, Theobald F., and E. Oshe, Zanesville, Ohio. Attachment for faucets.....	274,996	Apr. 3	142	40	23	1250
Unger, Julius, Cannstadt, and S. O. Eisele, Heuchlingen, Germany; said Eisele assignor to	290,149	Dec. 11	956	271	25	1063
said Unger. Galvanic battery.....						
Unger, Julius, Cannstadt, and S. O. Eisele, Heuchlingen, Germany; said Eisele assignor to	290,150	Dec. 11	958	271	25	1064
said Unger. Electric lamp.....						



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Union Cabinet and Paper Company. (See Eaton, Benjamin F., assignor.)						
Union Carpet Lining Company. (See Farnham, Thomas H., assignor.)						
Union Fastening Company. (See Bacon, Henry S., assignor.)						
Union Fastening Company. (See Eppler, Andrew, Jr., assignor.)						
Union Hardware Company. (See Langdon, James E., assignor.)						
Union Hardware Company. (See Morris, William J., assignor.)						
Union Hardware Manufacturing Company. (See Gibbons, John, assignor.)						
Union Metallic Cartridge Company. (See Orcutt and Richards, assignors.)						
Union Mills Paper Manufacturing Company. (See Fisher and Solliday, assignors.)						
Union Paper Bag Machine Company. (See House, Henry A., assignor.)						
Union Paper Bag Machine Company. (See Stilwell, Charles B., assignor.)						
Union Paper Bag Machine Company. (See Stocking, Edgar B., assignor.)						
Union Switch and Signal Company. (See Gassett, Oscar, assignor.)						
Union Switch and Signal Company. (See Gassett and Fisher, assignors.)						
Union Switch and Signal Company. (See Guerber, Frederick S., assignor.)						
Union Switch and Signal Company. (See Hendrickson, Stephen C., assignor.)						
Union Twist Drill Company. (See Wheeler, Henry F., assignor.)						
Union Wire Mattress Company. (See Powers, David J., assignor.)						
United Gas Improvement Company. (See Hanlon, John, assignor.)						
United Gas Improvement Company. (See Hanlon and Leadley, assignors.)						
United Gas Improvement Company. (See Hanlon, Leadley, and Gibbs, assignors.)						
United Gas Improvement Company. (See Leadley and Hanlon, assignors.)						
United Gas Improvement Company of Pennsylvania. (See Gibbs and McClintock, assignors.)						
United States Chemical Company. (See Lewis, George T., assignor.)						
United States Dyeing Company. (See Vaughan, Henry W., assignor.)						
United States Electric Lighting Company. (See Maxim, Hiram S., assignor.)						
United States Electric Lighting Company. (See Olmsted, Joseph, assignor.)						
United States Electric Lighting Company. (See Weston, Edward, assignor.)						
United States Electric Lighting Company. (See Weston, Edward, assignor.) (Reissue.)						
United States Improvement Company. (See Johnston, James J., assignor.)						
United States Lock Nut Company. (See Eltonhead, William B., assignor.)						
United States Metallic Packing Company. (See Monroe, Edwin P., assignor.)						
United States Pneumatic Copying Press Company. (See Sammons, Jacob S., assignor.)						
United States Spring Car-Motor Construction Company. (See Stites, Steel, and Austin, assignors.)						
United States Standard Billiard Table Company. (See De Gaetano, Stephen, assignor.) (Reissue.)						
United States Standard Billiard Table Company. (See Wiggins, William H., assignor.)						
United States Wind Engine and Pump Company. (See Haley, George S. and C. H., assignors.)						
United States Wind Engine and Pump Company. (See Perry, Thomas O., assignor.)						
Universal Button Hole Attachment Company. (See Egge, Frederick, assignor.)						
Universal Heel Burnishing Machine Company. (See Beaudry, Zotique, assignor.)						
Unthank, Daniel, assignor to Unthank Plow Company, Indianapolis, Ind. Cultivator .....	278,672	May 29	2678	{ 733 734 }	23	2116
Unthank Plow Company. (See Unthank, Daniel, assignor.)						
Unzicker, Herman, Chicago, Ill. Automatic friction-clutch .....	284,689	Sept. 11	652	184	24	1020
Unzicker, Otto, assignor to A. Shoemaker, Chicago, Ill. Canopy-standard for vehicles .....	270,517	Jan. 9	849	247	23	176
Upham, Andrew J. (See Ellwood and Upham.)						
Upham, Andrew J., Sycamore, Ill. Wheelbarrow .....	285,323	Sept. 18	1421	401	24	1164
Upham, Andrew J., Sterling, Ill., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass. Barbed-metal-strip fencing .....	280,100	June 26	1835	517	23	2459
Upham, Andrew J., Sterling, Ill., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass., and I. L. Ellwood, De Kalb, Ill. Barbed wire .....	286,507	Oct. 9	906	245	25	175
Upham, Andrew J., Sycamore, Ill., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass., and I. L. Ellwood, De Kalb, Ill. Barbed metal-strip fencing ..	272,923	Feb. 27	1710	478	23	761
Upham, Andrew J., Sycamore, assignor to H. Ellwood, De Kalb, Ill. Barbed-wire fence ..	284,261	Sept. 4	130	36	24	927
Upham, Artemas B., assignor of one-half to H. W. Wells, Peoria, Ill. Combined measure and scale .....	290,945	Dec. 25	2004	552	25	1260
Upham, Artemas B., assignor of one-half to H. W. Wells and R. A. Goldsborough, Peoria, Ill. Store-service system .....	284,929	Sept. 11	1014	285	24	1085
Upson Nut Company. (See Edwards, William B., assignor.)						
Upson, Norton L., et al. (See Stoddard, Oscar, assignor.)						
Upton, Charles H., Minneapolis, Minn. Reversing-valve for steam-engines .....	283,046	Aug. 14	684	192	24	629
Upton, Charles S., Spencerport, N. Y. Rope and cord fastening .....	277,632	May 15	1381	372	23	1874
Upton, Charles S., Spencerport, N. Y. Halter .....	283,539	Aug. 21	1258	360	24	744
Upton, George. (See Rathbun, Charles B., assignor.)						
Urbahn, Alwill, Paterson, N. J., assignor of one-half to A. G. Jennings, Brooklyn, N. Y. Figured fabric .....	289,582	Dec. 4	266	74	25	934
Urbahn, Alwill, Paterson, N. J., assignor of one-half to A. G. Jennings, Brooklyn, N. Y. Woven fabric and loom for weaving the same .....	289,731	Dec. 4	452	{ 126 127 }	25	965
Urbahn, Alwill, assignor of one-half to J. Walder, Paterson, N. J. Loom for making French harness .....	289,872	Dec. 11	626	{ 174 175 }	25	1003
Urban, George, Jr. (See Ortman, Barnum F., assignor.)						
Urban, Jacob, Racine, Wis. Color .....	277,633	May 15	1381	.....	23	1875
Uren, Edward W., et al. (See Binnie, Alexander, assignor.)						
Uren, John W., et al. (See Binnie, Alexander, assignor.)						
Uren, Andrew. (See Ivey and Uren.)						
Uren, Richard, Houghton, Mich. Rolling-mill .....	274,856	Mar. 27	2057	573	23	1212
Urie, Thomas, assignor of one-third to F. S. Hall, Boulder, Colo. Weather-strip .....	277,858	May 15	1640	447	23	1922
Urie, Thomas, assignor of one-third to F. S. Hall, Boulder, Colo. Gate .....	286,092	Oct. 2	383	106	25	70
Urner, Lewis H., Nevada, Mo. Harness-pad press .....	283,305	Aug. 14	997	280	24	686
Urquhart, Samuel G. A., San Francisco, Cal. Car-coupling .....	279,675	June 19	1327	{ 368 369 }	23	2363
Urwick, Henry, Westwood House, St. John's Hill, Wandsworth, county of Surrey, England. Glove .....	276,310	Apr. 24	1844	{ 513 514 }	23	1566
Usher, Arthur P. (See Faas, Gustav A., assignor.)						
Ussing, Nicholas, et al. (See Nicolaisen, Eberhardt, assignor.)						
Ustick, Stephen, assignor of one-third to T. J. Bowley, Philadelphia, Pa. Inkstand .....	280,418	July 3	95	26	24	19
Ustick, Stephen, assignor of one-third to T. J. Bowley, Philadelphia, Pa. Pen-rack .....	282,936	Aug. 7	543	153	24	597
Utley, Thomas, Boston, Mass. Fittings for carrying cattle on vessels .....	286,976	Oct. 16	1507	414	25	286
Utter, Charles C., Saginaw, Mich. Tube-clamp for oil-wells .....	273,195	Feb. 27	2034	572	23	818
Utter, Morris L., Rockford, Ill. Cultivator .....	276,984	May 1	585	154	23	1726
Utz, Emil, Holstead, Kans. Car-starter .....	279,049	June 5	537	146	23	2215

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Utz, Emil, and T. Sprick, Odessa, Russia. Car-starter .....	272,358	Feb. 13	957	{ 266 267 }	{ 23	617
Uyrich, Philipp, Minneapolis, Minn. Barrel-lining .....	290,721	Dec. 25	1722	475	25	1212
Vacheresse, Jules, East New York, N. Y. Coffee or tea pot .....	272,802	Feb. 20	1535	432	23	724
Vadersen, William, and F. L. Träder, Elizabeth, N. J. Hydrant .....	286,508	Oct. 9	907	245	25	175
Vail, Alonzo V. C. (See Sliter and Bazzett, assignors.)						
Vail, Jonathan H., assignor to Bergmann & Co., New York, N. Y. Electrical stand-lamp.	286,350	Oct. 9	724	194	25	141
Vail, Joseph C., Maple's Mill, Ill. Horse-tail holder .....	229,873	Dec. 11	629	175	25	1003
Vail, Theodore N., Boston, Mass. Telephone-exchange signaling circuit and apparatus ..	274,857	Mar. 27	2058	574	23	1213
Vail, Theodore N., Boston, Mass. Automatic signaling apparatus for telephone-circuits ..	275,296	Apr. 3	526	144	23	1315
Vail, Theodore N., Boston, Mass. Telegraph and telephone line .....	279,289	June 12	835	232	23	2276
Vail, Thomas C., Topeka, Kans. Constructing picture-frames .....	286,872	Oct. 16	1373	376	25	263
Vaill, Edward W., Worcester, Mass. Furniture .....	289,583	Dec. 4	266	75	25	934
Vale, William, Birmingham, county of Warwick, England. Fountain pen-holder .....	290,820	Dec. 25	1848	{ 511 512 }	{ 25	1234
Valentine, David H., Brooklyn, N. Y. Preserving and protecting piles .....	282,807	Aug. 7	397	112	24	570
Valentine, E. K. (See Tichenor, Anson C., assignor.)						
Valentic, George S., Brooklyn, N. Y. Process of and apparatus for preserving wood by impregnation to given heights .....	285,087	Sept. 18	1148	321	24	1114
Valentine, Leander, Rushford, Minn. Bag-holder .....	289,181	Nov. 27	1736	483	25	834
Valentine, William, Redding, Cal. Tire-upsetter .....	278,836	June 5	223	66	23	2161
Valentino, William M., Glen Cove, N. Y. Dust-pan .....	279,676	June 19	1328	369	23	2363
Valero, Jose, Havana, Cuba. Thread-cutter for sewing-machines .....	287,197	Oct. 23	1797	493	25	345
Vallentine, Arthur. (See Hyde and Vallentine.)						
Valley, John N. (See Cove, Joseph T. C., assignor.)						
Valley, John N., Jersey City, N. J. Step-ladder .....	279,893	June 19	1575	441	23	2407
Valley Machine Company. (See Russell, John W., assignor.)						
Van Aernam, Thomas, Albany, N. Y. Wear-plate for wagon-holsters .....	270,918	Jan. 23	1350	389	23	283
Van Allen, Charles A., assignor to Van Allen Manufacturing Company, Chicago, Ill. Back-stop for sewing-machines .....	287,484	Oct. 30	2156	586	25	419
Van Allen, Charles A., assignor to Van Allen Manufacturing Company, Chicago, Ill. Spring for keeping pitmen off dead-centers .....	287,485	Oct. 30	2158	586	25	419
Van Allen, George W., New York, N. Y. Delivery mechanism for printing-presses .....	270,267	Jan. 9	520	{ 152 153 }	{ 23	112
Van Allen, George W., assignor to M. B. Brown, New York, N. Y. Self-closing hatch-way .....	278,204	May 23	2071	571	23	2002
Van Allen Manufacturing Company. (See Van Allen, Charles A., assignor.)						
Van Alstyne, Lawrence, Sharon, Conn. Level .....	287,342	Oct. 23	1976	540	25	378
Van Altena, Henry, Milwaukee, Wis. Fishing-tackle .....	279,206	June 12	742	203	23	2260
Van Amringe, Benjamin F. (See Cumming and Van Amringe.)						
Van Amringe, William B., Providence, R. I. Ticket-holder .....	287,486	Oct. 30	2160	586	25	420
Van Anden, William, New York, N. Y. Carriage-spring .....	271,953	Feb. 6	445	122	23	519
Van Anden, William, New York, N. Y. Carriage-spring .....	290,502	Dec. 18	1425	395	25	1153
Van Auken, Miner, Utica, N. Y. Dumping-wagon .....	276,098	Apr. 17	1580	436	23	1513
Van Baar, Rudolph, New York, N. Y. Paper box .....	278,837	June 5	224	66	23	2161
Van Benschoten, Samuel, Brooklyn, N. Y., and H. H. Johnson, Hackensack, N. J. Electric annunciator and fire-alarm .....	282,016	July 24	2111	579	24	385
Van Benthuyssen, Henry B., Phoenixville, Pa. Gas-generating furnace .....	280,691	July 3	423	{ 119 120 }	{ 24	75
Van Brunt, Daniel C., Horicon, Wis. Cultivator .....	280,263	June 26	2023	569	23	2492
Van Brunt, Daniel C., Horicon, Wis. Cultivator-beam .....	284,093	Aug. 28	1926	553	24	882
Van Bunnem, Louis, Brussels, Belgium. Watchman's time-detector .....	290,946	Dec. 25	2005	{ 552 553 }	{ 25	1260
Van Campen, Harry D., Belmont, N. Y. Blasting out stumps .....	270,351	Jan. 9	624	184	23	132
Van Campen, Harry D., Belmont, assignor to B. Alford, Olean, N. Y. Explosive compound.	288,516	Nov. 13	921	25	25	675
Van Campen, Johnson & Hance. (See Johnson, Frederick H., assignor.)						
Van Campen, Savillion, New York, N. Y. Box or package .....	290,819	Dec. 25	1848	511	25	1234
Van Campen, Savillion, assignor of one-half to Hastings, Todd & Schanck, New York, N. Y. Fan .....	279,050	June 5	538	147	23	2215
Van Choate, Silvanus F., New York, N. Y. Electric-arc lamp .....	274,997	Apr. 3	143	40	23	1250
Van Choate, Silvanus F., New York, N. Y. Dynamo-electric machine .....	286,241	Oct. 9	563	154	25	113
Van Choate, Silvanus F., New York, N. Y. Dynamo-electric machine .....	286,242	Oct. 9	562	{ 154 155 156 }	{ 25	113
Van Choate, Silvanus F., Boston, Mass. Electro-magnetic motor .....	286,873	Oct. 16	1374	377	25	263
Van Depoele, Charles J., Chicago, Ill. Device for controlling electrical currents .....	270,352	Jan. 9	625	185	23	132
Van Depoele, Charles J., Chicago, Ill. Dynamo-electric machine .....	275,549	Apr. 10	895	242	23	1387
Van Depoele, Charles J., Chicago, Ill. Storage or secondary battery .....	276,099	Apr. 17	1582	436	23	1513
Van Depoele, Charles J., Chicago, Ill. Secondary electric battery .....	282,414	July 31	2633	24	24	480
Van Depoele, Charles J., Chicago, Ill. Retort for carbonizing incandescents .....	284,779	Sept. 11	766	214	24	1040
Van Depoele, Charles J., Chicago, Ill. Device for adjusting the brushes of dynamo-electric machines .....	285,527	Sept. 25	1671	471	24	1214
Van Depoele, Charles J., Chicago, Ill. Regulator for electric apparatus .....	285,528	Sept. 25	1673	471	24	1214
Van Depoele, Charles J., Chicago, Ill. Secondary battery .....	285,529	Sept. 25	1674	471	24	1215
Van Depoele, Charles J., Chicago, Ill. Electric motor .....	285,557	Oct. 2	97	29	25	19
Van Depoele, Charles J., Chicago, Ill. Electric railway .....	285,558	Oct. 2	98	29	25	19
Van Depoele, Charles J., Chicago, Ill. Automatic electric-circuit changer .....	285,559	Oct. 2	100	29	25	20
Van Depoele, Charles J., Chicago, Ill. Electric lamp .....	286,093	Oct. 2	384	106	25	70
Van Depoele, Charles J., Chicago, Ill. Electric-arc lamp .....	286,094	Oct. 2	387	{ 106 107 }	{ 25	71
Van Depoele, Charles J., Chicago, Ill. Regulator for dynamo-electric machines .....	287,343	Oct. 23	1977	540	25	378
Van Depoele, Charles J., Chicago, Ill. Electrode for electric-arc lamps .....	287,344	Oct. 23	1979	540	25	379
Van Depoele, Charles J., Chicago, Ill. Safety-switch for dynamo-electric machines .....	287,345	Oct. 23	1980	541	25	379
Van Depoele, Charles J., Chicago, Ill. Insulating material .....	287,346	Oct. 23	1982	541	25	379
Van Depoele, Charles J., Chicago, Ill. System of generating and distributing electric currents .....	287,347	Oct. 23	1983	541	25	379
Van Depoele, Charles J., Chicago, Ill. Safety cut-out for electric lamps .....	288,682	Nov. 20	1128	310	25	718
Van Densen, C. R. (See Morand, William J., assignor.)						
Van Densen, Cary, Hudson, N. Y. Car-coupling .....	278,838	June 5	225	66	23	2162
Van Densen & Son, I. S. (See Morand, William J., assignor.)						
Van Doren, J. B., et al. (See Packham, Frank R., assignor.)						
Van Dorn, William T., Lincoln, Nebr. Car-coupling .....	271,553	Jan. 30	2148	618	23	427
Van Dusen, Charles, New Albany, Ind., assignor of one-half to William L. Breyfogle, Louisville, Ky. Automatic car-brake .....	284,690	Sept. 11	653	184	24	1021



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Van Dyke, John W., Brooklyn, N. Y. Steam-generator .....	276,735	May 1	268	68	23	1670
Van Dyke, John W., Brooklyn, N. Y. Steam-generator .....	289,182	Nov. 27	1737	433	25	834
Van Dyke, John W., Brooklyn, N. Y. Steam-generator .....	289,183	Nov. 27	1739	483	25	835
Van Dyke, John W., Brooklyn, N. Y. Steam-boiler .....	289,322	Nov. 27	1905	529	25	867
Van Dyke, John W., Brooklyn, N. Y. Steam-generator .....	290,503	Dec. 18	1427	395	25	1153
Van Gelder, Pieter, Sowerby Bridge, county of York, England. Grain separator and grader.	281,808	July 24	1859	508	24	343
Van Gelder, Pieter, Sowerby Bridge, county of York, England. Grain-separator .....	282,415	July 31	2634	722	24	450
Van Gorder, George L. (See Hazen and Van Gorder.)						
Van Haagen, Claus, Collegeville, Pa. Finger-board for musical instruments .....	281,584	July 17	1553	425	24	284
Van Hagen, Isaac, assignor to Adams & Westlake Manufacturing Company, Chicago, Ill. Stove-board cover .....	271,163	Jan. 23	1649	474	23	331
Van Hagen, Isaac, assignor to Adams & Westlake Manufacturing Company, Chicago, Ill. Process of and apparatus for manufacturing stove-boards .....	288,892	Nov. 20	1383	382	25	764
Van Hagen, Isaac, assignor to Adams & Westlake Manufacturing Company, Chicago, Ill. Gas-stove .....	288,893	Nov. 20	1385	382	25	764
Van Hoevenbergh, Henry, Elizabeth, N. J. Electric lamp-lighting device .....	284,516	Sept. 4	438	124	24	978
Van Hoevenbergh, Henry, Elizabeth, N. J. Electric lighting .....	290,292	Dec. 18	1140	320	25	1103
Van Hoevenbergh, Henry, Elizabeth, N. J. Printing-telegraph .....	285,710	Sept. 25	1892	538	24	1255
Van Hoevenbergh, Henry, Elizabeth, N. J., assignor to Western Union Telegraph Company, New York, N. Y. Printing-telegraph .....	274,416	Mar. 20	1503	414	23	1109
Van Hoevenbergh, Henry, Elizabeth, N. J., assignor to Western Union Telegraph Company, New York, N. Y. Printing-telegraph .....	274,417	Mar. 20	1505	414	23	1109
Van Hoevenbergh, Henry, Elizabeth, N. J., assignor to R. S. Waring, Pittsburg, Pa. Testing lead-covered cables .....	284,094	Aug. 28	1987	553	24	882
Van Hoevenbergh, Henry, Elizabeth, N. J., assignor to Western Union Telegraph Company, New York, N. Y. Printing-telegraph .....	285,709	Sept. 25	1886	537	24	1254
Van Hoevenbergh, Henry, Elizabeth, N. J., assignor to Western Union Telegraph Company, New York, N. Y. Printing-telegraph .....	286,977	Oct. 16	1508	415	25	286
Van Horn, William, Piqua, Ohio. Grain-binder .....	273,325	Mar. 6	106	31, 32	23	852
Van Houten, Abram, deceased, E. W. Van Houten, Newark, and C. Van Houten, Belleville, N. J., administrators. Safety-pin .....	272,001	Feb. 6	513	137	23	529
Van Houten, Cornelius, et al., administrators. (See Van Houten, Abram.)						
Van Houten, Eleanor W., et al., administrators. (See Van Houten, Abram.)						
Van Houten, William B., assignor of one-fourth to J. New, Brenham, Tex. Folding packing-case .....	274,418	Mar. 20	1508	415	23	1109
Van Kersen, James J., Kalamazoo, Mich. Sirup measure and funnel .....	272,924	Feb. 27	1710	478	23	761
Van Keuren, John A., assignor of one-half to L. N. Van Keuren, Bridgeport, Conn. Water-proof preservative blacking .....	272,606	Feb. 20	1290		23	680
Van Keuren, Louis N. (See Van Keuren, John A., assignor.)						
Van Liew, Dennis F. (See Bugbee, Calvin S., assignor.)						
Van Liew, Dennis F., Aurora, Ill. Catch for grain-car doors .....	278,377	May 29	2323	635	23	2054
Van Meter, Alvin C. (See Mills, William N., assignor.)						
Van Ness, Samuel, et al. (See Mac Mahon, Michael, assignor.)						
Van Nostrand, George, Gloversville, N. Y. Saw-gummer .....	290,947	Dec. 25	2007	553	25	1260
Van Ostrand, Thomas, Kinsley, Kans. Riding-harrow .....	273,196	Feb. 27	2035	573	23	819
Van Patin, Emery. (See Wood, Myron G., assignor.)						
Van Patten, John, Washington, D. C. Dredging-machine .....	284,095	Aug. 28	1989	554	24	882
Van Patten, Silas, Duaneburg, N. Y. Grappling-hook for barrels, &c .....	270,156	Jan. 2	390	113	23	79
Van Patten, Silas, Duaneburg, N. Y. Apparatus for loading and unloading wagons .....	270,159	Jan. 2	391	113	23	79
Van Pelt, Gilbert S., New York, N. Y. Coupon-shears .....	274,998	Apr. 3	144	41	23	1250
Van Riper, George P., Paterson, N. J. Bobbin for silk-spinning machines .....	278,673	May 29	2660	734	23	2117
Van Sickle, Charles G. (See Doherty and Van Sickle.)						
Van Sickle, George W., assignor to J. H. Bramhall and N. S. Hammack, Burlington, Iowa. Tongueless cultivator .....	271,164	Jan. 23	1649	474	23	331
Van Slyke, James M., Ottawa, Kans., assignor of two-thirds to J. E. Winn, Jackson, and C. J. Gale, Corunna, Mich. Bolting-reel .....	280,692	July 3	425	120	24	76
Van Stavoren, Samuel J. (See Edwards and Van Stavoren.)						
Van Tassel, George W., Girard, assignor of one-half to F. X. Lommer, Miles Grove, Pa. Strainer for eaves-spouts .....	289,473	Dec. 4	123	35	25	908
Van Tassel, Matthew, Brooklyn, N. Y. Brake-rod for cars .....	271,381	Jan. 30	1931	558	23	388
Van Trump, Daniel, Norborne, assignor to himself and S. C. Danforth, Watson, Mo. Fruit step-ladder .....	285,369	Sept. 18	1479	416	24	1173
Van Vechten, Orville R., Brooklyn, N. Y. Sewing-machine .....	272,104	Feb. 13	653	178	23	565
Van Vleck, Volkert, New York, N. Y. Dental plate .....	287,199	Oct. 23	1799	493	25	345
Van Vliet, Warren R., East Stroudsburg, Pa. Cover for fruit-jars .....	275,793	Apr. 10	1206	330	23	1440
Van Wageningen, Henry G., Monroe, Wis. Electric time-signaling device .....	285,088	Sept. 18	1150	321	24	1115
Van Wagoner & Williams. (See Williams, William H., assignor.)						
Van Wie, Byron, and J. Taylor, Troy, N. Y. Car-brake .....	289,474	Dec. 4	124	35	25	908
Van Wie, Peter G., Cleveland, Ohio. Straight-way valve .....	279,617	June 19	1251	347	23	2351
Van Wie, Peter G., Cleveland, Ohio. Straight-way valve .....	286,656	Oct. 16	1102	297	25	216
Van Winkle, Garrett, Avon, Ill., assignor to J. W. Penfield, Willoughby, Ohio. Brick and tile machine .....	276,544	Apr. 24	2145	597	23	1617
Van Winkle, George H., Hornellsville, N. Y. Locking-latch .....	276,507	Apr. 24	2098	553	23	1610
Van Winkle, Nathaniel H., New York, N. Y. Bed-lounge .....	272,991	Feb. 27	1784	500	23	773
Van Wormer & Co., J. (See Van Wormer, Jasper, assignor.)						
Van Wormer, Jasper, assignor to J. Van Wormer & Co., Albany, N. Y. Parlor heating-stove .....	274,677	Mar. 27	1854	516	23	1177
Van Wormer, Matthew, Melrose, Mass. Dumping-car .....	284,691	Sept. 11	655	184	24	1021
Van Zandt, George, Oak Park, Ill. Hand-stamp .....	288,385	Nov. 13	761	205	25	647
Van Zandt, George, Ravenswood, Ill. Dating-box for self-inking hand-stamps .....	289,475	Dec. 4	125	36	25	909
Van Zandt, Robert S., Brooklyn, N. Y., assignor of one-half to G. Boyd, Plainfield, N. J. Ash-sifter .....	271,751	Feb. 6	201	56	23	475
Vance, Emily F., Gallipolis, Ohio. Folding cot .....	289,584	Dec. 4	267	75	25	934
Vance, James R., and S. D. Parker, Geneva, N. Y. Steam-generator .....	282,808	Aug. 7	398	113	24	570
Vance, John D., assignor of one-half to J. J. Le Bean, Cincinnati, Ohio. Car-coupling .....	279,845	June 19	1518	425	23	2397
Vance, John M., Eureka, Cal. Crank-handle for lifting-jacks .....	287,198	Oct. 23	1798	493	25	345
Vance, Samuel B. H., and C. H. Hinds, New York, N. Y. Combined gas and electric light fixture .....	290,152	Dec. 11	960	271	25	1064
Vance, William W., assignor of one-half to F. Y. Robertson, Kearney, Nebr. Device for holding dental drills on whetstones .....	289,472	Dec. 4	122	35	25	908

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Vandaworker, James B. (See Freeman, Thomas R., assignor.)						
Van der Linden, Dirk, Hoorn, Netherlands. Car-brake	269,943	Dec. 11	707	200	25	1018
Vander Voet, Cornelius, <i>et al.</i> (See Carr, William, assignor.)						
Vander Weyde, Peter H., assignor to C. A. Cheever, trustee, New York, N. Y. Apparatus for cooking the armatures of dynamo-electric machines	270,518	Jan. 9	849	247	23	176
Vanderbilt, Jacob E., Brooklyn, N. Y. Collar-button	271,954	Feb. 6	447	192	23	519
Vanderbilt, Jacob E., Brooklyn, N. Y. Necktie or scarf holder	287,594	Oct. 30	2311	625	25	449
Vanderburgh, John K., Marshfield, Oreg. Separating the sediments, &c., from the saccharine juice of sorghum	275,963	Apr. 17	1414	390	23	1485
Vanderhoof, Henry T., assignor, by mesne assignments, to Hamilton Lead Bath Company, New York, N. Y. Amalgamator	283,540	Aug. 21	1289	360 361	24	745
Vandervoort, Charles F., Corpus Christi, Tex. Blind-stop	279,111	June 5	632	171	23	2230
Vandervoort, John A., Clarksville, Ohio. Washing-machine	280,973	July 10	788	218	24	145
Vandeverter & Horne. (See Vandeverter, Jacob H., assignor.)						
Vandeverter, Jacob H., Brooklyn, assignor to Vandeverter & Horne, New York, N. Y. Name-plate for marking carpets	290,151	Dec. 11	959	271	25	1064
Vanduzen, Benjamin C., Cincinnati, Ohio. Elevator-gate	288,383	Nov. 13	752	204	25	646
Vanduzen, Benjamin C., Cincinnati, Ohio. Steam-pump	288,384	Nov. 13	753	205	25	646
Vanduzen, Ezra W., Newport, Ky. Boiler-furnace	270,157	Jan. 2	389	113	23	79
Vanduzen, Ezra W., Newport, Ky. Steam-boiler furnace	278,637	May 29	2638	721	23	2109
Vanell, Frank, Vincennes, Ind. Railway-switch	279,509	June 12	1126	312	23	2321
Vankeerberghen, Victor, Brussels, Belgium. Automatic fire-extinguisher	272,803	Feb. 20	1536	432	23	725
Vanneman, William C. (See Starr and Vanneman.)						
Vanorman, Oliver, Racine, Wis. Buckboard-wagon	279,894	June 19	1576	441	23	2408
Vanorman, Oliver, assignor of one-half to Hurlbut Manufacturing Company, Racine, Wis. Double-tree	279,846	June 19	1519	425	23	2397
Vansize, William B., Brooklyn, N. Y. Fire-alarm or district telegraph	280,536	July 3	239	64, 65	24	43
Vansize, William B., Brooklyn, and C. L. Buckingham, assignors to Western Union Telegraph Company, New York, N. Y. Printing-telegraph	290,613	Dec. 18	1573	432	25	1178
Vanston, John, Durango, Colo. Sawing-machine	274,419	Mar. 20	1509	415	23	1810
Vanstone, Samuel, assignor of one-half to C. H. Sawyer, Providence, R. I. Caster	277,522	May 15	1245	334	23	1153
Varian, Edward. (See Garver and Varian.)						
Varley, Cromwell F., Bexley Heath, county of Kent, England. Electric divining-rod	277,087	May 8	731	191 192	23	1757
Varney, Joseph M., assignor of one-third to A. W. Prather, Lineville, Iowa. Collar	277,088	May 8	732	192	23	1757
Varney, Nicholas R., Waltham, Mass. Stem-winding watch	269,974	Jan. 2	179	52	23	37
Varney, William E., Daytonville, and W. J. Hull, Wellman, Iowa. Wood-working machine	279,051	June 5	538	147 148	23	2215
Varney, William E., Daytonville, and W. J. Hull, Wellman, Iowa. Wood-working machine	279,052	June 5	541	148	23	2215
Varns, Tobias L. (See Michener and Varns.)						
Varnum, William, Erie, Pa. Step-ladder	273,782	Mar. 13	709	191	23	964
Varwig, Henry. (See Albright, William L., assignor.)						
Vaughan, Frank, Elizabeth City, N. C. Self-bailing boat	270,519	Jan. 9	851	248	23	176
Vaughan, Frank, Elizabeth City, N. C. Life-boat	273,197	Feb. 27	2036	573	23	919
Vaughan, Frank, Elizabeth City, N. C. Fire-escape	270,053	June 5	542	149	23	2215
Vaughan, Frank, Elizabeth City, N. C. Boat hoisting, detaching, and lowering	282,937	Aug. 7	544	154	24	597
Vaughan, Henry W., assignor to J. W. Slater and H. Richmond, Providence, R. I. Applying dye-stuffs to fibrous materials	272,498	Feb. 20	1154		23	657
Vaughan, Henry W., assignor to J. W. Slater and H. Richmond, Providence, R. I. Preparing dye-stuffs for application to fibrous materials	272,499	Feb. 20	1155		23	657
Vaughan, Henry W., assignor to H. Richmond and J. W. Slater, Providence, R. I. Machine for applying coloring-matter to fibrous material	273,198	Feb. 27	2037	573	23	919
Vaughan, Henry W., assignor to United States Dyeing Company, Providence, R. I. Machine for applying coloring-matter to fibrous material	280,885	July 10	674	190	24	126
Vaughan, Patrick, Louisville, Ky. Beer-scale	290,153	Dec. 11	962	272	25	1065
Vaughn, Joseph W., Peabody, assignor to himself and G. L. Newcomb, Salem, Mass. Putting-out machine	274,858	Mar. 27	2063	574 575	23	1213
Vaughn, Joseph W., Peabody, assignor to himself and G. L. Newcomb, Salem, Mass. Roller for leather-dressing	274,859	Mar. 27	2066	575	23	1214
Vaughn, Warren J., Kansas City, Mo. Windmill	278,756	June 5	100	28	23	2140
Vaughn, William H., Quincy, Ill. Fence-making machine	271,165	Jan. 23	1650	474 475	23	331
Vavasaur, Josiah, London Ordnance Works, Bear Lane, Southwark, county of Surrey, England. Projectile for ordnance	271,382	Jan. 30	1932	539	23	388
Vavasaur, Josiah, Bear Lane, Southwark, county of Surrey, England. Gun-carriage	273,199	Feb. 27	2039	573 574	23	919
Vavasaur, Josiah, Bear Lane, Southwark, county of Surrey, England. Breech-loading ordnance	275,550	Apr. 10	896	242 243	23	1387
Vavasaur, Josiah, Bear Lane, Southwark, county of Surrey, England. Ordnance	277,634	May 15	1382	373	23	1875
Vavasaur, Josiah, Bear Lane, Southwark, county of Surrey, England. Apparatus for controlling the recoil of ordnance	283,688	Aug. 21	1466	413	24	779
Veber, William F., assignor to C. D. Yonker, Bowling Green, Ohio. Lamp-filling can	289,585	Dec. 4	268	75	25	934
Vedder, Elihu, New York, N. Y. Decorative structure	276,100	Apr. 17	1583	437	23	1513
Vedder Pattern Works, Bascom, Galbraith & Co., N. S. (See Bascom, H. Clay, assignor.)						
Veerkamp, Florence L., C. F. Leopold, and W. Darker, Philadelphia, Pa. Braiding-machine	277,523	May 15	1246	335	23	1853
Vehring, Charles, assignor to M. Rubens, New York, N. Y. Bag or satchel	277,812	May 15	1584	433	23	1912
Velguth, Adolph, Milwaukee, Wis. Oil-stove	278,063	May 22	1887	517	23	1970
Veline, Nels A., Villisca, Iowa. Mechanical movement	290,372	Dec. 18	1240	349	25	1122
Vellacott, James R., assignor of one-half to G. Lendrum, Des Moines, Iowa. Valve and valve-gear for steam-pumps	273,645	Mar. 6	519	139	23	923
Velloni, Georges G. L., Paris, France. Electric battery	290,654	Dec. 18	1622	446	25	1187
Venator, Robert, and J. Weller, Buffalo, N. Y. Steam-generator	282,243	July 31	2418	665	24	442
Venn, Frank, Malden, Mass. Device for marking boots, shoes, and other articles	284,149	Aug. 28	2063	572	24	894
Venner, George W., <i>et al.</i> (See Venner, Orange H., assignor.)						
Venner, Orange H., Malden, assignor of one-half to G. W. Venner, Boston, and A. M. Wood, Somerville, Mass. Oscillating piston-engine	280,974	July 10	789	219	24	145
Verbeck, William, San Francisco, Cal. Combined cane and fan	285,530	Sept. 25	1676	471	24	1215
Verdin, Alois N. (See Hey and Verdin.)						
Vergason, Hiram K. (See Fisk and Vergason.)						
Vermilya, R. Dwight. (See De Tray and Vermilya.)						
Vermont Farm Machine Company. (See Butler, Francis G., assignor.) (Reissue.)						
Vernay, Claude. (See Thimonnier and Vernay.)						
Vernay, Claude, and F. Roux, Lyons, France. Sewing-machine	279,464	June 12	1067	295 296	23	2313



*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Vernon, Charles D., Sellapolis, Iowa. Scale and indicator	284,692	Sept. 11	658	185	24	1021
Vernon, James, Newton-Stewart, Scotland. Drinking-vessel	282,244	July 31	2418	665	24	442
Vernon, William G., assignor to Goodell & Waters, Philadelphia, Pa. Band saw machine.	284,580	Sept. 4	515	144	24	991
Vero, Charles, and J. Everitt, Atherstone, county of Warwick, England. Manufacture of felt hats	284,924	Sept. 11	935	.....	24	1071
Verrill, Edgar F., <i>et al.</i> (See Cummings, Charles, assignor.)						
Verrill, George W., Portland, Me. Adjustable grate for ovens	274,533	Mar. 27	1684	468	23	1146
Very, Theodore S. (See Evans, Charles A., assignor.)						
Very, Theodore S., Boston, Mass. Cooling and distributing compressed air for refrigerating and ventilating purposes	275,964	Apr. 17	1415	390	23	1485
Vest, Eugene W., assignor of one-half to E. W. Stevens, Sedalia, Mo. Seed-planter	285,184	Sept. 18	1267	356	24	1135
Vetter, Charles W., Ukiah, Cal. Fruit-drier	286,509	Oct. 9	908	245	25	175
Vetter, John C., New Haven, Conn. Blow-pedal for organs	277,435	Mar. 8	1137	306	23	1828
Vetter, John C., Indianapolis, Ind. Table-hinge	281,322	July 17	1232	341	24	230
Vibbard, William H., Kalamazoo, Mich. Sewer-flushing apparatus	272,992	Feb. 27	1785	500	23	773
Vick, Alfred, Mount Carmel, Conn., assignor of one-half to T. J. Harbach, Philadelphia, Pa. Toy	281,948	July 24	2031	555	24	373
Vicken, George P., assignor to Homan & Co., Cincinnati, Ohio. Candle-mold gage	282,133	July 31	2224	627	24	419
Vickers, George R., Jr., Baltimore, Md. Stock for fire-arms	287,741	Oct. 30	2506	675	25	486
Vickroy, James M. (See Strong, Sutton, assignor.)						
Vidal, Victor, Jr., Pignans, France. Fishing-boat and manufacturing the same	290,154	Dec. 11	963	272	25	1065
Vielhaber, Walther, Altoona, Pa. Shaft-coupling	288,746	Nov. 20	1213	332	25	733
Vieman, Christian, assignor of one-half to Ford, Johnson & Co., Michigan City, Ind. Cross-ing-needle for weaving cane	272,993	Feb. 27	1786	500	23	774
Vienor, Jules P., assignor to R. Hoe & Co., New York, N. Y. Web-printing machine	274,534	Mar. 27	1686	468	23	1146
Viets, Samuel W., Oscoda, Mich. Attachment to edgers	289,184	Nov. 27	1745	485	25	836
Vigreux, Charles. (See Clandon and Vigreux.)						
Vigreux, Emile, Bois Guillaume, France. Apparatus for producing currents of pure or carburated air	272,002	Feb. 6	513	138	23	529
Villa, Henrique. (See Villa, José M. and H.)						
Villa, José M. and H., Medellin, United States of Colombia. Needle-gun	277,385	May 8	1076	290	23	1818
Villebonnet, Lucien B., Nancy, France. Rotary pump and ventilator	281,165	July 10	1016	284	24	186
Vincent, Charles W. (See Elphinstone and Vincent.)						
Vincent, Herbert M. (See Smith and Vincent.)						
Vincent, Herbert M., and W. N. Smith, assignors to themselves, J. H. and P. H. Coffin, New Bedford, Mass. Combined die-plate and tap-wrench	274,420	Mar. 20	1511	415	23	1110
Vincent, John, Jr., assignor of one-half to M. P. O'Donnell, M. Fitzsimmons, A. Reddy, G. Miller, A. and S. Campbell, J. O'Brien, and W. Gibson, St. James, Mich. Stove and other sheet-metal pipes	274,421	Mar. 20	1513	416	23	1110
Vincent, Nathan H. (See Smith, David L., assignor.)						
Vincent, William E., assignor to Reynolds Brothers, Port Deposit, Md. Can-heading machine	274,863	Mar. 27	2075	577	23	1214
Vine, James S., <i>et al.</i> (See Chambers, Josephus C., assignor.)						
Vinet, Atila S., <i>et al.</i> (See Lord, Peter, assignor.)						
Vinet, Jean B., <i>et al.</i> (See Lord, Peter, assignor.)						
Vinson, John, Knoxville, Tenn. Coal-chute	270,919	Jan. 23	1352	390	23	283
Visscher, Frederick, Mount Sterling, Ky. Transplanting-instrument	289,185	Nov. 27	1745	485	25	836
Visscher, Frederick, Mount Sterling, Ky. Transplanting-instrument	289,186	Nov. 27	1746	485	25	836
Vivarttas, Aloha, West Hoboken, N. J. Tool for cutting the teeth of metal gear-wheels	274,860	Mar. 27	2067	575	23	1214
Vivarttas, Aloha, West Hoboken, N. J. Tooth for gearing	274,861	Mar. 27	2069	576	23	1214
Vivarttas, Aloha, West Hoboken, N. J. Bevel-gear	274,862	Mar. 27	2073	577	23	1214
Vivarttas, Aloha, West Hoboken, N. J. Tooth for gearing. (Reissue)	10,381	Sept. 11	1024	287 288	24	1087
Vizelich, Nicolas, Stockton, Cal. Combined portable tank and pump	274,060	Mar. 13	1042	286 287	23	1020
Voegtli, Jacob, Indianapolis, Ind. School-house heater	270,706	Jan. 16	1093	313	23	229
Voegtlin, Emile J., Telford, Pa. Screw-cutting die	270,618	Jan. 16	976	282	23	207
Voelckel, Frederick. (See Wiswall, Alvah, assignor.)						
Voerde, Frederick W., Chicago, Ill. Safety attachment for elevators	280,419	July 3	96	26	24	20
Voeth, Robert. (See Weiss, John C., assignor.)						
Vogel, Bernhard, Baltimore, Md. Sash-cord fastener	289,732	Dec. 4	454	127	25	966
Vogel, Ernst W., Milwaukee, Wis. Universal joint	277,176	May 8	843	223	23	1776
Vogeler, Jerome I. (See Thomas, George W., assignor.)						
Vogeler, Jerome I. (See Whittle, John T., assignor.)						
Vogelez, Samuel G., Pittsburg, Pa. Manufacture of glass stands and pedestals	274,233	Mar. 20	1272	351	23	1069
Voglesong, John W., Minerva, Ohio. Rubber bucket for pumps	274,061	Mar. 13	1042	287	23	1020
Vogt, Albrecht, Rochester, N. Y. Fire-escape	277,386	May 8	1080	290	23	1818
Vogt, Albrecht, Rochester, N. Y. Molding	291,008	Dec. 25	2095	577	25	1274
Vogt, Julius F. and W. C., St. Louis, Mo. Stave-jointer	288,517	Nov. 13	922	252	25	676
Vogt, Louis. (See Buchbinder and Vogt.)						
Vogt, William C. (See Vogt, Julius F. and W. C.)						
Voigt, Ferdinand F., Walla Walla, Wash. Ter. Track-laying machine	286,564	Oct. 9	979	263	25	188
Voigt, Ward & Co. (See Brunt, William H., assignor.)						
Voigt, Ward & Co. (See Stewartson, William B., assignor.)						
Voigt, Ward & Co. (See Ward and Brunt, assignors.)						
Voigtman, Max W. (See Smith and Voigtman.)						
Voith, Friedrich, Heidenheim, Württemberg, Germany. Machine for assorting wood-pulp	289,187	Nov. 27	1747	485	25	836
Vojáček, Ladislav, Sinichov-Prague, Bohemia, Austria-Hungary. Apparatus for bending rails and bars	274,678	Mar. 27	1855	517	23	1177
Volker, Daniel L. (See Felthousen and Volker.)						
Volkersen, Frederik D. (See Leerbech and Volkersen.)						
Vollmann, Conrad D., assignor of one-half to W. F. Peddycoord, Nappanee, Ind. Pipe-wrench	289,188	Nov. 27	1747	486	25	836
Vollert, William P., <i>et al.</i> (See Dumke, Frank F., assignor.)						
Vollmer, John G., Austin, Tex. Dry ore-concentrator	287,396	Oct. 23	2043	556	25	389
Vollschwitz, Rudolph, Jersey City, N. J. Rasp	285,185	Sept. 18	1270	356	24	1135
Volpp, Schwarz & Co. (See Ganchot, Paul E., assignor.)						
Voltz, Anthony W., Buffalo, N. Y. Document and file case	273,403	Mar. 6	2290	59	23	871
Voltz, Anthony W., Buffalo, N. Y. File-case	289,042	Nov. 27	1572	434	25	805
Vom Hofe, Edward C., Brooklyn, N. Y. Fishing-reel	271,166	Jan. 23	1653	475	23	332
Von Bechtolsheim, Clemens, Munich, Germany. Centrifugal machine	276,985	May 1	586	154	23	1726
Von Buchwald, William C. (See Cannon and Von Buchwald.)						
Von Cort, Charlotte A., New York, N. Y. Apparatus for cooling and ventilating buildings	282,474	July 31	2710	746	24	492

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Von Der Wulbeke, Anthony, New York, N. Y. Table	279,290	June 12	836	232	23	2276
Von Krause, Arthur, West New Brighton, N. Y. Portable ice-freezing house	276,508	Apr. 24	2101	584	23	1610
Von Lillenschield, Hans G. (See Steineke, Charles, assignor.)						
Von Lochr, August, Vienna, Austria-Hungary. Watch-case	283,170	Aug. 14	829	232	24	654
Von Rein, Carl, Rudolstadt, assignor to Tunker & Ruh, Karlsruhe, Germany. Sewing-machine	274,381	Mar. 20	1460	400	23	1101
Von Reitzner, Viktor, Vienna, Austria-Hungary. Lineameter	275,734	Apr. 10	1124	308	23	1426
Von Schlieffen, Wilhelm, Schlieffenberg, Germany. Pneumatic stopper for bottles	288,603	Nov. 13	1025	282	25	695
Von Schmidt, Alexey W., San Francisco, Cal. Curved rotating plow for submarine work	277,177	May 8	843	223	23	1776
Von Schwarz, Carl E., Vienna, Austria-Hungary. Device for stopping horses	273,616	Mar. 6	481	129	23	916
Voorhees, John K., Pella, Iowa. Check-row corn-planter	271,167	Jan. 23	1654	475	23	332
Voorhis, Winfield S., and G. H. Houser, Chicago, Ill. Grain-car door	275,735	Apr. 10	1125	308	23	1426
Voos, Franz, Solingen, Prussia, Germany. Drilling-machine	273,400	Mar. 6	221	59	23	871
Vorck, August. (See Wellmann, Fredrick, assignor.)						
Vordermark, Henry R., Indianapolis, Ind. Track-gate for railways	270,707	Jan. 16	1095	313	23	229
Vorhes, Josiah H., Fandon, Ill. Road-scraper	283,835	Aug. 28	1653	466	24	823
Voris, Franklin D. (See Moran, John J., assignor.)						
Vorpahl, Leonhard, and H. Pohl, Berlin, Germany. Album-clasp	289,363	Nov. 27	1956	544	25	877
Vorburgh, Reuben, Oregon, Ill. Sash-weight	276,509	Apr. 24	2103	584	23	1611
Vose, George L. (See Southwick, Andrew S., assignor.)						
Vose, Richard. (See Clark, Dallas P., assignor.)						
Vose, Richard, New York, N. Y. Shaped bar for springs	285,324	Sept. 18	1422	402	24	1164
Votti, Carl, Philadelphia, Pa. Signal device for clock-winding	289,789	Dec. 4	515	142	25	976
Vought, Thomas L., Madelia, Minn. Hay-rack	280,693	July 3	426	121	24	76
Vought, Thomas L., Madelia, Minn. Press for cornstalks, &c.	281,417	July 17	1347	372	24	250
Vreeland, Aaron, Cedar Grove, N. J. Vehicle-wheel	284,990	Sept. 11	1017	286	24	1086
Vreeland, Jacob C. (See Tidd, Milton, assignor.)						
Vreeland, Sara L., Hackensack, N. J. Tray	276,510	Apr. 24	2104	584	23	1611
Vunk, George W., assignor of one-half to B. E. Huntley, Brockport, N. Y. Car-coupling	274,422	Mar. 20	1514	416	23	1110
Wachs, Alfred, Leipsic, Germany. Planometer or measuring parallel ruler	287,200	Oct. 23	1800	493	25	345
Waddell, James O., Elizabeth, N. J. Faucet	270,353	Jan. 9	627	185	23	132
Waddell, James O., Elizabeth, N. J. Sand-band	274,535	Mar. 27	1688	468	23	1146
Waddell, James O., Elizabeth, assignor to Waddell Manufacturing Company, Newark, N. J. Cock and casing	270,520	Jan. 9	852	248	23	176
Waddell, Lyttelton and W. H., Charlottesville, Va. Portable and adjustable head-rest for car or other seats	284,925	Sept. 11	937	263	24	1071
Waddell Manufacturing Company. (See Waddell, James O., assignor.)						
Waddell, William H. (See Waddell, Lyttelton and W. H.)						
Waddell, William H., Charlottesville, Va. Station-indicator	288,518	Nov. 13	923	252	25	676
Waddell, William H., Charlottesville, Va. Railway time-signal	288,519	Nov. 13	924	252	25	676
Waddill, John J. (See Irvine and Waddill.)						
Waddill, John J., Montgomery, Ala. Nut-lock	271,955	Feb. 6	447	122	23	519
Waddington, A. B., et al. (See Gibson, James E., assignor.)						
Wade, Ephraim H., San José, Cal. Whiffletree	283,541	Aug. 21	1291	361	24	745
Wade, George W., and J. M. Wardell, Cadillac, Mich. Rotary steam-engine	270,160	Jan. 2	393	114	23	80
Wade, Horace S., et al. (See Bennette, Jacob B., assignor.)						
Wade, John, Oregon, Ill. Barrel-head holder	273,646	Mar. 6	521	140	23	923
Wade, Josiah, Halifax, county of York, England. Boring-tool	280,420	July 3	99	26	24	20
Wadhams, Orlo E., Goshen, Conn. Chain-pump bucket	287,348	Oct. 23	1985	541	25	379
Wadleigh, John C., Chicago, Ill. Gelatine eye-disk	273,410	Mar. 6	221	60	23	871
Wadleigh, Joseph, Milks Grove, Ill. Hay-press	276,649	May 1	130	34	23	1649
Wadleigh, Theodore, Milks Grove, Ill. Trace-buckle	284,262	Sept. 4	131	36	24	927
Waddington, John M., Marshall, Mo. Tree-protector	285,186	Sept. 18	1270	357	24	1136
Wadlow, Richard H., Atlanta, Ga. Shoe	281,166	July 10	1017	285	24	186
Wadsworth, Daniel. (See Phelps, George N., assignor.)						
Wadsworth, Grant M., Sugar Grove, Pa. Fence	289,189	Nov. 27	1748	486	25	837
Waelelar, Louis, Hoboken, N. J. Water-closet	286,874	Oct. 16	1378	378	25	264
Waggoner, Albert, Columbus, Ohio. Hame	282,245	July 31	2420	665	24	442
Wagner, Daniel W., et al. (See Greene, Jonathan H., assignor.)						
Wagner, George F., Omaha, Nebr. Fire-extinguisher	279,054	June 5	544	149	23	2216
Wagner, George J. (See Switzer, Joseph, assignor.)						
Wagner, Gustavus G., assignor of one-tenth to F. L. Crawford, New York, N. Y. Pneumatic clock-regulator	269,900	Jan. 2	93	28	23	20
Wagner, Gustavus G., Mount Vernon, N. Y. Synchronizing clocks	281,585	July 17	1553	425	24	284
Wagner, Jacob, Pickering, Mo. Steam-pump regulator	287,069	Oct. 23	1634	449	25	315
Wagner, John H., assignor to Smith Consolidation Company, Chicago, Ill. Machine for consolidating loose materials into solid blocks	290,293	Dec. 18	1143	320	25	1104
Wagner, John L., and J. Seath, Terre Haute, assignors to themselves, T. A. Lewes, Indianapolis, R. S. Cox, Terre Haute, Ind., and H. R. Duvall, New York, N. Y. Car-door	288,190	Nov. 6	488	136	25	592
Wagner, John L., and J. Seath, Terre Haute, assignors to themselves, T. A. Lewis, Indianapolis, Ind., H. R. Duvall, New York, N. Y., and R. S. Cox, Terre Haute, Ind. Car-door	280,537	July 3	242	65	24	43
Wagner, Julius, Reading, Pa. Shaft-loop	270,161	Jan. 2	395	114	23	80
Wagner, Louis. (See Johnson and Wagner.)						
Wagner, Louis. (See Patzner and Wagner.)						
Wagner, Michael, assignor of one-half to H. Schanuel, Belleville, Ill. Thill-coupling	281,323	July 17	1233	341	24	231
Wagstaff, John H., St. John, New Brunswick, Canada. Index	285,531	Sept. 25	1676	471	24	1215
Wahl, Joseph, Chicago, Ill. Overalls	275,441	Apr. 10	761	203	23	1364
Waide, Robert, Indianapolis, Ind. Ventilator	279,291	June 12	837	232	23	2276
Wailey, Charles W., assignor of one-half to C. W. Foushee, Lexington, Ky. Weighing-scale	281,586	July 17	1555	425	24	284
Wainwright, Charles B., Philadelphia, Pa. Medicated artificial nest-egg	275,297	Apr. 3	530	144	23	1316
Wainwright, Clement R., et al. (See Harned, Frank P., assignor.)						
Wainwright, Israel R., et al. (See Harned, Frank P., assignor.)						
Wainwright, Jacob T., Philadelphia, Pa. Generating motor-vapor for engines	274,423	Mar. 20	1515	416	23	1111
Wainwright, Joseph G., et al. (See Nugent, Richard C., assignor.)						
Wainwright, Joseph R., et al. (See Harned, Frank P., assignor.)						
Wainwright, William. (See Ludwig and Wainwright.)						
Wais, Christian, assignor one-half to W. J. Rothweiler, Newport, Ky. Sheet-metal-shearing machine	271,956	Feb. 6	448	123	23	519
Wait, Oscar E., Providence, R. I. Caster for roller-skates and furniture	281,324	July 17	1234	341	24	221
Wait, Oscar E., Providence, R. I. Preparing rawhide for shaping	284,780	Sept. 11	767	214	24	1040



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Waite, Aldis L., <i>et al.</i> (See McAllister, Guy W., assignor.)						
Waite, Charles N., Medford, Mass., assignor to Avery Lactate Company, Portsmouth, N. H.	290,294	Dec. 18	1144	.....	25	1104
Mordant	279,055	June 5	546	150	23	2216
Waite, Enoch, Franklin, Mass. Felt boot or shoe	285,089	Sept. 18	1152	321	24	1115
Waite, Enoch, Franklin, Mass. Felt boot	289,190	Nov. 27	1749	486	25	837
Waite, Franklin H., Mankato, Minn. Match-safe						
Waite, Henry E. (See Bartlett and Waite.)						
Waite, Henry E., New York, N. Y. Receiver for telephones	286,875	Oct. 16	1380	378	25	264
Waite, Henry E., New York, N. Y. Telephone-receiver	286,876	Oct. 16	1380	379	25	264
Waite, Henry E., assignor to Molecular Telephone Company, New York, N. Y. Telephone-receiver	287,742	Oct. 30	2507	675	25	486
Waite, Henry E., and S. H. Bartlett, assignors to Molecular Telephone Company, New York, N. Y. Telephone-receiver	287,743	Oct. 30	2507	676	25	486
Waite, Milo K. (See Armstrong and Waite.)						
Wakefield, Calvin P., Cressey, Cal. Trace-hook	272,175	Feb. 13	731	202	23	578
Wakefield, Hezekiah B., Winfield, Kans. Stock-trough	290,948	Dec. 25	2007	553	25	1260
Wakefield, Nathan S., assignor of one-half to Q. Barber, Camden, N. Y. Machine for cutting pegs from boots or shoes	281,587	July 17	1555	426	24	285
Wakeman, Abram, Jr., New York, N. Y. Spike	276,511	Apr. 24	2104	585	23	1611
Walbridge, Dwight F., Buffalo, N. Y. Slate-wiper	270,708	Jan. 16	1096	314	23	229
Walbridge, Henry B., Brooklyn, N. Y. Fire-escape	276,736	May 1	270	68	23	1670
Walcott, Jabez E., assignor to F. I. Marcy, Providence, R. I. Feed device for jewelers' presses	273,918	Mar. 13	875	237	23	991
Walcott, Jabez E., assignor to F. I. Marcy, Providence, R. I. Machine for making the loops of chain-swivels	273,919	Mar. 13	876	{ 237 238	{ 23	992
Walcott, William S., New York Mills, N. Y. Warping-machine	287,201	Oct. 23	1501	494	25	346
Walden, William J., Kingsland, county of Middlesex, England. Fastening for gaiters, gloves, &c	272,359	Feb. 13	958	267	23	618
Walder, Jacob. (See Urbahn, Alwill, assignor.)						
Waldherr, Apollo, Union Hill, N. J. Scarf and collar fastener	273,200	Feb. 27	2041	574	23	819
Waldman & Daniels. (See Waldman, Simon L., assignor.)						
Waldman, Simon L., assignor to Waldman & Daniels, Boston, Mass. Leggin	276,737	May 1	271	68	23	1671
Waldo, Charles F., New York, N. Y. Velocipede	284,781	Sept. 11	769	{ 215 216	{ 24	1040
Waldo, George H., Detroit, Mich. Grading-machine	278,296	May 22	2193	{ 603 604	{ 23	2022
Waldorp, Jan H. M., Nymwegen, Holland. Apparatus for recording speed of trains on railway-bridges	279,292	June 12	838	{ 232 233	{ 23	2277
Waldran, John D., Memphis, Tenn. Valve-grinder	266,095	Oct. 2	391	107	25	72
Waldron, Charles F., Boston, Mass. Carriage-lamp	280,101	June 26	1836	517	23	2459
Wales, George A. (See Mullins, Timothy, assignor.)						
Wales Manufacturing Company. (See Beadle, George, assignor.)						
Wales, Sigourney, Cambridge, Mass., assignor to W. C. Howard, New York County, N. Y. Tool-handle	281,418	July 17	1348	372	24	250
Wales, Sigourney, Cambridge, Mass., assignor to W. C. Howard, New York County, N. Y. Razor-strop	281,419	July 17	1349	372	24	250
Wales, Sigourney, Cambridge, Mass., assignor to W. C. Howard, New York, N. Y. Garment-supporter clasp	287,349	Oct. 23	1986	542	25	380
Wales, Sigourney, Cambridge, Mass., assignor to W. C. Howard, New York, N. Y. Pencil-clasp	289,476	Dec. 4	126	36	25	909
Wales, William A., assignor to Anburndale Watch Company, Boston, Mass. Game-counter	276,101	Apr. 17	1584	437	23	1514
Walke, Henry A., Hamilton, Ohio. Fountain-pen	274,679	Mar. 27	1857	517	23	1177
Walker, Aaron, Kokomo, Ind. Fire-escape	284,517	Sept. 4	439	124	24	979
Walker, Addison W., assignor to Lovell Manufacturing Company, (limited,) Erie, Pa. Animal-trap	283,171	Aug. 14	830	232	24	654
Walker, Albert A., and T. J. Backus, Dayton, Ohio. Water-motor	272,105	Feb. 13	655	178	23	565
Walker, Albert W., Clemonsville, N. C. Fruit-drier	281,167	July 10	1019	285	24	187
Walker, Albert W., Clemonsville, N. C. Tobacco-drier	281,168	July 10	1019	285	24	187
Walker, Charles C., Lilleshal, county of Salop, and W. T. Walker, Highgate, county of Middlesex, England. Apparatus for the purification of coal-gas	272,804	Feb. 20	1537	432	23	725
Walker & Co., William H. (See Walker, William H., assignor.)						
Walker, Edward F., Providence, R. I. Car-coupling	287,070	Oct. 23	1635	449	25	316
Walker, Edwin R. (See Walker, John S., T. A., and E. R.)						
Walker, Frank, Tombstone, Ariz. Ter. Piston water-meter	272,607	Feb. 20	1291	{ 359 360	{ 23	680
Walker, Fred. B., and J. Lander, Galveston, Tex. Railway steam car-brake	278,297	May 22	2205	605	23	2025
Walker, George, Newark, N. J. Rosette for brides	279,677	June 19	1329	369	23	2364
Walker, George P., <i>et al.</i> (See Coram, John C., assignor.)						
Walker, George P., Lowell, Mass. Parcel-carrier and track	278,298	May 22	2206	605	23	2025
Walker, George P., assignor of one-half to A. T. Atherton, Lowell, Mass. Track for cash and parcel carriers	282,416	July 31	2637	{ 723 724	{ 24	481
Walker, George P., assignor of one-half to A. T. Atherton, Lowell, Mass. Track for cash and parcel carriers	282,417	July 31	2639	724	24	481
Walker, George P., assignor of one-half to A. T. Atherton, Lowell, Mass. Track for cash and parcel carriers	282,418	July 31	2641	{ 724 725	{ 24	481
Walker, George P., assignor of one-half to A. T. Atherton, Lowell, Mass. Track for cash and parcel carriers	282,419	July 31	2643	725	24	482
Walker, George P., assignor of one-half to A. T. Atherton, Lowell, Mass. Cash-carrier	282,420	July 31	2644	725	24	482
Walker, George P., assignor of one-half to A. T. Atherton, Lowell, Mass. Cash-carrier	282,421	July 31	2645	725	24	482
Walker, George W., Malden, Mass. Grate-bar. (Reissue)	10,296	Mar. 13	1093	301	23	1029
Walker, George W., Malden, Mass. Stove	274,062	Mar. 13	1043	287	23	1020
Walker, George W., Malden, Mass. Stove	275,442	Apr. 10	762	203	23	1364
Walker, Henry, Birmingham, county of Warwick, England. Breech-loading fire-arm	284,518	Sept. 4	440	125	24	979
Walker, Henry W., San Francisco, Cal. Capel-mold	284,693	Sept. 11	660	185	24	1022
Walker, Hiram C., and W. Bacon, Silver Cliff, Colo. Gold-separator	288,520	Nov. 13	925	253	25	676
Walker, James, Jr., Chelsea, Mass. Lubricator	289,477	Dec. 4	127	36	25	909
Walker, James, Wyoming, assignor of one-half to R. C. Maxwell, Cincinnati, Ohio. Car-ventilator	274,063	Mar. 13	1044	288	23	1021
Walker, James T., Troy, N. Y. Fruit and vegetable cutter	273,201	Feb. 27	2043	575	23	820
Walker, James T., Baltimore, Md. Thread holder	275,736	Apr. 10	1126	308	23	1427
Walker, James T., Baltimore, Md. Thread-holder	283,689	Aug. 21	1468	414	24	779
Walker, James T., Baltimore, Md. Carriage-top standard	283,690	Aug. 21	1468	414	24	779
Walker, James T., Baltimore, Md. Bottle-stopper fastener	287,350	Oct. 23	1987	542	25	380
Walker, James T., Baltimore, Md. Bottle-stopper	288,521	Nov. 13	926	253	25	676

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Walker, James T., Baltimore, Md. Wad-retainer for cartridges .....	289,191	Nov. 27	1749	486 69 70 71 72	25	837
Walker, John, Indianapolis, Ind. Molding-machine .....	287,983	Nov. 6	245	71 72	25	550
Walker, John, Cleveland, Ohio. Pulley-wheel .....	288,386	Nov. 13	762	205	25	647
Walker, John, Cleveland, Ohio. Pulley or wheel .....	288,522	Nov. 13	927	253	25	677
Walker, John L., Braidwood, Ill. Wind-engine .....	273,920	Mar. 13	877	238	23	982
Walker, John R., Richland, Mo. Boot-jack .....	273,920	Mar. 13	877	238	23	982
Walker, John S., T. A., and E. R., Wigan, county of Lancaster, England. Air-valve .....	275,551	Apr. 10	897	243	23	1387
Walker, Joseph, Belleville, Kans. Weather-strip .....	289,192	Nov. 27	1750	487	25	837
Walker, Joseph H. (See Powers and Walker.)	274,536	Mar. 27	1689	469	23	1147
Walker, Joseph H., assignor of one-half to W. H. Powers, Grand Rapids, Mich. Burial-casket .....	276,312	Apr. 24	1848	515	23	1566
Walker, Lambert R. (See Bassemir and Walker.)						
Walker, Lewis W., Minneapolis, Minn. Coffee-pot .....	277,813	May 15	1584	433	23	1912
Walker, Lyman J., et al. (See Lattimer, Francis, assignor.)						
Walker, Marion H., Whitehall, Ill. Stock-car .....	288,683	Nov. 20	1129	311	25	718
Walker, Martin W., Sing Sing, N. Y. Oil-stove .....	288,523	Nov. 13	927	253	25	677
Walker, Micah, Port Huron, Mich. Flexible pipe-joint .....	275,098	Apr. 3	288	79	23	1276
Walker, Oakley S., Carthage, N. Y. Ratchet-drill .....	282,309	Aug. 7	399	113	24	570
Walker, Richard H., Wilkes-Barré, assignor of one-half to M. H. Stevens, Pittston, Pa. Sole and upper protector for boots and shoes .....	280,264	June 26	2024	569	23	2493
Walker, Robert J., Girard, Ill. Grain-door .....	271,957	Feb. 6	450	123	23	520
Walker, Robert O. and S., Chicago, Ill. Seal-lock .....	283,836	Aug. 28	1654	466	24	823
Walker, Samuel, Birmingham, county of Warwick, England. Making circular disks for tubes .....	283,727	Aug. 21	1517		24	788
Walker, Sophronie. (See Walker, Robert O. and S.)						
Walker, Stephen T., et al. (See Kelley, John, assignor.)						
Walker, Thomas, Philadelphia, Pa. Amalgamator .....	279,995	June 26	1703	478	23	2436
Walker, Thomas, and J. F. Carter, Philadelphia, Pa., assignors to said Walker. Ore-roasting furnace .....	280,102	June 26	1837	517 518	23	2460
Walker, Thomas A. (See Walker, John S., T. A., and E. R.)						
Walker, Thomas G., Morristown, N. J. Manufacture of glycerine .....	283,936	Aug. 28	1776	502	24	846
Walker, Thomas G., Morristown, N. J. Offal-drier .....	285,187	Sept. 18	1271	357	24	1136
Walker, Thomas H., Kansas City, Mo. Self-closing faucet .....	275,099	Apr. 3	289	79	23	1276
Walker, William, Jr. (See Fair, George W., assignor.)						
Walker, William H., assignor to W. H. Walker & Co., Rochester, N. Y. Photographic camera .....	276,311	Apr. 24	1845	514	23	1566
Walker, William T. (See Walker, Charles C. and W. T.)						
Walkley, Samuel T. (See Johnson and Walkley.)						
Walkup, Liberty, Rockford, Ill. Paint-distributor .....	285,325	Sept. 18	1423	402	24	1164
Wall, Edward B. (See Ely, Cloud, and Wall.)						
Wall, Frank J., Lawrence, Mass. Electric bell-pull .....	282,246	July 31	2421	666	24	443
Wallace, Albert E., Hartford, Conn., and J. H. Griffin, Brockton; said Wallace assignor to said Griffin; said Griffin assignor of one-half to C. Curtis, Boston, Mass. Trimming attachment for sewing-machines .....	272,805	Feb. 20	1539	433	23	725
Wallace, Albert E., Hartford, Conn., assignor to Pope Manufacturing Company, Boston, Mass. Axle-bearing for vehicles .....	280,421	July 3	100	27	24	20
Wallace, Albert E., assignor to Pope Manufacturing Company, Hartford, Conn. Tricycle .....	284,782	Sept. 11	776	216 217	24	1041
Wallace, Ebenezer G., et al. (See Hall, Dyer P., assignor.)						
Wallace, Ebenezer G., et al. (See Scruton, Stephen B., assignor.)						
Wallace, Edwin, et al. (See Hall, Dyer P., assignor.)						
Wallace, Edwin, et al. (See Scruton, Stephen B., assignor.)						
Wallace, Henry R., Chicago, Ill. Neck-yoke .....	279,847	June 19	1520	425	23	2397
Wallace, George M., Yuba City, Cal. Dump-wagon .....	283,937	Aug. 28	1777	502	24	846
Wallace, John T., Neoga, Ill. Guard for plants and trees .....	283,837	Aug. 28	1655	467	24	824
Wallace, Nesbit W., 3 Harley Place, Clifton, county of Gloucester, England. Entrenching implement .....	285,188	Sept. 18	1272	357	24	1136
Wallace, Robert, Wallingford, Conn. Match-box .....	274,864	Mar. 27	2077	577	23	1215
Wallace, S. H. (See Strowger, William D., assignor.)						
Wallace, Samuel J., Keokuk, Iowa. Electric generator .....	274,865	Mar. 27	2077	578	23	1215
Wallace, Samuel J., Keokuk, Iowa. Car-axle lubricator .....	280,265	June 26	2025	570	23	2493
Wallace & Sons. (See Bray, Morris P., assignor.)						
Wallace, Thomas, et al. (See Wallace, William, assignor.)						
Wallace, William, New York, N. Y. Dumping-wagon .....	273,202	Feb. 27	2044	575	23	820
Wallace, William, Oakland, Cal. Dress-maker's rule .....	284,783	Sept. 11	779	217	24	1041
Wallace, William, Ansonia, Conn. Manufacturing articles by electro-deposition of metals upon forms .....	290,949	Dec. 25	2008	553	25	1261
Wallace, William, Ansonia, Conn., assignor of two-thirds to A. K. Eaton, Brooklyn, N. Y., and T. Wallace, Ansonia, Conn. Making electrodes for secondary batteries .....	278,638	May 29	2639	721	23	2109
Wallace, William B., Belleville, Ill. Steam-brake for locomotives .....	278,299	May 22	2206	606	23	2025
Wallace, William M., Bridgeport, Ohio. Manufacture of glassware .....	275,298	Apr. 3	530	145	23	1316
Wallace, William M., Bridgeport, Ohio. Manufacturing glass articles .....	278,472	May 29	2438	665	23	2075
Wallace, William M., Bridgeport, Ohio. Glass-press .....	281,740	July 24	1767	480 481	24	325
Wallace, William M., assignor to C. M. Rhodes, Bridgeport, Ohio. Mold for forming glass screw-caps .....	270,162	Jan. 2	395	114	23	80
Wallace, William R., assignor of two-thirds to T. L. Rivers, Mount Vernon, Ill. Car-coupling .....	277,635	May 15	1382	373	23	1875
Wallace, William W., Frankfort, Ind. Brick and tile machine .....	288,894	Nov. 20	1386	382	25	765
Wallace, William W., Frankfort, Ind. Clay-crusher .....	288,895	Nov. 20	1387	382	25	765
Wallach, Solomon, New York, N. Y. Shirt .....	277,524	May 15	1249	336	23	1853
Wallensak, John F., Chicago, Ill. Set-screw .....	278,759	June 5	103	29	23	2141
Waller, Harry T. W., New York, N. Y. Gauge apparatus .....	289,043	Nov. 27	1573	434	25	805
Walliker, Arnold. (See Fuson, William T., assignor.)						
Wallis, Arthur H., Basingsstoke, county of Hants, England. Pitch-chain. (Reissue) .....	10,413	Nov. 27	1873	548	25	879
Wallmer, Johannes, Middlebury, Ind. Horse-collar pad .....	288,141	Nov. 6	429	121	25	583
Walmsley, Joseph. (See Hall and Walmsley.)						
Walrath, Jesse, Racine, Wis. Saw-mill .....	278,064	May 22	1888	517	23	1971
Walrath, Jesse, Racine, Wis. Steam-engine .....	281,809	July 24	1862	509	24	343
Walrath, Jesse, Racine, Wis. Portable steam-engine .....	284,344	Sept. 4	226	64	24	942
Walsh, Francis A., Chicago, Ill. Seaming-machine .....	271,668	Feb. 6	98	27	23	457



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Walsh, Francis A., Chicago, Ill. Double-seaming sheet-metal cans .....	272,500	Feb. 20	1156	324	23	657
Walsh, Francis A., Chicago, Ill. Sheet-metal can .....	273,783	Mar. 13	710	191	23	964
Walsh, Francis A., Chicago, Ill. Seaming-machine .....	277,962	May 22	1764	481 482	23	1948
Walsh, John B., Providence, R. I. School-slate .....	277,387	May 8	1081	290	23	1819
Walsh, John E., New York, N. Y. Grain-elevator .....	284,263	Sept. 4	132	37	24	927
Walsh, Peter H., New York, N. Y. Truck .....	280,975	July 10	790	219	24	145
Walsh, Ralph, <i>et al.</i> (See Crowley, David, assignor.)						
Walsh, Richard, Detroit, Mich. Water-closet .....	283,172	Aug. 14	831	232	24	654
Walsh, Robert F., Brooklyn, N. Y. Slate-frame .....	270,163	Jan. 2	397	114	23	81
Walter, Charles, <i>et al.</i> (See Smith, Abraham B., assignor.)						
Walter, Gustave, Sandwich, Ill. Cart-spring .....	270,164	Jan. 2	397	115	23	81
Walter, John, Nashville, Tenn. Pipe-coupling .....	284,096	Aug. 28	1991	555	24	883
Walter, John, Nashville, Tenn. Car-roof .....	286,877	Oct. 16	1381	379	25	264
Walter, John F., Jr., Brooklyn, N. Y. Drying and seasoning lumber .....	287,351	Oct. 23	1988		25	380
Walter, John T., Easton, Pa. Middlings-purifier .....	290,504	Dec. 18	1429	396	25	1154
Walter, Peter, Jr. (See Stitt, Lowbridge, and Rosenkranz, assignors.)						
Walterhouse, John J., Vincennes, Ind. Centrifugal reel .....	274,234	Mar. 20	1273	352	23	1069
Walters, Almern B., Philadelphia, Pa. Lock for sliding doors .....	276,941	May 1	535	138	23	1717
Walters, Andrew J. (See Walters, John W., assignor.)						
Walters, Charles F., Richmond, Ind., assignor to Richmond City Mill Works, of Indiana.						
Flour-packer .....	279,678	June 19	1330	370	23	2364
Walters, John W., assignor of one-half to A. J. Walters, Jonesville, Mich. Fence-post .....	286,978	Oct. 16	1512	415	25	286
Walters, Joseph, Washington, assignor of one-half to J. Billings, Daviess County, Ind.						
Bed-spring .....	271,554	Jan. 30	2149	619	23	427
Walthour, John F., San Francisco, Cal. Device for unshipping masts .....	282,592	Aug. 7	144	43	24	526
Walton, Augustus. (See Rasner and Walton.)						
Walton, Augustus, San Francisco, Cal. Pulley .....	282,422	July 31	2646	726	24	482
Walton, Augustus, San Francisco, Cal. Car-axle .....	287,202	Oct. 23	1803	494	25	346
Walton, Benjamin, Fairbury, Ill. Stock-barn .....	288,896	Nov. 20	1388	383	25	765
Walton, Elias H., Cincinnati, Ohio. Sliding door or shutter .....	290,373	Dec. 18	1241	350	25	1122
Walton, George B., <i>et al.</i> , trustees. (See Cochen, Noah L., assignor.)						
Walton, Henry, Philadelphia, Pa. Bottle-case .....	275,552	Apr. 10	898	243	23	1387
Walton, Isaac, <i>et al.</i> (See Odell, Levi J., assignor.)						
Walton, Joseph J. (See Drake, Mahlon S., assignor.)						
Walton, Joseph J. (See Hunt, George P., assignor.)						
Walton, Thomas, assignor to himself and A. W. Paull, Wheeling, W. Va. Manufacture of covered glassware .....	286,096	Oct. 2	392	107 108	25	72
Walton, Wesley, <i>et al.</i> (See Odell, Levi J., assignor.)						
Walworth, Caleb C., Boston, Mass. Automatic fire-extinguisher .....	271,669	Feb. 6	100	27	23	457
Walworth, Caleb C., Boston, Mass. Pipe-cutter .....	279,207	June 12	742	204	23	2260
Walworth, Caleb C., Boston, Mass. Fire-extinguisher .....	281,169	July 10	1020	285	24	187
Walworth, Caleb C., Boston, and O. B. Hall, Malden, Mass. Automatic fire-extinguisher .....	287,071	Oct. 23	1636	450	25	316
Wanamaker, John. (See Thompson, Charles S., assignor.)						
Wands, John C., St. Louis, Mo. Rotary engine .....	271,555	Jan. 30	2150	619	23	427
Wands, John C., St. Louis, Mo. Freight-car roofing .....	280,976	July 10	791	220	24	145
Wanee, Silvanus. (See Weller, Wanee, and Roesch.)						
Wangman, Rudolph, San Francisco, Cal. Screw-clamp for stools .....	274,680	Mar. 27	1858	517	23	1177
Wannamaker, Alfred, West Salem, assignor to A. Hullinger, Oberlin, Ohio. Flax-thresher .....	274,866	Mar. 27	2081	578	23	1215
Wannamaker, John M., Trenton, Mo. Thill-coupling .....	279,996	June 26	1707	478	23	2436
Wanner, Albert, Hoboken, N. J. Pertinery-stand .....	289,586	Dec. 4	268	75	25	935
Wanner, Michael, St. Louis, Mo. Centrifugal machine .....	274,064	Mar. 13	1045	288	23	1021
Warbinton, William H., <i>et al.</i> (See Crawford, John, assignor.)						
Ward, Alexander F., Detroit, Mich. Feed-water heater .....	279,848	June 19	1521	425	23	2397
Ward, Alexander F., Detroit, Mich. Cut-off-valve gear .....	280,103	June 26	1840	518	23	2460
Ward, Anthony, assignor to A. G. Jennings, Brooklyn, N. Y. Knitting-machine .....	280,886	July 10	676	190 191	24	126
Ward, Charles, <i>et al.</i> (See Rayner, Thomas S., assignor.)						
Ward, Charles E., New York, N. Y. Neckscarf .....	288,387	Nov. 13	763	206	25	647
Ward & Curley. (See McHugh, Timothy, assignor.)						
Ward, Cyrus T., <i>et al.</i> (See Rayner, Thomas S., assignor.)						
Ward, Eugene, Newark, N. J. Bridle .....	289,193	Nov. 27	1752	487	25	837
Ward, Eugene, assignor to Butler & Ward, Newark, N. J. Sewing-machine attachment for channeling leather .....	275,794	Apr. 10	1206	330	23	1440
Ward, Frank F., and F. Lindsey; said Ward assignor to B. A. Nevins, Otsego, Mich. Eggcrate .....	282,810	Aug. 7	400	113	24	570
Ward, George B., New York, N. Y. Treadle attachment for sewing and other machinery .....	270,863	Jan. 16	1273	367	23	264
Ward, George C., Gerard, Kans. Cotton-seed planter .....	273,647	Mar. 6	522	140	23	923
Ward, George M. (See Serrell and Ward.)						
Ward, George W. (See Ward, Thomas B., W., and G. W.)						
Ward, Hezekiah C. (See Hedrick, Mason, assignor.)						
Ward, James M. (See Cannon and Ward.)						
Ward, Joel T., Piedmont, W. Va. Saddler's sewing-horse .....	284,097	Aug. 28	1992	555	24	883
Ward, John A., Sharpsville, Pa. Clothes-drier .....	283,728	Aug. 21	1518	428	24	789
Ward, John H., assignor of one-half to J. H. McDermott, Lowell, Mass. Car-coupling .....	273,326	Mar. 6	112	32	23	853
Ward, John S., Eureka, Ill. Corn-planter .....	274,065	Mar. 13	1046	288 289	23	1021
Ward, Michael, and W. H. Brunt, assignors to Voigt, Ward & Co., Pittsburg, Pa. Apparatus used in etching glassware .....	270,165	Jan. 2	398	115	23	81
Ward, Milton C., Farmington, N. C. Lifting-tongs .....	282,134	July 31	2285	627	24	420
Ward, Morris E., <i>et al.</i> (See Jackson, Andrew, assignor.)						
Ward, Robert, South Orange, N. J. Knit fabric .....	283,047	Aug. 14	685	192	24	629
Ward, Stephen S., Greenfield, Mass. Carving-fork guard .....	279,056	June 5	546	150	23	2216
Ward, Thomas B., W., and G. W., Soldier's Grove, Wis. Harrow .....	274,066	Mar. 13	1048	289	23	1021
Ward, Thomas H., Tipton, county of Stafford, England. Machinery or apparatus for ascertaining and indicating weight .....	270,864	Jan. 16	1274	368 369	23	264
Ward, Thomas H., Tipton, county of Stafford, England. Game apparatus .....	287,352	Oct. 23	1989	542	25	380
Ward, William. (See Ward, Thomas B., W., and G. W.)						
Ward, William, Cleveland, Ohio. Glass roof .....	279,465	June 12	1069	296	23	2313
Ward, William S., Leadville, Colo. Ore-concentrator .....	276,738	May 1	272	69	23	1671
Wardell, Joshua M. (See Wade and Wardell.)						
Wardell, Philip, Toronto, Ontario, Canada. Pad to protect the corners of slate-frames .....	285,326	Sept. 18	1425	402	24	1165

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Wardin, Robert B., and J. C. Moore, Philadelphia, Pa.; said Wardin assignor to said Moore. Water-cooler stand	288,960	Nov. 20	1465	405	25	780
Wardman, William, assignor of one-half to G. A. Shoemaker, Bristol, Pa. Wool-combing machine	276,313	Apr. 24	1849	515	23	1567
Wardwell, Edward H., New York, N. Y. Manufacture of ammoniacal salts	273,411	Mar. 6	222	60	23	871
Wardwell, Simon W., Jr., Woonsocket, R. I. Wax thread sewing-machine	270,710	Jan. 16	1097	314	23	229
Wardwell, Simon W., Jr., Woonsocket, R. I., assignor to Hautin Sewing Machine Company, New York, N. Y. Stripping device for wax-thread sewing-machines	270,709	Jan. 16	1097	314	23	229
Ware, Charles F., Camden, N. J. Suspensory bandage	286,657	Oct. 16	1103	297	25	216
Ware, Charles L., assignor to himself, J. H. Russell, and R. T. Oney, Huntington, W. Va. Automatic numbering-machine	276,986	May 1	588	154	23	1727
Ware, Charles V. (See Chinnock and Stephens, assignors.)						
Ware, Charles V. (See Stephens, John G., assignor.)						
Ware, Charles W. (See Frentress, Henry N., assignor.)						
Ware, Cleveland H., Wrentham, assignor to Lincoln, Bacon & Co., Plainville, Mass. Ornamental chain	283,542	Aug. 21	1291	361	24	745
Ware, Cleveland H., Wrentham, assignor to Lincoln, Bacon & Co., Plainville, Mass. Ornamental chain	289,874	Dec. 11	630	175	25	1003
Ware, Edmund R., Worcester, Mass. Journal-bearing	287,203	Oct. 23	1804	495	25	346
Ware, Edmund R., Worcester, Mass. Grinding and polishing machine	287,744	Oct. 30	2508	676	25	486
Ware, Edmund R., Worcester, Mass. Grinding and polishing machine	289,323	Nov. 27	1907	530	25	868
Ware, James, Union Hill, N. J. Making button-holes	278,473	May 29	2439	665	23	2075
Ware, James E., New York, N. Y. Fire-proof ceiling	277,814	May 15	1585	433	23	1912
Ware, John P., Mount Vernon, Mo. End-gate for wagons	290,374	Dec. 18	1244	350	25	1122
Ware, Maroni. (See Alters, Joseph K., assignor.)						
Ware, William F. (See Bruen, John T., assignor.)						
Warfield, Oliver D., Chicopee Falls, Mass. Calipers	288,961	Nov. 20	1466	405	25	780
Warfield, Solomon D., Baltimore, Md. Machine for cutting green corn from the cob	281,588	July 17	1556	{ 426 427 }	24	285
Waring, Arthur B., Boston, Mass., assignor to J. T. Waring, New York, N. Y. Felting-machine	288,747	Nov. 20	1214	332	25	733
Waring, George E., Jr., Newport, R. I., assignor to Drainage Construction Company, Boston, Mass. Wash-stand	277,963	May 22	1769	482	23	1949
Waring, George E., Jr., Newport, R. I., assignor to Drainage Construction Company, Boston, Mass. Sewering and draining towns	278,839	June 5	226	66, 67	23	2162
Waring, George H., assignor to himself and C. Miller, Indiantown, New Brunswick, Canada. Spike-machine	272,994	Feb. 27	1787	501	23	774
Waring, John B., assignor to American Diamond Rock Boring Company, New York, N. Y. Power rock-drill	271,168	Jan. 23	1655	476	23	332
Waring, John T. (See Waring, Arthur B., assignor.)						
Waring, John T., New York, N. Y. Method of and apparatus for making hat-bodies and other fabrics of carded fibers and disintegrated fibers	277,636	May 15	1383	373	23	1875
Waring, John T., New York, N. Y. Apparatus for manufacturing napped or filled yarns or threads	279,997	June 26	1707	479	23	2436
Waring, Richard S. (See Van Hovenbergh, Henry, assignor.)						
Waring, Richard S., Pittsburg, Pa. Insulating compound for electric wires. (Reissue)...	10,351	July 3	553	.....	24	97
Waring, Richard S., Pittsburg, Pa. Insulating material and preparation of the same.....	284,098	Aug. 28	1992	.....	24	883
Waring, Richard S., Pittsburg, Pa. Electric cable	290,375	Dec. 18	1245	350	25	1123
Waring, Richard S., Pittsburg, Pa., and J. B. Hyde, New York, N. Y.; said Hyde assignor to said Waring. Process of and apparatus for insulating wires for electric uses. (Reissue).....	10,349	July 3	550	153	24	97
Waring, Richard S., Pittsburg, Pa., and J. B. Hyde, New York, N. Y.; said Hyde assignor to said Waring. Insulating material for electrical uses. (Reissue).....	10,350	July 3	552	.....	24	97
Waring, Richard S., assignor to Standard Cable Company, Pittsburg, Pa. Joint-connection in lead-covered electric cables	284,099	Aug. 28	1994	555	24	883
Waring, Richard S., assignor to Standard Cable Company, Pittsburg, Pa. Truck for paying off electric cable	284,100	Aug. 28	1996	556	24	883
Warmoth, Madison M., Brandenburg, Ky. Cultivator	290,376	Dec. 18	1247	350	25	1123
Warne, Eljah, Easton, Pa. Illuminating apparatus	288,281	Nov. 13	610	167	25	622
Warne, Eljah, Easton, Pa. Method of and apparatus for reducing and disintegrating ores.	289,587	Dec. 4	269	76	25	935
Warne, Mary A., St. Louis, Mo. Scissors-holder	287,745	Oct. 30	2511	676	25	487
Warner, Adalbert J. (See Warner, Joseph, assignor.)						
Warner, Albion and C. A., New York, N. Y. Interconvertible bedstead and table	277,637	May 15	1386	374	23	1876
Warner, Alfred D. (See Krebs, H. Johannes, assignor.)						
Warner Brothers. (See Tallman, John C., assignor.)						
Warner, Charles A. (See Warner, Albion and C. A.)						
Warner, Charles H., Boston, Mass. Velocipede	282,938	Aug. 7	544	{ 154 155 }	24	597
Warner, Charles H., assignor of one-half to Pope Manufacturing Company, Boston, Mass. Velocipede	283,306	Aug. 14	998	280	24	686
Warner, Edward B., San Francisco, Cal. Necktie-holder	280,694	July 3	427	121	24	76
Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Telephone and signal circuit	284,102	Aug. 28	1998	556	24	884
Warner, Harry T., Chicago, Ill. Spring-roller for curtain-fixtures	290,821	Dec. 25	1850	512	25	1234
Warner, Ira D., Bridgeport, Conn. Ironing apparatus	279,293	June 12	841	233	23	2277
Warner, James C., assignor to Western Electric Company, Chicago, Ill. Spring-jack plug	273,648	Mar. 6	523	140	23	923
Warner, James C., assignor to Western Electric Company, Chicago, Ill. Spring-jack switch for telephone-exchanges	281,741	July 24	1769	481	24	326
Warner, Jasper P., Dowagiac, Mich. Swivel-coupling	276,203	Apr. 24	1715	474	23	1544
Warner, Joseph, Hartford, Conn., assignor of one-half to A. J. Warner, Chicago, Ill. Key-hole guard	275,553	Apr. 10	899	244	23	1388
Warner, Leman A., Freeport, Ill. Cushion-spring for chair backs, seats, &c	279,998	June 26	1709	479	23	2437
Warner, Lucien C. (See Pretty, William J., assignor.)						
Warnholtz, Johannes. (See Schütt and Warnholtz.)						
Warnick, Charles P., assignor of one-half to C. Jahnke, Chicago, Ill. Car-starter	278,378	May 29	2324	636	23	2054
Warren, Alonzo, Boston, Mass. Sewing-machine trimmer	278,300	May 22	2208	606	23	2026
Warren, Andrew. (See Creclius, Louis J., assignor.)						
Warren, Andrew. (See Terry, Ira C., assignor.)						
Warren, Andrew, St. Louis, Mo. Seal-lock	272,360	Feb. 13	959	267	23	618
Warren, Andrew, St. Louis, Mo. Seal-lock	284,519	Sept. 4	441	125	24	979
Warren, Charles F., et al. (See Hanson, Freeman, assignor.)						
Warren, Daniel D. (See Paige, William H., assignor.)						
Warren, Edmond A., assignor to himself and T. J. Moore, Brooklyn, N. Y. Lathe-stand..	270,166	Jan. 2	399	115	23	81



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Warren, Edward K., Three Oaks, Mich., assignor of one-half to G. R. Holden, Michigan City, Ind. Whip.....	286,748	Oct. 16	1220	329	25	236
Warren, Edward K., Three Oaks, Mich., assignor of one-half to G. R. Holden, Michigan City, Ind. Corset-stiffener.....	286,749	Oct. 16	1221	330	25	236
Warren, George H. (See Wiswell, George T., assignor.).....						
Warren, George H., Shelburne Falls, Mass. Carving-fork guard.....	279,294	June 12	842	233	23	2377
Warren, George H., Shelburne Falls, Mass. Fork-guard.....	286,658	Oct. 16	1104	297	25	216
Warren, George L., et al. (See Hanson, Freeman, assignor.).....						
Warren, Henry J., West Bridgewater, assignor to F. Bryant, Cambridge, Mass. Electric gas-lighting burner.....	272,004	Feb. 6	515	138	23	529
Warren, Henry J., and H. F. Packard, Brockton, assignors to H. F. Chase, Boston, Mass. Apparatus for lighting gas by electricity.....	284,784	Sept. 11	779	217	24	1041
Warren, Jabez T., Le Roy, assignor to M. Nevinger, Attica, and M. Selden, administratrix of R. Selden, deceased, Stafford, N. Y. Potato-digging machine.....	282,135	July 31	2256	627	24	420
Warren, James G., Providence, R. I. Hand corn-sheller.....	280,887	July 10	679	191	24	127
Warren, John, Boston, assignor to himself, D. A. White, and C. F. Casey, trustees, Newton, Mass. Boot-treating machine.....	289,044	Nov. 27	1575	434	25	805
Warren, John H., Burlington Junction, Mo. Check-row dropper.....	290,950	Dec. 25	2009	554	25	1261
Warren, Marshall A., Boston, Mass. Adjustable clothes-drier frame.....	286,878	Oct. 16	1382	379	25	265
Warren, Murray H. (See Clark, Rollin C., assignor.).....						
Warren, William, Warren, R. I. Stair-pad.....	281,325	July 17	1235	342	24	231
Warrington, Jesse. (See Marmion and Warrington.).....						
Warrington, Jesse, assignor to Nordyke & Marmion Company, Indianapolis, Ind. Roller-mill.....	277,525	May 15	1249	336	23	1853
Wartenberg, Louis, Anaheim, Cal. Adjustable coupling for harness.....	278,474	May 29	2440	666	23	2075
Warwick, Thomas, Aston, near Birmingham, county of Warwick, England. Vehicle-wheel.....	289,733	Dec. 4	455	127	25	966
Wash, Benjamin S., St. Louis, Mo. Fire-grate.....	277,526	May 15	1254	337	23	1854
Washburn, Albert L., Hartford, assignor of one-half to N. S. Perkins, New London, Conn. Thread-doubling machine.....	271,383	Jan. 30	1933	559	23	388
Washburn, Albert L., Moriden, assignor of one-half to N. S. Perkins, New London, Conn. Thread-doubling machine. (Reissue).....	10,364	Aug. 7	556	157	24	600
Washburn, George W., West New Brighton, N. Y. Ear-jewel fastening.....	285,532	Sept. 25	1677	472	24	1215
Washburn, George W., West New Brighton, N. Y. Safety-catch for pins.....	288,897	Nov. 20	1388	383	25	765
Washburn & Moen Manufacturing Company. (See Boughton, George A., assignor.).....						
Washburn & Moen Manufacturing Company. (See Brinkerhoff, Jacob and W. M., assignors.).....						
Washburn & Moen Manufacturing Company. (See Childs, J. Wallace, assignor.).....						
Washburn & Moen Manufacturing Company et al. (See Gunderson, Albert, assignor.).....						
Washburn & Moen Manufacturing Company. (See Judson, Lyman P., assignor.) (Reissue.).....						
Washburn & Moen Manufacturing Company et al. (See Kittleson, Ole O., assignor.).....						
Washburn & Moen Manufacturing Company. (See Lenox, Edwin S., assignor.).....						
Washburn & Moen Manufacturing Company et al. (See Upham, Andrew J., assignor.).....						
Washburn & Moen Manufacturing Company. (See Watson, Edwin J., assignor.).....						
Washburn & Moen Manufacturing Company et al. (See Root, William A., assignor.).....						
Washburn & Moen Manufacturing Company et al. (See Stevens, Sidney M., assignor.).....						
Washburn & Moen Manufacturing Company et al. (See Wells, David G., assignor.).....						
Washburn, Morgan S., Billings, N. Y. Fire-escape.....	280,538	July 3	243	65	24	44
Washburn, Nathan, Allston, Mass. Car-wheel.....	279,466	June 12	1070	296	23	2313
Washington, George L., Matanzas, Cuba, assignor of one-half to J. D. Wolf, Philadelphia, Pa. Fiber for cordage, textile fabrics, &c.....	272,361	Feb. 13	960		23	618
Washington, Wade, Huntington, W. Va. Corn-husking machine.....	283,173	Aug. 14	832	232	24	654
Wass, Dyson D., assignor to himself, J. C. Henderson, S. Stuart, and T. Motley, New York, N. Y. Apparatus for removing impurities from feed-water.....	272,806	Feb. 20	1541	433	23	726
Wassell, Edwin D., Pittsburg, Pa. Metallurgic furnace.....	285,860	Oct. 2	101	29, 30	25	20
Wasson, Jesse, and R. T. Hitt, La Porte City, Iowa. Machine for working butter.....	286,879	Oct. 16	1383	379	25	265
Wassong, William, Springfield, Mass. Miter-box.....	286,097	Oct. 2	393	108	25	72
Waterbury Buckle Company. (See Buchanan, John, assignor.).....						
Waterbury Clock Company. (See Lewis, Charles S., assignor.).....						
Waterbury Horse Nail Company. (See Croft, Edward, assignor.).....						
Waterhouse, Addison G., New York, N. Y. Electric-induction machine.....	271,169	Jan. 23	1657	476	23	332
Waterhouse, Addison G., New York, N. Y. Mechanical movement.....	277,964	May 22	1770	477	23	1949
Waterhouse, Ai. (See Waterhouse, Mark A., assignor.).....				482		
Waterhouse, Frank G., Sacramento, Cal. Electric-arc lamp.....	274,999	Apr. 3	145	41	23	1251
Waterhouse, Mark A., Chicago, Ill., assignor to A. Waterhouse, Durham, Me. Combined bustle and corset.....	290,505	Dec. 18	1435	397	25	1154
Waterhouse, Samuel, Springfield, Mass. Steam-generator.....	288,524	Nov. 13	928	254	25	677
Waterhouse, Samuel S., Pleasantville, N. J., assignor to H. A. Willes, Philadelphia, Pa. Sash-holder.....	273,327	Mar. 6	113	32	23	853
Waterman, Anthony and F. L., Boston, Mass. Spark-arrester.....	274,867	Mar. 27	2062	578	23	1215
Waterman, Frederick L. (See Waterman, Anthony and F. L.).....						
Waterman, Julius, New York, N. Y. Corset.....	290,822	Dec. 25	1852	512	25	1234
Waterman, Noble J., Detroit, Mich. Hand-truck.....	282,136	July 31	2287	628	24	420
Waterman, Skuley E., and F. H. Kelley, Pawtucket, R. I. Surface-gage.....	273,784	Mar. 13	711	192	23	964
Waterous, John, Brooklyn, N. Y. Composition of matter to be used for sealing fruit-cans, &c.....	288,525	Nov. 13	932		25	677
Waterous, John, Brooklyn, N. Y. Sealing fruit and other cans.....	288,526	Nov. 13	932	254	25	677
Waters, Charles H., Groton, assignor to Clinton Wire Cloth Company, Clinton, Mass. Metallic lathing.....	273,412	Mar. 6	223	60	23	872
Waters, Edward P., Roseville, Ill. Hame-tug.....	278,475	May 29	2441	666	23	2075
Waters, Frank M., Springfield, Ohio. Mechanical movement.....	271,556	Jan. 30	2151	619	23	427
Waters, Horace H., Chicago, Ill. Wire-cloth-sample card.....	272,005	Feb. 6	516	138	23	528
Waters, James, Minneapolis, Minn. Pumping-engine.....	279,679	June 19	1330	370	23	2364
Waters, Robert H., Malden, Mass., assignor to Post Refrigerator Car Company, Portland, Me. Refrigerating structure.....	275,000	Apr. 3	147	41	23	1251
Waters, Robert H., Malden, Mass., assignor to Post Refrigerator Car Company, Portland, Me. Shelf for refrigerator-cars.....	278,757	June 5	102	29	23	2141
Waters, William C., San Francisco, Cal. Brake for winding or hoisting engines.....	281,810	July 24	1803	509	24	343
Waters, William H., Muskegon, Mich. Railway-frog.....	270,521	Jan. 9	853	248	23	177
Waters, William T., Atlanta, Ga. Railway-train telegraph.....	271,958	Feb. 6	451	123	23	520

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Waterson, Henry G., Kansas City, Mo. Holder for electrotype or stereotype plates .....	272,807	Feb. 20	1542	433	23	726
Watkins Automatic Signal Telegraph Company. (See Bulen, George F., assignor.)						
Watkins Automatic Signal Telegraph Company. (See Reeve, Thomas, assignor.)						
Watkins, Benjamin F., Johnstown, Pa. Making molds for steel castings .....	281,212	July 10	1083	.....	24	198
Watkins, George, Detroit, Mich. Device for adjusting roses to doors .....	280,539	July 3	245	65	24	44
Watkins, John N. (See Canaday, Winfield S., assignor.)						
Watkins, Luther M., assignor to Hagerstown Steam Engine and Machine Company, Hagerstown, Md. Fertilizer attachment for grain-drills .....	285,711	Sept. 25	1896	{ 538 539 }	{ 24 24 }	{ 1255 1255 }
Watkins, Samuel H., Linn Flat, Tex. Motor .....	287,893	Nov. 6	130	38	25	530
Watkins, Thomas, Johnstown, Pa. Device for filling pipe-joints .....	274,868	Mar. 27	2083	578	23	1215
Watkins, Thomas, Portsmouth, N. H. Barrel-tap .....	290,732	Dec. 25	1723	475	25	1312
Watkinson, George, New Haven, Conn. Pants-protector .....	281,213	July 10	1084	298	24	198
Watkinson, George, New Haven, Conn. Tap-sole for rubber boots and shoes .....	282,423	July 31	2647	726	24	482
Watrous, James A., assignor to one-half to A. Backus, Green Spring, Ohio. Hot-air flue for heating stoves and furnaces .....	288,142	Nov. 6	430	121	25	583
Watrous, Thomas A., Wellsborough, Pa. Hand-truck .....	272,106	Feb. 13	656	178	23	565
Watson, Amasa B., et al. (See Gates, George W., assignor.)						
Watson, Charles S., Philadelphia, Pa. Envelope-moistener .....	282,247	July 31	2422	666	24	443
Watson, Edwin J., and C. S. Hall, Worcester, Mass. Manufacturing wire .....	279,295	June 12	843	.....	23	2277
Watson, Edwin J., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass. Machine for making pump-chains .....	280,422	July 3	101	27, 28	24	90
Watson, Edwin J., C. S. Hall, and P. Bauer, Worcester, Mass.; said Bauer assignor to said Watson and Hall. Coating for wire preparatory to drawing .....	284,345	Sept. 4	227	.....	24	943
Watson, Elijah S., Water Valley, Miss. Car for elevated railways .....	288,193	Nov. 6	493	137	25	593
Watson, Elijah S., Water Valley, Miss. Elevated railway .....	288,194	Nov. 6	494	{ 137 138 }	{ 25 25 }	{ 593 593 }
Watson, George A. (See Ellsworth, John J., assignor.)						
Watson, George E., Bannack City, Mont. Ter. Sleigh .....	282,811	Aug. 7	401	113	24	571
Watson, James, Jr. (See Crosby, George S., assignor.)						
Watson, James, Jr. (See Steele, Elbridge J., assignor.)						
Watson, James. (See Threlfall, Thomas, assignor.)						
Watson, James, London, England. Baling-press .....	283,838	Aug. 28	1655	467	24	824
Watson, James, Marinette, Wis. Window-screen .....	288,282	Nov. 13	611	168	25	622
Watson, James, Marinette, Wis. Automatic leak-valve for pumps .....	288,283	Nov. 13	612	168	25	623
Watson, John, assignor to himself and J. C. Conway, Buffalo, N. Y. Bit-brace .....	288,748	Nov. 20	1215	332	25	733
Watson, Lewis. (See Ressegieu, James, assignor.)						
Watson, Montgomery H., Dayton, Ohio. Envelope .....	276,314	Apr. 24	1850	515	23	1567
Watson, Nathan K., Wrightsville, Ga. Drag-saw .....	275,443	Apr. 10	763	203	23	1364
Watson & Newell. (See Costello, John, assignor.)						
Watson, Robert E., et al. (See Bushfield, Samuel B., assignor.)						
Watson, Robert S., Bay City, Mich. Knob attachment .....	276,942	May 1	536	138	23	1717
Watson, Sam, et al. (See Minot, Hiram P., assignor.)						
Watson, Thomas, Paisley, assignor to J. & P. Coats, Ferguslie Works, Paisley, county of Renfrew, Scotland. Combined bolster and step for spindles .....	279,680	June 19	1332	370	23	2364
Watson, Thomas, Paisley, assignor to J. & P. Coats, Ferguslie Works, Paisley, county of Renfrew, Scotland. Spinning-machine, &c. ....	279,681	June 19	1333	371	23	2364
Watson, Thomas A. (See Goodwin, William H., assignor.)						
Watson, Thomas A., Everett, Mass. Telephone-exchange apparatus .....	280,266	June 26	2026	570	23	2493
Watson, Thomas A., Everett, assignor to American Bell Telephone Company, Boston, Mass. Telephone-switch .....	270,522	Jan. 9	853	{ 248 249 }	{ 23 23 }	{ 177 177 }
Watson, William, Chicago, Ill. Grain-elevator .....	282,424	July 31	2648	{ 726 727 }	{ 24 24 }	{ 483 483 }
Watson, William, Chicago, Ill. Grain-elevator .....	282,425	July 31	2650	727	24	483
Watson, William, Memphis, Tenn. Grain-elevator .....	281,214	July 10	1085	{ 298 299 }	{ 24 24 }	{ 198 198 }
Watson, William, Memphis, Tenn. Grain-elevator .....	282,812	Aug. 7	402	114	24	571
Watson, William, Memphis, Tenn. Grain-elevator .....	287,505	Oct. 30	2312	625	25	449
Watt, Christina L., Boston, Mass. Window-washing seat .....	290,506	Dec. 18	1436	397	25	1155
Watt, George, Richmond, Va. Fence .....	286,750	Oct. 16	1222	330	25	236
Watt, James H., Barnesville, Ohio. Chimney-cap .....	276,102	Apr. 17	1586	437	23	1514
Watt, Stewart, Barnesville, Ohio. Fire-place grate .....	282,813	Aug. 7	404	114	24	571
Watters, John, New York, N. Y. Box-loop .....	269,975	Jan. 2	180	52	23	37
Watters, John, New York, N. Y. Box-loop .....	269,976	Jan. 2	180	53	23	38
Watters, John, New York, N. Y. Box-loop .....	269,977	Jan. 2	181	53	23	38
Watters, John, New York, N. Y. Box-loop .....	271,170	Jan. 23	1659	477	23	333
Watters, John, New York, N. Y. Frame for carriage-curtain lights .....	277,388	May 8	1082	290	23	1819
Wattles, Luther H., Providence, R. I. Device for centralizing .....	272,167	Feb. 13	657	178	23	565
Watts, Amos, et al. (See Runk, Jacob L., assignor.)						
Watts, Harry, Knightstown, Ind. Two-wheeled vehicle .....	275,965	Apr. 17	1417	391	23	1486
Watts, James A., et al. (See Runk, Jacob L., assignor.)						
Watts, James S., Baltimore, and L. G. Watts, Pikesville, Md. Artificial stone .....	282,426	July 31	2652	.....	24	483
Watts, John. (See Segur, Harry, assignor.)						
Watts, John W., Clarksville, Mo. Station-indicator .....	281,215	July 10	1087	299	24	199
Watts, Joseph O., Linville, Iowa. Spectacle-case .....	275,795	Apr. 10	1207	331	23	1440
Watts, Lunsford G. (See Watts, James S. and L. G.)						
Wangh, Johnson S., assignor to one-half to K. E. Randall and L. Gast, Prospect, Ohio. Car-coupling .....	288,527	Nov. 13	933	255	25	677
Wanghop, Charles W. (See Sebring, Henry K., assignor.)						
Way, Albert S., and J. W. Lutz, Springfield, Ohio. Car-coupling .....	270,865	Jan. 16	1277	369	23	264
Way, Eli B., Knohnoster, Mo. Churn .....	286,510	Oct. 9	909	246	25	175
Way, George A., Middleville, Mich. Fire-back for stoves .....	278,840	June 5	228	67	23	2162
Way, Orville W., assignor to one-half to J. W. Dusenbury, Troy, N. Y. Stocking-clasp .....	288,749	Nov. 20	1216	332	25	733
Way, Samuel M., Hempstead, N. Y. Faucet for soda-fountains and other articles .....	290,823	Dec. 25	1853	512	25	1235
Wayland, Eli, Monroe City, Mo. Horse hay-rake .....	286,659	Oct. 16	1105	298	25	216
Wayland, Eli, Monroe City, and H. H. Wayland, Salisbury, Mo. Horse hay-rake .....	279,057	June 5	547	150	23	2217
Wayland, Henry H. (See Wayland, Eli and H. H.)						
Wayland, James, Newark, assignor to W. B. Gould, Montrose, N. J. Trunk-catch .....	288,284	Nov. 13	614	168	25	623
Wayne Agricultural Company. (See Fulgham, Jesse P., assignor.)						
Wayne, Edward S., et al. (See Schaeppi, Julius, assignor.)						
Weamer, George W., and F. T. Zimmerman, Auburn, Ind. Heating-drum .....	289,045	Nov. 27	1577	435	25	806
Weale, Henry P., assignor to himself, M. V. B. Hersom, Boston, and T. G. Abbott, Watertown, Mass. Automatic metallic packing .....	275,299	Apr. 3	532	145	23	1316
Weart, George W. (See Godley and Whitaker, assignors.)						
Weatherhead, Oscar E., Peekskill, N. Y. Facing for foundry-castings .....	272,808	Feb. 20	1543	.....	23	726



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Weatherly, Warren C., Grand Rapids, Mich. Glue-heater.	280,540	July 3	245	66	24	44
Weatherly, William L., Philadelphia, Pa., assignor to G. P. Ide, Bruce & Co., Troy, N. Y. Standing collar for female wear.	278,758	June 5	102	29	23	2141
Weathers, James, Indianapolis, assignor of one-half to J. A. Robbins, Columbus, Ind. Lifting-jack.	273,649	Mar. 6	524	140	23	923
Weaver, Albert S., assignor, by mesne assignments, to himself and L. C. Angell, Providence, R. I. Electric cable support or hanger.	285,327	Sept. 18	1426	403	24	1165
Weaver, Alfred C., Lake City, Minn. Machine for cleaning bottles.	286,880	Oct. 16	1384	380	25	265
Weaver, Andrew J., St. Petersburg, Pa. Picture-frame holder.	282,427	July 31	2653	728	24	483
Weaver, Devalson G. (See Wood, William H., assignor.)						
Weaver, George L., Boston, Mass. Telephonic annunciator.	276,739	May 1	273	69	23	1671
Weaver, James C., assignor to himself and J. Felthoff, Cutler, Ind. Stock-car.	284,103	Aug. 28	1999	556 557	24	884
Weaver, James H., Chicago, Ill. Envelope.	286,881	Oct. 16	1385	380	25	265
Weaver, James N. (See Hamm, Aron, assignor.)						
Weaver, John C., New York, N. Y. Clamp for panel lining or facing.	286,243	Oct. 9	568	156	25	114
Weaver, Joseph P., Enfield, N. C. Combined cane and pipe case.	275,100	Apr. 3	290	80	23	1276
Weaver, Noah. (See Morris and Weaver.)						
Weaver, Solomon F., near Portis, Kans. Corn-harvester.	286,882	Oct. 16	1386	380 381	25	265
Weaver, Theophilus, Harrisburg, Pa. Rotary measuring and self-closing faucet.	272,176	Feb. 13	731	202	23	578
Weaver, Theophilus, Harrisburg, Pa. Nut-lock.	275,001	Apr. 3	147	41, 42	23	1251
Webb, Browne W., London, England. Cashier's registering apparatus.	274,424	Mar. 20	1515	416 417	23	1111
Webb, Francis W., Crewe, county of Chester, England. Locomotive and traction engine.	270,167	Jan. 2	399	115 116	23	81
Webb, George B., Newark, N. J. Device for making lantern-pinions.	289,478	Dec. 4	128	36	25	909
Webb, George B., assignor of one-half to Plumb & Marcus, Newark, N. J. Circuit-breaker for electric clocks.	289,944	Dec. 11	708	200	25	1018
Webb, George H., Pawtucket, R. I. Press for making bolts.	284,694	Sept. 11	660	186	24	1022
Webb, George H., Pawtucket, R. I. Machine for tapping nuts.	284,695	Sept. 11	661	186	24	1022
Webb, George H., Pawtucket, R. I. Mechanism for trimming and chamfering nuts.	285,447	Sept. 25	1579	444	24	1196
Webb, Jean F., Lebanon, Ill. Safety-guard for railway-frogs, &c.	279,849	June 19	1522	426	23	2398
Webb, Jean F., Lebanon, Ill. Car-axle lubricator.	286,098	Oct. 2	394	108	25	72
Webb, Morell A., Marengo, assignor of one-fourth to F. W. Bailey, Chicago, Ill. Book-mark.	288,285	Nov. 13	615	168	25	623
Webb, Rodolphus, assignor to Landers, Frary & Clark, New Britain, Conn. Self-closing faucet.	275,300	Apr. 3	533	145	23	1316
Webb, Samuel D. (See Hill, Webb, and Odell.)						
Webb, Samuel D., et al. (See Magruder, George C. W., assignor.)						
Webb, Samuel D., Washington, D. C. Workman's apron.	277,178	May 8	844	223	23	1776
Webb, Samuel D., assignor of one-half to H. McNeill, Washington, D. C. Galley type-lock.	274,681	Mar. 27	1859	517 518	23	1177
Webb, Samuel D., assignor, by mesne assignments, of two-thirds to S. C. Hill, Washington, D. C. Galley type-lock. (Reissue.)	10,424	Dec. 11	1012	284 285	25	1073
Webb, Theodore W. (See Nicols and Webb.)						
Webber, Elbridge, assignor of one-half to C. Gifford, Gardiner, Me. Car-coupling.	270,523	Jan. 9	855	249	23	177
Webber, Henry A., Rockton, Ill. Snow-plow.	275,301	Apr. 3	534	145 146	23	1316
Webber, Moses H., Boston, Mass. Mechanical movement.	279,058	June 5	548	151	23	2217
Webber, W. S., et al. (See Blakely, Caleb J., assignor.)						
Weber, Adolph, et al. (See Smith, Alfred B., assignor.)						
Weber, Albert G., New York, N. Y. Separable button.	290,614	Dec. 18	1575	433	25	1179
Weber, Benjamin. (See Smith, Thomas B., assignor.)						
Weber, Charles E., Monroeville, Ind. Window-shutter.	271,384	Jan. 30	1934	559	23	389
Weber, Henry A. (See Roberts, Fabian J., assignor.)						
Weber, Henry A., Urbana, Ill., and M. A. Scovell, Sterling, Kans. Mechanism for defecating and clarifying the juices of sugar-cane, &c.	285,938	Oct. 2	206	58	25	40
Weber, Henry A., Urbana, and M. A. Scovell, Champaign, Ill. Defecating the juice of sugar-producing plants.	285,939	Oct. 2	207		25	40
Wober, John K., Titusville, Pa. Stock-car.	283,441	Aug. 21	1179	331	24	725
Weber, Kaspar. (See Spoehr, Fritz, assignor.)						
Weber, Nicholas F. (See Spengler, John, assignor.)						
Weber, Otto E., Dresden, Saxony, Germany. Machine for compressing pulverized substances.	289,945	Dec. 11	709	200 201	25	1018
Weber, Peter F., Columbus, Ind. Ironing-board.	287,596	Oct. 30	2314	626	25	449
Weber, Theodore A., assignor to J. L. Clark, New York, N. Y. Machine for making barbed fence-wire.	286,511	Oct. 9	910	246	25	175
Weber, Theodore A., assignor to J. L. Clark, New York, N. Y. Barbed fence-wire.	286,512	Oct. 9	914	246	25	176
Weber, Valentin, Princeville, Ill. Check-row attachment for corn-planters.	288,528	Nov. 13	934	255	25	678
Weber, William. (See Toll and Weber.)						
Weber, William F., Newark, N. J. Making dies.	270,866	Jan. 16	1278	369	23	264
Weber, William F., Newark, N. J. Inlaying and embossing celluloid.	275,343	Apr. 3	606	163	23	1328
Webley & Son, P. (See Webley and Brain, assignors.)						
Webley, Thomas W., and T. Brain, assignors to P. Webley & Son, Birmingham, county of Warwick, England. Breech-loader.	275,737	Apr. 10	1127	308 309	23	1427
Webster, Alexander. (See Denney, Harmer, assignor.)						
Webster, Benjamin, Bridgeport, Conn. Cut-off valve.	272,809	Feb. 20	1543	433 434	23	726
Webster, Charles E., New York, N. Y., assignor of one-half to R. Marsh, New Brunswick, N. J. Filler and faucet for oil-cans.	285,712	Sept. 25	1898	539	24	1256
Webster & Comstock Manufacturing Company. (See Chivill, John, assignor.)						
Webster & Comstock Manufacturing Company. (See Webster and Chivill, assignors.)						
Webster, Hanson S., Glensdale, assignor of two-thirds to J. E. Mulford, New York, and M. G. Lewis, Lowville, N. Y. Automatic car-brake.	290,723	Dec. 25	1724	475 476	25	1212
Webster, Hiram, East Aurora, N. Y. Hydraulic air-compressor.	286,751	Oct. 16	1223	330	25	237
Webster, James, Solihull, county of Warwick, England. Composition or alloy of metals.	274,537	Mar. 27	1689		23	1147
Webster, James W., Monticello, Ill. Flue-stop.	274,682	Mar. 27	1859	518	23	1178
Webster, John B., Los Angeles, Cal. Water-heater.	289,194	Nov. 27	1753	487	25	837
Webster, John W., assignor to W. Deering, Chicago, Ill. Grain-binder.	278,639	May 29	2640	722	23	2109
Webster, Joseph F., Needham, Mass. Pencil-fastener.	276,512	Apr. 24	2105	585	23	1611
Webster Manufacturing Company. (See Kennan, Sidney T., assignor.)						
Webster, Octavius R., Belfast, Me. Can-opener.	278,379	May 29	2325	636	23	2055
Webster, Ronena C., Sr., Lipscomb, Tenn. Public-hall exit.	290,951	Dec. 25	2010	552	25	1261
Webster, Towner K., and J. Chivill, assignors to Webster & Comstock Manufacturing Company, Chicago, Ill. Screw-conveyer coupling.	272,006	Feb. 6	517	130	23	539

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Webster, Towner K., and J. Chivill, assignors to Webster & Comstock Manufacturing Company, Chicago, Ill. Screw-conveyer.....	276,103	Apr. 17	1586	437	23	1514
Weckerly, Frank, <i>et al.</i> (See Ireton, William, assignor.).....						
Weed, Alfred, Philadelphia, Pa. Machine for stripping file-blanks.....	287,072	Oct. 23	1638	450	25	316
Weed, Alfred, Philadelphia, Pa. Machine for grinding and dressing file-blanks.....	287,746	Oct. 30	2511	677	25	487
Weed, E. Beverly, Detroit, Mich. Honey-comb-foundation machine.....	283,442	Aug. 21	1180	332	24	725
Weed, Frederick T. (See Mason, James P., assignor.).....						
Weed, John D., Buffalo, N. Y. Treadle for sewing-machines.....	273,921	Mar. 13	878	233	23	992
Weed, John D., Buffalo, N. Y. Fire-escape.....	277,389	May 8	1082	291	23	1810
Weed Sewing Machine Company. (See Thomas, Eddy T., assignor.).....						
Weeden, Henry C., assignor to Phillips & Weeden, Boston, Mass. Flushing apparatus for tanks.....	274,156	Mar. 20	1171	323	23	1050
Weeden, William N., New Bedford, Mass. Music-box.....	283,307	Aug. 14	1000	280	24	686
Weeden, William N., Waterbury, Conn. Watch-case.....	284,926	Sept. 11	938	263	24	1071
Weeks, Albert W., Worcester, and L. St. Clair, Lynn, Mass. Shoe-tying machine.....	274,236	Mar. 20	1277	{ 552 353 }	23	1069
Weeks, Andrew J. and J. E., Littleton, N. H. Tanning.....	289,588	Dec. 4	272		25	935
Weeks, Asa, Minneapolis, Minn. Spar-terpedo.....	273,413	Mar. 6	224	60	23	872
Weeks, Asa, Minneapolis, Minn. Rocket-terpedo.....	274,067	Mar. 13	1049	{ 289 290 }	23	1022
Weeks, Asa, Minneapolis, Minn. Device for launching rocket-terpedoes.....	274,068	Mar. 13	1053	290	23	1022
Weeks, Asa, Minneapolis, Minn. Floating torpedo.....	274,069	Mar. 13	1054	{ 290 291 }	23	1022
Weeks, Francis H., New York, N. Y. Handling freight.....	274,235	Mar. 20	1275	352	23	1069
Weeks, Horace, Boston, Mass., assignor to Corrugated Wire Fastening Company, Hartford, Conn. Nailing-machine.....	280,267	June 26	2027	570	23	2493
Weeks, John E. (See Weeks, Andrew J. and J. E.).....						
Weems, David G., Baltimore, Md. Artificial stone.....	274,237	Mar. 20	1280	353	23	1070
Wegmann, Friedrich, Zurich, Switzerland. Roller-mill.....	276,104	Apr. 17	1587	{ 438 439 }	23	1514
Wehner, Christian, New York, N. Y. Middlings-purifier.....	287,597	Oct. 30	2315	626	25	449
Weidemann, Gustav, Newark, N. J. Bed-leunge.....	273,203	Feb. 27	2045	576	23	820
Weidenmann, Jacob, assignor to Kueffel & Esser, New York, N. Y. T-square.....	282,248	July 31	2423	666	24	443
Weidmann, Paul, Brooklyn, N. Y. Barrel-heater.....	282,514	Aug. 7	404	114	24	571
Weigell, August, Milwaukee, Wis. Pillow, bolster, or mattress.....	276,650	May 1	131	35	23	1649
Weigman, John B. (See Schanze and Weigman.).....						
Weihmann, Henry A., Jr. (See Zeising and Weihmann.).....						
Weik, Charles, Jr., Bristol, Pa. Car-coupling.....	279,059	June 5	549	151	23	2217
Weil, A. Lee. (See Arendt and Weil.).....						
Weil, Lehman, New York, N. Y. Bathing-garment.....	286,660	Oct. 16	1105	298	25	216
Weil, Samuel, Boston, Mass. Shirt.....	279,467	June 12	1071	296	23	2313
Weiler, John, Griggsville, Ill. Road-cart.....	285,189	Sept. 18	1273	358	24	1136
Weiller, Lazare, Angoulême, Charente, France. Manufacture of silicious copper and bronze for making electric conductors.....	277,089	May 8	733		23	1757
Weimann, Conrad L., New York, and J. Weimann, Brooklyn, N. Y. Waterproofing compound.....	275,738	Apr. 10	1130		23	1427
Weimann, John. (See Weimann, Conrad L. and J.).....						
Weimer, Peter L., Lebanon, Pa. Blast-furnace.....	287,204	Oct. 23	1805	495	25	346
Weimer, Peter P. (See Trversky, Nicholas N., assignor.).....						
Weinberg, Carl A. W., <i>et al.</i> (See Healy, Michael L., assignor.).....						
Weindel, John A. (See Weindel, Leonard and J. A.).....						
Weindel, Leonard and J. A., St. Louis, Mo. Machine for dressing the interior of kegs.....	286,661	Oct. 16	1106	298	25	216
Weinhagen, Henry, Hoboken, N. J. Thermometer.....	278,380	May 29	2326	637	23	2055
Weinhagen, Henry, Hoboken, N. J., assignor to C. A. Tatum, New York, N. Y. Thermometer-tube. (Reissue).....	10,274	Jan. 16	1301	375	23	268
Weinig, Paul, Hanau, Prussia, Germany, assignor to F. W. Wolf, Chicago, Ill. Malt-kiln floor.....	281,326	July 17	1235	342	24	231
Weinreich, Gustav A. (See Hardenberg and Weinreich.).....						
Weinschenk, Gustave, Cambridge, Mass. Combined copy-holder and book-rest.....	289,195	Nov. 27	1754	487	25	838
Weinstock, Harris. (See Lubin, David, assignor.).....						
Weir, Fredric C., Cincinnati, Ohio. Railway-switch.....	273,785	Mar. 13	711	192	23	964
Weir, Fredric C., Cincinnati, Ohio. Brace for railway switches and rails.....	273,786	Mar. 13	712	192	23	964
Weir, John B., assignor to W. S. Weir, Monmouth, Ill. Cultivator.....	273,787	Mar. 13	713	{ 192 193 }	23	964
Weir, Robert. (See Lee and Weir.).....						
Weir, William S. (See Weir, John B., assignor.).....						
Weir, William S., Monmouth, Ill. Cultivator.....	274,070	Mar. 13	1057	291	23	1023
Weirbach, Henry T., and M. B. Bitting, Allentown, Pa. Sandpapering-machine.....	277,090	May 8	734	192	23	1757
Weirick, John, Mifflinburg, Pa. Harness.....	276,105	Apr. 17	1591	{ 439 440 }	23	1515
Weis, Herman, Tonica, Ill. Lifting-jack.....	271,959	Feb. 6	452	124	23	520
Weis, Joseph, Jersey City, N. J. Circuit-instrument for electric railway-signals.....	277,390	May 8	1083	291	23	1819
Weiss, Albert R. and C. W., Brooklyn, N. Y. Drinking-vessel.....	278,205	May 22	2073	571	23	2002
Weiss, Charles W. (See Weiss, Albert R. and C. W.).....						
Weiss, Charles W., Brooklyn, assignor of one-half to C. Kruse, New York, N. Y. Photographic passenger-recorder.....	283,174	Aug. 14	833	233	24	654
Weiss, Charles W., assignor to G. I. Cullmer, G. Corbett, S. A. Martin, Brooklyn, G. W., and W. W. Corbett, New Brighton, N. Y. Bag-sewing machine.....	290,952	Dec. 25	2011	{ 554 555 }	25	1261
Weiss, Henry W., Quakertown, Pa. Milk cooler and heater.....	280,695	July 3	428	121	24	76
Weiss, John C., assignor to himself and R. Voeth, Pittsburg, Kans. Corn planter and cultivator.....	270,524	Jan. 9	857	249	23	177
Weissenbach, Jacob, <i>et al.</i> (See Græbel, H. William, assignor.).....						
Weitzell, John W. (See Smith and Weitzell.).....						
Welbourn, Josiah M., Edison, Ohio. Grain-separator.....	281,589	July 17	1559	427	24	285
Welby, Thomas J. (See Jones, Marcus R., assignor.).....						
Welch, Charles T. (See Purdy and Welch.).....						
Welch, E. B. (See Trouvelot, George H. E., assignor.).....						
Welch, Ebenezer B. (See Robinson, Thomas C., assignor.).....						
Welch, Herman L., <i>et al.</i> (See Learned, Edward A., assignor.).....						
Welch, James M. (See Kinney, Cyrus, assignor.).....						
Welch, Reuel H., assignor of two-thirds to G. D. Barnard, St. Louis, Mo. Book-cover.....	270,560	Jan. 9	902	260	23	185
Welch, S. Frank, Mount Pleasant, Iowa. Excavating-machine.....	289,734	Dec. 4	456	{ 128 129 }	25	966



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Welch, Thomas, and G. Corbion, Jr., Philadelphia, Pa., assignors to C. H. Crawford, New York, N. Y. Button-hole sewing-machine.	272,108	Feb. 13	658	179 180	23	565
Welch, William, J. Coughlin, and J. J. Mahoney, San Francisco, Cal. Splash-board for water-closets.	271,557	Jan. 30	2152	619	23	427
Weld, Calvin J., assignor of one-half to G. W. Hooker, Brattleborough, Vt. Shingle-machine.	273,650	Mar. 6	524	141	23	924
Weldon, Stephen, Philadelphia, Pa. Juvenile rocker.	281,420	July 17	1351	372	24	251
Welds, Benjamin A., Jackson, Mich. Fence-lock.	286,752	Oct. 16	1225	331	25	237
Weldy, Charles, and G. Witman, Reading, Pa. Hand-oiler.	274,683	Mar. 27	1861	518	23	1178
Welker, Washington, Fremont, Ohio. Carriage-curtain fastening.	285,090	Sept. 18	1153	321	24	1115
Weller, George, Cass County, Mo. Sulky-plow attachment.	275,444	Apr. 10	764	203	23	1365
Weller, Chester A., Sing Sing, assignor of one-half to E. Herzig, New York, N. Y. Drive-chain.	282,689	Aug. 7	258	75	24	544
Weller, Jacob P., St. Louis, Mo. Tire for vehicle-wheels.	276,943	May 1	536	139	23	1718
Weller, Jacob P., St. Louis, Mo. Tire-setter.	276,944	May 1	537	139	23	1718
Weller, John. (See Venator and Weller.)						
Weller, Marvin E., Fort Plain, N. Y. Stove-damper.	274,238	Mar. 20	1281	353	23	1070
Weller, Simon P., S. Wance, and G. Roesch, Denver, Colo., assignors of one-fourth to A. Rische and C. A. Funke. Car-brake.	274,869	Mar. 27	2084	579	23	1216
Weller, Simon P., and G. R. Roesch, Denver, Colo. Lubricating-cup.	280,423	July 3	105	28	24	20
Weller, Thomas B., assignor of one-half to P. A. Largey, Butte City, Mont. Ter. Bob-sleigh.	290,295	Dec. 18	1145	321	25	1104
Weller, Thomas W., Louisville, Ky., assignor to Brennan & Co., South Western Agricultural Works. Evaporator.	287,487	Oct. 30	2161	587	25	420
Welles, Richard J., Chicago, Ill. Harness-pad.	270,711	Jan. 16	1099	315	23	230
Welles, Richard J., Chicago, Ill. Machine for crimping harness-pads.	270,712	Jan. 16	1100	315	23	230
Welles, Richard J., Chicago, Ill. Harness-pad machine.	284,696	Sept. 11	663	186	24	1022
Welles, Richard J., Chicago, Ill., assignor to W. and T. B. Mills, Brooklyn, N. Y. Land-ing-net.	273,651	Mar. 6	526	141	23	924
Welles, Richard J., assignor to C. C. Champlin and F. T. Spencer, Chicago, Ill. Counter-sink for bits.	277,859	May 15	1641	447	23	1922
Welling, John E., Georgetown, Ky. Steam cooking apparatus.	225,302	Apr. 3	535	146	23	1317
Welling, John E., assignor of one-half to A. Degaris, Georgetown, Ky. Flour-sifter.	284,581	Sept. 4	516	144	24	991
Wellings, James H., et al. (See Lewis, Henry G., assignor.)						
Wellington, Charles A. (See Chase, Albert, assignor.)						
Wellington, Darius, Boston, Mass. Self-leveling basin for ships.	270,525	Jan. 9	858	250	23	178
Wellington, Darius, Boston, Mass. Water-closet.	271,752	Feb. 6	202	56	23	475
Wellington, Frank O., East Bridgewater, Mass. Hydrocarbon-engine.	278,065	May 22	1899	518	23	1971
Wellington, Henry, Brooklyn, N. Y. Torch.	284,346	Sept. 4	223	64	24	943
Wellington, Martha L., Brookline, Mass. Doll.	285,448	Sept. 25	1580	444	24	1197
Wellman, Emilius A., Belfast, assignor to himself and J. F. Rogers, Searsport, Me. Presser-foot and gage for sewing-machines.	288,529	Nov. 13	935	255	25	678
Wellman, Henry H. (See Bartlett, La Roy, assignor.)						
Wellman, Samuel T. (See Roby and Wellman.)						
Wellman, Samuel T., Cleveland, Ohio. Car-wheel.	271,286	Jan. 30	1805	523	23	366
Wellman, Samuel T., Cleveland, Ohio. Rolling-mill.	277,815	May 15	1586	433 434 447 448	23	1912
Wellman, Samuel T., Cleveland, Ohio. Rolling-mill.	277,860	May 15	1642	447 448	23	1922
Wellman, Samuel T., Cleveland, Ohio. Cutter for revolving puddling-furnaces.	285,861	Oct. 2	103	30, 31	25	20
Wellman, Seth A., Lee Centre, Ill. Hay-elevator.	280,494	July 3	105	29	24	21
Wellman, Willard F., assignor, by mesne assignments, to himself and F. A. Howard, Belfast, Me. Adjustable head-rest for chairs.	283,443	Aug. 21	1181	332	24	725
Wellmann, Fredrick, assignor of one-half to A. Vorck, New York, N. Y. Sole-plate for boots and shoes.	290,155	Dec. 11	964	272	25	1065
Wells, Bezel P., et al. (See Nugent, Richard C., assignor.)						
Wells, Charles C., Saratoga Springs, N. Y. Machine for coating pills.	273,328	Mar. 6	114	33	23	853
Wells, Charles D., and C. A. Newlin, Millville, N. J. Wrench.	285,449	Sept. 25	1580	444	24	1197
Wells, Charles R., and B. K. Lewis, Lynn, Mass. Boot and shoe sole finishing machine.	275,873	Apr. 17	1316	363	23	1467
Wells, David G., Joliet, Ill., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass., and I. L. Elwood, De Kalb, Ill. Machine for spooling barbed fence-wire.	288,530	Nov. 13	936	255	25	678
Wells, Frank O. (See Wells, Frederic E. and F. O.)						
Wells, Frederic E. and F. O., Greenfield, Mass. Tire-upsetter.	269,901	Jan. 2	94	28	23	20
Wells, Frederic E., Montreal, Quebec, Canada. Spark-conductor for locomotives.	283,839	Aug. 28	1658	468	24	824
Wells, George M., Boston, Mass., assignor to J. S. Smith, Chicago, Ill. Last.	276,651	May 1	131	35	23	1649
Wells, George M., Boston, Mass., assignor to Solidity Iron Last Company, New York, N. Y. Jack for lasts.	281,742	July 24	1769	481	24	326
Wells, George M., Boston, Mass., assignor to Solidity Iron Last Company, New York, N. Y. Last.	288,286	Nov. 13	616	169	25	623
Wells, George W., and J. Preux, assignors to American Optical Company, Southbridge, Mass. Eyeglass.	286,883	Oct. 16	1329	381	25	266
Wells, George W., and J. Preux, assignors to American Optical Company, Southbridge, Mass. Eyeglass.	285,450	Sept. 25	1581	445	24	1197
Wells, Harlan P., Salisbury, Mass. Jump-seat for carriages.						
Wells, Harvey J., et al. (See Myers, John G. L., assignor.)						
Wells, Henry P., et al. (See Onderdonk, Lansing, assignor.)						
Wells, Henry W. (See Upham, Artemas B., assignor.)						
Wells, Horace E., Cleveland, Ohio. Disinfecting water-closets.	276,106	Apr. 17	1592	440	23	1515
Wells, Isaac C., Three Mile Bay, N. Y. Brush.	271,960	Feb. 6	452	124	23	520
Wells, James H., Vineland, N. J. Machine for bending and straightening bars.	279,618	June 19	1252	347	23	2351
Wells, Jesse O., Des Moines, Iowa. Automatic circuit-closer for electric fire-alarms.	277,965	May 22	1772	483	23	1949
Wells, Joseph L., Philadelphia, Pa. Insect-excluding device.	274,425	Mar. 20	1517	417	23	1111
Wells, Justin R., Brooklyn, N. Y. Compound balanced steam-engine.	278,841	June 5	229	67, 68	23	2162
Wells, Levi, Spring Hill, Pa. Butter-package.	284,927	Sept. 11	938	263	24	1071
Wells, Parker, Lynn, Mass. Speed-governor.	271,287	Jan. 30	1806	524	23	366
Wells, Parker, Lynn, Mass. Speed-governor.	271,288	Jan. 30	1807	524	23	366
Wells, Philip F., assignor of one-half to H. A. Kipp, Milford, Mich. Spring-tooth barrow.	274,684	Mar. 27	1862	518	23	1178
Wells, Philip F., assignor of one-half to H. A. Kipp, Milford, Mich. Spring-tooth.	280,104	June 26	1841	519	23	2450
Wells, Samuel J., Chicago, Ill. Trunk-fastener.	283,938	Aug. 28	1778	502	24	846
Wells, Thomas, near Decatur, Miss. Fertilizer.	283,308	Aug. 14	1001	.....	24	687
Wells, Webster, Winchester, Mass., assignor, by mesne assignments, to Brunswick Ship's Berth Company, of Connecticut. Governor for swinging berths.	279,619	June 19	1253	347	23	2351
Wells, Webster, Winchester, Mass., assignor, by mesne assignments, to Brunswick Ship's Berth Company, of Connecticut. Self-leveling ship's berth.	280,977	July 10	792	220	24	145
Wells, William, New Providence, N. J. Water-meter.	273,204	Feb. 27	2046	576	23	820
Wells, William D. (See Slayton and Wells.)						
Wells, William T., Hackensack, N. J. Locomotive.	275,739	Apr. 10	1130	309	23	1427

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Welman, James. (See Beaumont and Welman.)						
Wels, Richard, Dessau, Germany. Friction-clutch	285,940	Oct. 2	209	59	25	40
Welsh, David, Washington, D. C. Fire-escape	278,301	May 22	2210	606	23	2026
Welsh, Morris, Quincy, Mass. Indicator-lock	229,196	Nov. 27	1755	488	25	838
Welsh, Thomas J., et al. (See Rudolph, Alexander, assignor.)						
Welsh, William H., Erie, Pa. Fire-escape	287,598	Oct. 30	2317	626	25	450
Welte, Emil, New York, N. Y. Mechanical musical instrument	287,599	Oct. 30	2318	627	25	450
Welton, Edwin D., assignor to Scovill Manufacturing Company, Waterbury, Conn. Button-setting machine	284,928	Sept. 11	939	264	24	1071
Welty, James O., Nevada, Ohio. Bosom-ironing board	284,927	Sept. 11	664	187	24	1023
Wemple & Co. (See De Quillfeldt, Charles, assignor.)						
Wendell, Isaac P., Philadelphia, Pa. Bearing for car-axes	280,978	July 10	792	220	24	146
Wendell, Washington, Orange, Mass. Sewing-machine	286,662	Oct. 16	1108	298	25	217
Wendt, Arthur F., New York, N. Y. Water-bosh for blast-furnaces	277,638	May 15	1387	374	23	1876
Wengenroth, August, Troy, N. Y. Blow-gun	286,513	Oct. 9	915	247	25	176
Wenham, Francis H., Warbeck Road, Shepherd's Bush, county of Middlesex, England. Gas-lamp	281,590	July 17	1560	427	24	285
Wenigmann, Ernest, New York, N. Y. Conduit for street-pipes	285,328	Sept. 18	1427	403	24	1163
Wentling, Adam, assignor of one-half to C. H. Lawrence, Hiawatha, Kans. Tug-slide	289,479	Dec. 4	128	37	25	909
Wentworth, Charles H., Chicago, Ill. Child's carriage	283,939	Aug. 28	1779	502	24	847
Wentworth, Richmond A., Appleton, Me. Fish-trap or spring-hook	283,444	Aug. 21	1182	332	24	725
Wentzell, John B. (See Wentzell, William W. and J. B.)						
Wentzell, William W. and J. B., Harper's Ferry, W. Va. Moistening apparatus for cigars and tobacco	273,205	Feb. 27	2048	577	23	821
Wenzel, Hermann J., San Francisco, Cal. Watchman's time-detector	276,740	May 1	273	69	23	1671
Wenzel, John, Vernon, Ind. Stove-shelf	281,949	July 24	2031	555	24	373
Wenzell, George, assignor of one-half to H. J. Meier, Detroit, Mich. Spring-bed	277,639	May 15	1387	374	23	1876
Werden, John H., Winfield, Kans. End-gate	277,391	May 8	1084	291	23	1819
Werfield, William, Aurora, Nebr. Churn	277,091	May 8	735	193	23	1758
Werk, Emil, et al. (See Spooner, Samuel P., assignor.)						
Werk, Casimir L., Cincinnati, Ohio. Candle-machine	284,785	Sept. 11	781	217	24	1042
Werle, Henry, Sterling, Ill. Bung for barrels	273,788	Mar. 13	714	193	23	965
Werner, Emil, Philadelphia, Pa. Easel	281,591	July 17	1562	428	24	286
Werner, Emil, Philadelphia, Pa. Combined easel, artist's box, sketching-board, and stool	283,175	Aug. 14	834	233	24	655
Werner, Emil, Philadelphia, Pa. Store-service apparatus	283,543	Aug. 21	1292	361	24	745
Wernert, John M. J., Paw Paw, Mich. Door	278,066	May 22	1890	518	23	1971
Werneth, Francis J., Baltimore, Md. Curtain-cord tightener	275,303	Apr. 3	536	146	23	1317
Werts, Alexander A., Big Creek, S. C. Harrow	287,353	Oct. 23	1990	542	25	380
Werts, William, et al. (See Hope, Charles, assignor.)						
Werts, William, Camden, N. J. Press for molding glass	270,526	Jan. 9	860	250	23	178
Werts, William, Camden, N. J., assignor of one-half to W. H. Mattson, Philadelphia, Pa. Horseshoe-nail machine	220,268	June 26	2029	570	23	2493
Wertz, John S., Stanberry, Mo. Car-seal	286,514	Oct. 9	916	247	25	176
Weschler, Daniel D., Erie, Pa. Apparatus for making malt	270,619	Jan. 16	977	252	23	208
Wesel, Ferdinand, New York, N. Y. Stereotype-plate holder	276,204	Apr. 24	1716	475	23	1544
Wesp, William. (See Kroedel and Wesp.)						
Wessell, Otto. (See Schlüter, Rudolph, assignor.)						
Wesson, Daniel B., Springfield, Mass. Revolver	284,786	Sept. 11	782	218	24	1042
Wesson, Daniel B., Springfield, Mass. Lock for revolving fire-arms	285,802	Oct. 2	104	31	25	21
Wesson, Daniel B., Springfield, Mass. Safety attachment for gun-locks	289,875	Dec. 11	630	175	25	1003
Wesson, Isaac A., Wingo, Ky. Sulky-spring	275,445	Apr. 10	765	204	23	1365
Wesson, Walter D., Providence, R. I. Hand-stamp	286,884	Oct. 16	1390	381	25	266
West, Adam C., assignor of two-thirds to C. V. West, Blanchard, Mich. Plow	288,581	Nov. 13	937	256	25	678
West, Andrew, Birmingham, Iowa. Roundabout	288,898	Nov. 20	1390	383	25	765
West, Benjamin C. (See West, Redfield B., assignor.)						
West, Charles V. (See West, Adam C., assignor.)						
West, Clark S., Boston, Mass. Lamp-stove	274,426	Mar. 20	1518	417	23	1111
West, Clark S., Boston, Mass., assignor to West Oil Stove Company, of New Jersey. Steam cooker	284,104	Aug. 23	2000	557	24	684
West, Edmund B., Philadelphia, Pa. Car brake and starter	279,999	June 26	1710	479	23	2437
West, Francis H., Milwaukee, Wis. Steam-trap and boiler-feeder	276,107	Apr. 17	1593	440	23	1515
West, Francis H., Milwaukee, Wis. Steam-trap	281,592	July 17	1563	428	24	286
West, John C., assignor of two-thirds to O. N. Baldwin, Clarksville, Mo. Railway-switch	285,190	Sept. 18	1274	358	24	1136
West, Marshall O., Port Chester, N. Y. Shirt	272,810	Feb. 20	1544	434	23	726
West, Marshall O., Port Chester, N. Y. Dickey	290,953	Dec. 25	2013	555	25	1261
West, North. (See Swaney, David A., assignor.)						
West Oil Stove Company. (See West, Clark S., assignor.)						
West, Redfield B., assignor of one-half to B. C. West, Guilford, Conn. Photographic printing	273,206	Feb. 27	2050	-----	23	821
West, Robert S. (See Beecher and West.)						
West, Stillman A., Racine, Wis. Burnishing-machine for boots and shoes	288,532	Nov. 13	939	256	25	678
West, Thomas L., Palatine, Ill. Evaporator	225,723	Sept. 25	1899	539	24	1256
West, William, Denver, Colo., assignor of one-half to H. Pennoek, New York, N. Y. Apparatus for concentrating sulphuric acid	280,425	July 3	107	29	24	21
Westcott, Charles S. (See Hoke, Walter S., assignor.)						
Westcott, John M., assignor to Hoosier Drill Company, Richmond, Ind. Grain-seeding machine	271,961	Feb. 6	453	124	23	520
Westerbeck, Frederick, St. Louis, Mo. Shipping-can	282,690	Aug. 7	259	75	24	544
Westerfield, William C., assignor to J. H. and E. F. Earl, Chicago, Ill. Device for holding and cutting paper	284,105	Aug. 28	2001	557	24	884
Westerman, George, Jr., Lockport, and W. T. Miller, Buffalo, N. Y. Composition for target-balls	290,296	Dec. 18	1145	321	25	1104
Western Electric Company. (See Barrett, John A., assignor.)						
Western Electric Company. (See Firman, Leroy B., assignor.)						
Western Electric Company. (See Haskins, Charles D., assignor.)						
Western Electric Company. (See Hibbard, Angus S., assignor.)						
Western Electric Company. (See Patterson, William R., assignor.)						
Western Electric Company. (See Phelps, George M., Jr., assignor.)						
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Western Union Telegraph Company. (See Fenn, Joseph E., assignor.)						
Western Union Telegraph Company. (See Field, Stephen D., assignor.)						
Western Union Telegraph Company. (See Van Hoesvenbergh, Henry, assignor.)						
Western Union Telegraph Company. (See Vansize and Buckingham, assignors.)						
Westervelt, Edmund C., South Bend, Ind. Wooden plate	284,347	Sept. 4	230	65	24	943
Westfall, Augustus M., et al. (See Shamp, George W., assignor.)						
Westgate, Joseph D., Manchester, N. H., assignor of one-half to W. H. Hodgdon, Lynn, Mass. Automatic vent for water-pipes	290,824	Dec. 25	1854	513	25	1235
Westinghouse, George, Jr., Pittsburg, Pa. Cock-grinding machine	270,527	Jan. 9	861	{ 250 251 }	{ 23 23 }	{ 178 178 }
Westinghouse, George, Jr., Pittsburg, Pa. Air-brake pressure-regulator	270,528	Jan. 9	862	251	23	179
Westinghouse, George, Jr., Pittsburg, Pa. Electric circuit for railway-signaling	270,867	Jan. 16	1279	369	23	264
Westinghouse, George, Jr., Pittsburg, Pa. Fluid-pressure regulator	280,269	June 26	2031	572	23	2494
Westinghouse, George, Jr., Pittsburg, Pa. Track-circuit connector	282,240	July 31	2423	666	24	443
Westinghouse, George, Jr., Pittsburg, Pa. Track-circuit connector	282,250	July 31	2425	667	24	443
Westinghouse, George, Jr., Pittsburg, Pa. Fluid-pressure-gage tester	287,894	Nov. 6	131	38, 39	25	530
Westinghouse, George, Jr., Pittsburg, Pa. Connection for railway-brakes	288,388	Nov. 13	764	206	25	648
Westinghouse, George, Jr., Pittsburg, Pa. Boiler-feeder	290,307	Dec. 18	1438	397	25	1155
Westinghouse, H. Herman, Pittsburg, Pa. Steam-engine lubricating attachment	271,005	Jan. 23	1461	420	23	300
Weston, Charles H., Yarmouth, Me. Toggle-press	276,108	Apr. 17	1595	{ 440 441 }	{ 23 23 }	{ 1516 1516 }
Weston, Clinton H., Mount Clemens, Mich. Oscillating guide for gang-saws	286,351	Oct. 9	725	194	25	142
Weston, David M., Boston, Mass. Centrifugal machine	275,874	Apr. 17	1317	363	23	1467
Weston, David M., Boston, Mass. Centrifugal machine	275,875	Apr. 17	1321	364	23	1468
Weston, Edward, Newark, N. J. Electric light	271,172	Jan. 23	1061	478	23	333
Weston, Edward, Newark, N. J. Magnetic speed-indicator	277,179	May 8	845	223	23	1777
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Incandescent electric lamp	271,171	Jan. 23	1660	478	23	333
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Electric-arc lamp	271,173	Jan. 23	1663	{ 478 479 }	{ 23 23 }	{ 333 333 }
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Device for regulating the electrical transmission of power	272,362	Feb. 13	960	267	23	618
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Device for regulating the electrical transmission of power	272,363	Feb. 13	962	268	23	618
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Device for regulating the electrical transmission of power	272,364	Feb. 13	964	269	23	619
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. System for the electric transmission of power	272,365	Feb. 13	966	269	23	619
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Dynamo-electric machine	272,366	Feb. 13	967	270	23	619
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Electric-arc lamp	272,367	Feb. 13	967	270	23	620
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Controlling the electrical transmission of power	273,329	Mar. 6	116	33	23	854
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Incandescent-lamp holder	274,427	Mar. 20	1519	418	23	1111
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Bracket for incandescent lamps. (Reissue)	10,299	Mar. 27	2113	588	23	1220
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Circuit-controlling device	277,640	May 15	1388	374	23	1876
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Bracket for electric incandescent lamps	277,641	May 15	1389	375	23	1876
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Bracket for electric incandescent lamps	277,642	May 15	1391	375	23	1877
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Electric-lamp fixture	277,643	May 15	1391	375	23	1877
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Dynamo-electric machine	277,644	May 15	1392	375	23	1877
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Electric lamp and holder therefor	277,645	May 15	1394	376	23	1877
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Electric lamp and holder	277,646	May 15	1395	376	23	1877
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Regulator for dynamo-electric machines	278,640	May 29	2641	722	23	2110
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Dynamo-electric machine	278,641	May 29	2643	723	23	2110
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Bracket or fixture for incandescent lamps	278,642	May 29	2646	724	23	2110
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Indicator for secondary batteries	282,428	July 31	2655	728	24	484
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Vacuum apparatus	283,544	Aug. 21	1295	362	24	746
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Vacuum-pump	283,545	Aug. 21	1296	363	24	746
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Electro-magnetic motor	283,546	Aug. 21	1298	363	24	746
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Electric meter	283,547	Aug. 21	1299	363	24	747
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Dynamo-electric machine	283,548	Aug. 21	1300	364	24	747
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Apparatus for producing vacuums	283,549	Aug. 21	1301	364	24	747
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Apparatus for charging and discharging secondary batteries	285,714	Sept. 25	1901	540	24	1256
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Electric-arc lamp	285,715	Sept. 25	1903	540	24	1257
Weston, Edward, Newark, N. J., assignor to Weston Electric Light Company. Electric lamp	285,451	Sept. 25	1582	445	24	1197
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Safety cut-out for electro-magnetic motors	289,197	Nov. 27	1757	488	25	838

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Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Apparatus for regulating and controlling the electrical transmission of power.	289,198	Nov. 27	1758	488	25	839
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Electric-circuit breaker.	289,199	Nov. 27	1761	488	25	839
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Dynamo or magneto electric machine.	289,200	Nov. 27	1762	489	25	839
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. System of generating and regulating electric currents.	289,324	Nov. 27	1909	{ 530 531 }	{ 25	868
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Regulator for dynamo or magneto electric machines.	289,325	Nov. 27	1910	531	25	868
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Regulator for electrical generators.	289,326	Nov. 27	1911	531	25	869
Weston, Edward, Newark, N. J., assignor to United States Electric Lighting Company, New York, N. Y. Apparatus for treating carbon conductors.	289,327	Nov. 27	1913	532	25	869
Weston, Edward, Newark, N. J., and L. E. Curtis, New York, N. Y. Apparatus for charging and discharging secondary batteries.	289,328	Nov. 27	1914	532	25	869
Weston Electric Light Company. (See Weston, Edward, assignor.)						
Weston, Erastus D. (See Hart, Fred O., assignor.)						
Weston, Frederick, Brixton, county of Surrey, England, assignor to Weston Gas Improvement Company, of New York. Apparatus for increasing the illuminating-power of gas.	286,515	Oct. 9	916	247	25	177
Weston Gas Improvement Company. (See Weston, Frederick, assignor.)						
Weston, Henry, assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Artificial tooth-crown.	275,554	Apr. 10	899	244	23	1388
Weston, Henry, assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Artificial tooth-crown.	277,392	May 8	1085	292	23	1819
Weston, Henry, and E. T. Starr, assignors to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Artificial tooth-crown.	287,354	Oct. 23	1990	543	25	380
Weston, Robert, Norwalk, Ohio. Horseshoe.	270,713	Jan. 16	1101	315	23	230
Weston, Stephen M., and C. T. Shanner, Somerville, Ind. Rotary colter.	272,368	Feb. 13	369	270	23	620
Weston, Thomas A., assignor to Yale Lock Manufacturing Company, Stamford, Conn. Brake mechanism for a trolley for a crane.	272,608	Feb. 20	1293	{ 360 361 }	{ 23	680
Weston, William W., Honesdale, Pa. Glass butter jar, box, and cover.	289,589	Dec. 4	273	77	25	935
Westphal, Henry, Chicago, Ill. Revolving shot-case.	280,979	July 10	793	{ 220 221 }	{ 24	146
Westphal, Henry, Chicago, Ill. Revolving flower-stand.	283,840	Aug. 28	1659	468	24	824
Westphal, Oscar F., San Francisco, Cal. Castanet.	273,414	Mar. 6	225	61	23	872
Westphal, Robert, Berlin, Germany. Machine for polishing paper, textile fabrics, &c.	274,685	Mar. 27	1853	519	23	1178
Westwood, John, Lynn, Mass. Shoe-soling machine.	273,207	Feb. 27	2051	577	23	821
Wetherbee, Albert C., assignor of one-half to A. Aitken, Hammononton, N. J. Thill-coupling.	274,428	Mar. 20	1520	418	23	1112
Wethered, Edwin R., Woolwich, county of Kent, England. Sash-fastener.	287,747	Oct. 30	2514	678	25	487
Wetherell, George F. (See Jones and Wetherell.)						
Wetherell, George F., et al. (See Jones, Richard B., assignor.)						
Wetherill, William M. (See Ferguson, Grismore, and Wetherill.)						
Wetmore, Jean A., Concord, Mich. Electric-arc light.	272,811	Feb. 20	1546	434	23	727
Wetmore, Jerome W., Erie, Pa. Seat-spring for vehicles.	275,446	Apr. 10	766	204	23	1365
Wetmore, Jerome W., Erie, Pa. Seat-spring for vehicles.	275,555	Apr. 10	901	244	23	1388
Wetmore, Jerome W., Erie, Pa. Wagon-tongue support.	279,895	June 19	1577	442	23	2408
Wetmore, Jerome W., Erie, Pa. Vehicle-spring.	289,046	Nov. 27	1578	{ 435 436 }	{ 25	806
Wetmore, Orlando, Nevada, Mo. Locomotive attachment.	284,520	Sept. 4	443	126	24	979
Wetter Brothers. (See Suter, Frederick, assignor.)						
Wetzel, Albert, Jr. (See Hartman and Wetzel.)						
Wetzel, Charles H., assignor of one-half to E. Rummelmeyer, Butte City, Mont. Ter. Concentrator.	290,825	Dec. 25	1855	513	25	1235
Wetzel, Charles M. (See Young, Neil, and Wetzel.)						
Wever, John M., et al. (See Wilkinson, John D., assignor.)						
Wever, Willis L., et al. (See Wilkinson, John D., assignor.)						
Weyburn, George W., Goshen, Ind. Pump-casing.	280,105	June 26	1842	519	23	2461
Weyhrich & Co., P. (See Irwin, John W., assignor.)						
Weymouth, Richard W., Denver, Colo. Elevator-brake.	290,297	Dec. 18	1146	321	25	1104
Wharry, James A. (See Freeland and Wharry.)						
Wharton, John C., Nashville, Tenn. Rotary engine.	290,508	Dec. 18	1440	398	25	1155
Wharton, Joseph. (See Otterson, Thomas J., assignor.)						
Wharton Railroad Switch Company. (See Johnston, Edward H., assignor.)						
Wharton, Richard, assignor of one-half to W. Whitaker, Philadelphia, Pa. Thread guide and tension device.	272,812	Feb. 20	1547	434	23	727
Wharton, William, Jr., Philadelphia, Pa. Traction-rope railway.	281,593	July 17	1565	428	24	286
Wharton, William, Jr., Philadelphia, Pa. Transferring cars from one track to another.	282,815	Aug. 7	405	114	24	572
Wheat, Corydon, Geneva, N. Y. Combined ventilating and heating apparatus.	285,533	Sept. 25	1679	472	24	1215
Wheat, John J., assignor to C. Lilly, Indianapolis, Ind. Sewing-machine table and cover.	285,534	Sept. 25	1679	472	24	1215
Wheat, John J., assignor to C. Lilly, Indianapolis, Ind. Tension-liberator for sewing-machines.	285,535	Sept. 25	1680	473	24	1216
Wheat, John J., assignor to C. Lilly, Indianapolis, Ind. Sewing-machine.	285,536	Sept. 25	1681	473	24	1216
Wheat, John J., assignor to C. Lilly, Indianapolis, Ind. Sewing-machine shuttle movement.	285,537	Sept. 25	1681	{ 473 474 }	{ 24	1216
Wheeler, Algernon S., New Orleans, La. Bagasse-washing and saccharine-extracting machine.	276,513	Apr. 24	2106	585	23	1611
Wheeler, Candace T., New York, N. Y. Fabric for needle-woven tapestries.	271,174	Jan. 23	1665	{ 479 480 }	{ 23	334
Wheeler & Co., F. A. (See Albey, John, assignor.)						
Wheeler, David C. (See Wheeler, Dwight and D. C.)						
Wheeler, Dwight and D. C., Bridgeport, Conn. Manufacture of hat frames and bodies.	280,980	July 10	794	221	24	146
Wheeler, Dwight and D. C., Bridgeport, Conn. Covering hat-frames.	280,981	July 10	796	221	24	146
Wheeler, Dwight and D. C., Bridgeport, Conn. Hat-binding.	280,982	July 10	796	221	24	146
Wheeler, Dwight and D. C., Bridgeport, Conn. Manufacturing hats.	286,244	Oct. 9	569	156	25	114
Wheeler, Edward W., Chicago, Ill. Dress-lining.	272,813	Feb. 20	1549	435	23	727
Wheeler, Elijah H. (See Holden, William G., assignor.)						
Wheeler, Frank and W. W., Meriden, Conn. Ore-crusher.	285,538	Sept. 25	1682	474	24	1216
Wheeler, Harlan B., assignor to J. A. Wheeler, Noble, Ill. Self-drop corn-planter.	272,392	Feb. 13	1013	283	23	626
Wheeler, Henry, Chambersville, Mo. Socket-wrench.	269,902	Jan. 2	95	28	23	80
Wheeler, Henry, Dudenville, Mo. Wrench.	279,896	June 19	1577	442	23	2408
Wheeler, Henry, Dudenville, Mo. Combined bolt-holder and screw-driver.	284,787	Sept. 11	783	218	24	1042



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Wheeler, Henry F., assignor to Union Twist Drill Company, Leominster, Mass. Grinding-machine for producing the relief on twist and fluted drills	286,663	Oct. 16	1110	299	25	217
Wheeler, Hiram M., Smithson, Ind. Apparatus for utilizing the waste heat of stove-pipes and chimneys	284,106	Aug. 28	2002	557	24	885
Wheeler, James J., assignor to Craver, Steele & Austin, Grinnell, Iowa. Shaft-coupling	283,940	Aug. 28	1781	503	24	847
Wheeler, James L., Stillwater, Minn. Jar	280,888	July 10	679	191	24	127
Wheeler, Jane A. (See Wheeler, Harlan B., assignor.)						
Wheeler, John A. (See Pelton, Charles H., assignor.)						
Wheeler, John E. (See Raymond and Wheeler.)						
Wheeler, John M. (See Kimball, Charles M., assignor.)						
Wheeler, Jonas A., Vandalia, Mo. Lubricator for engine-cylinders	283,176	Aug. 14	835	233	24	655
Wheeler, Laurens S., Independence, Kans. Harrow	279,060	June 5	550	151	23	2317
Wheeler, Madden & Clemson Manufacturing Company. (See McChesney, George G., assignor.)						
Wheeler & Melick Company. (See Melick and Colbert, assignors.)						
Wheeler, Milo L. G., Oregon City, Oreg. Force-pump	280,106	June 26	1842	519	23	2461
Wheeler, Nathaniel, Bridgeport, Conn. Railway-car	273,415	Mar. 6	226	61	23	872
Wheeler, Nathaniel, Bridgeport, Conn. System of heating and ventilating buildings	285,539	Sept. 25	1684	474	24	1217
Wheeler, Orson H., Charlesworth, Mich. Injector	273,652	Mar. 6	527	142	23	924
Wheeler, Paris H., Washington, D. C. Machine for packing dry-plates for photographers	282,939	Aug. 7	548	155	24	598
Wheeler, Richard, Alameda, Cal. Canning apparatus	270,529	Jan. 9	864	251	23	179
Wheeler, Schuyler S. (See Crocker, Curtis, and Wheeler.)						
Wheeler, Schuyler S., New York, N. Y. Electric elevator	273,208	Feb. 27	2052	578	23	821
Wheeler, Schuyler S., C. G. Curtis, and F. B. Crocker, New York, N. Y. Electric motor	271,175	Jan. 23	1667	480	23	334
Wheeler, Seth, Albany, N. Y. Manufacture of wrapping-paper	272,369	Feb. 13	970	271	23	620
Wheeler, Seth, Albany, N. Y. Preventing offset in web-printing	284,929	Sept. 11	941	264	24	1072
Wheeler, Seth, Albany, N. Y. Paper-holding device	289,735	Dec. 4	459	129	25	966
Wheeler, Stephen. (See Rice, Alvah, assignor.)						
Wheeler, William, Concord, Mass. Focuss-regulator for electric-arc lamps	280,426	July 3	108	29	24	21
Wheeler & Wilson Manufacturing Company. (See Neely, William A., assignor.)						
Wheelock, Eva E., et al. (See Wheelock, John A., assignor.)						
Wheelock, George J., Oakland, assignor of one-half to N. Beauregard, San Francisco, Cal. Dumping-car	290,298	Dec. 18	1147	322	25	1104
Wheelock, Jerome, Worcester, Mass. Relief-valve for engine-cylinders	269,978	Jan. 2	181	53	23	38
Wheelock, Jerome, Worcester, Mass. Injector-condenser	269,979	Jan. 2	182	53	23	38
Wheelock, Jerome, Worcester, Mass. Injector-condenser	278,476	May 29	2442	666	23	2075
Wheelock, John A., assignor to E. E. Wheelock, P. Kline, and A. Clark, Amsterdam, N. Y. Device for truing misshapen hose-couplings	284,107	Aug. 28	2002	558	24	885
Wheelock, John W., Albany, N. Y. Sad-iron holder	274,157	Mar. 20	1172	324	23	1051
Whelan, James N. (See Tevis, Edwin L., assignor.)						
Wheless, Wesley N., Augusta, Ga. Stamping-machine	289,047	Nov. 27	1578	436	25	806
Wherry, William B., Overton, Tex. Landside for plows	283,729	Aug. 21	1519	428	24	789
White, Joseph, Cleveland, Ohio. Manufacturing car-coupling pins	273,417	Mar. 6	228	62	23	873
Whippell, Thomas V. (See McKimm, Edgar N., assignor.)						
Whipple, Clarence F., Chicago, Ill. Weather-strip	274,158	Mar. 20	1175	324	23	1051
Whipple, John A. (See Porter, Daniel R., assignor.)						
Whipple, John P., Whitewater, Wis. Paint-distributor	280,696	July 3	430	122	24	77
Whipple, John P., Whitewater, Wis. Paint-distributor	289,048	Nov. 27	1580	436	25	806
Whipple, Polcy, et al. (See Alexander, Samuel G., assignor.)						
Whipple, William V., Boston, Mass. Hat and bonnet stand	288,287	Nov. 13	617	169	25	623
Whissemore, John H., Mansfield, Ohio. Stove-bracket	273,653	Mar. 6	528	142	23	924
Whitacre, Thomas L., East Rochester, Ohio. Wrench for wagon-axle nuts	284,521	Sept. 4	444	126	24	980
Whitaker, Argalus F. (See Crismon and Whitaker.)						
Whitaker, David W., assignor of one-half to R. B. Boone, Roxborough, N. C. Printer's imposing-stone	286,979	Oct. 16	1512	415	25	236
Whitaker, Edwin V., Gloversville, N. Y. Glove	284,150	Aug. 28	2064	572	24	894
Whitaker, Elijah J. B., New York, N. Y. Automatic feed-gear for animals	282,143	Nov. 6	431	121	25	583
Whitaker, Elisha F., Goldsborough, Me. Hay-rack	272,109	Feb. 13	662	180	23	566
Whitaker, James B., Loretto, Va. Book-support for writing-desks	276,514	Apr. 24	2108	586	23	1611
Whitaker, John A. (See Case and Whitaker.)						
Whitaker, Joseph C., et al. (See Henwood, John, assignor.)						
Whitaker, Richard, assignor to A. L. Fisher, New Brunswick, N. J. Metal-cripping tool	287,784	Oct. 30	2565	690	25	497
Whitaker, Thomas, and S. D. Moore, Macon, Ill. Check-rower	273,789	Mar. 13	715	193 194	23	965
Whitaker, William. (See Wharton, Richard, assignor.)						
Whitall, James, et al. (See Leake, Lewis C., assignor.)						
Whitall, Tatum & Co. (See Atwater, Richard M., assignor.)						
Whitcomb, Aaron J., Chicopee, assignor of one-third to A. W. Anderton, Chicopee Falls, Mass. Lawn-mower	274,239	Mar. 20	1283	353	23	1071
Whitcomb, Calvin M. (See Hall, Whitcomb, and D'Ewart.)						
Whitcomb, Edward A., Cincinnati, Ohio. Welding-flux	277,393	May 8	1087	.....	23	1820
Whitcomb, George D., Chicago, Ill. Pick for mining-machines	280,541	July 3	246	66	24	44
Whitcomb, George D., Chicago, Ill. Pick for mining-machines	280,542	July 3	247	66	24	44
Whitcomb, George D., Chicago, Ill. Pick for mining-machines	280,543	July 3	248	66	24	45
Whitcomb, George D., Chicago, Ill. Coal-mining machine	280,544	July 3	248	67	24	45
Whitcomb, John B., Beloit, Wis. Vehicle-spring attachment	288,604	Nov. 13	1027	282	25	695
Whitcomb, Simeon P., Hornellsville, N. Y. Spring bed-bottom	288,533	Nov. 13	939	256	25	679
White, Addison, assignor of one-half to J. L. Rison, Huntsville, Ala. Game-carrier	276,945	May 1	538	139	23	1718
White, Andrew J. (See Zerbe and White.)						
White, Arthur M. (See Shaffer and White.)						
White, Charles. (See Billings, John D., assignor.)						
White, Charles, assignor to Scott Manufacturing Company, Baltimore, Md. Can-opener	273,416	Mar. 6	227	61	23	872
White, Charles D., assignor to Perry Mason & Co., Boston, Mass. Addressing-machine	270,714	Jan. 16	1102	315	23	230
White, Charles H., New York, N. Y. Gong for street-cars	271,176	Jan. 23	1669	460	23	334
White, Charles N., Colby's Station, Mich. Washing-machine	271,385	Jan. 30	1934	560	23	389
White, Chauncey C., Peckville, Pa. Can for holding blasting-cartridges	287,785	Oct. 30	2566	690	25	497
White, Clarence O., assignor of one-half to H. H. Johnson, Minneapolis, Minn. Pendulum-escapement	284,788	Sept. 11	784	218	24	1042
White, Courtland S. (See Jackson and White.)						
White, Daniel A., et al., trustees. (See Warren, John, assignor.)						
White, Delos M., Hudson, Wis., and J. Hitchcock, St. Paul, Minn. Sand-band	279,682	June 19	1333	371	23	2364

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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White Dental Manufacturing Company, S. S. (See Burk, William E., assignor.)						
White Dental Manufacturing Company, S. S. (See Crosthwaite, James D., assignor.)						
White Dental Manufacturing Company, S. S. (See Gilbert, John W., assignor.)						
White Dental Manufacturing Company, S. S. (See Gilbert and Starr, assignors.)						
White Dental Manufacturing Company, S. S. (See Housel, Joseph R., assignor.)						
White Dental Manufacturing Company, S. S. (See How, Woodbury S., assignor.)						
White Dental Manufacturing Company, S. S. (See Johnston, William A., assignor.)						
White Dental Manufacturing Company, S. S. (See Johnston, Browne, Starr, and Gilbert, assignors.)						
White Dental Manufacturing Company, S. S. (See Porter, David T., assignor.)						
White Dental Manufacturing Company, S. S. (See Ross, Robert M., assignor.) (Reissue.)						
White Dental Manufacturing Company, S. S. (See Starr, Eli T., assignor.)						
White Dental Manufacturing Company, S. S. (See Taylor, William H., assignor.)						
White Dental Manufacturing Company, S. S. (See Weston, Henry, assignor.)						
White Dental Manufacturing Company, S. S. (See Weston and Starr, assignors.)						
White, Eliza A. (See Ryder, Martin H., assignor.)						
White, Francis M., assignor of one-half to D. B. Williams, Winigan, Mo. Harness-pad press	276,946	May 1	539	139	23	1718
White, George, Greenville, Pa. Vehicle	285,863	Oct. 2	105	31	25	21
White, George, Boston, Mass. Gear	290,299	Dec. 18	1148	322	25	1104
White, George A., Boston, Mass. Heel lift and tap	293,048	Aug. 14	686	192	24	629
White, George A., Boston, Mass. Bundling-machine	293,049	Aug. 14	687	193	24	629
White, George A., Boston, Mass. Manufacturing heel lifts and taps	287,488	Oct. 30	2162	587	25	420
White, George H., Escanaba, Mich. Coal and ore chute	271,386	Jan. 30	1935	560	23	359
White, Hawley C., North Bennington, Vt. Stereoscope	281,743	July 24	1770	482	24	326
White, Henry C., Jug Tavern, assignor to himself and H. L. Spencer, Social Circle, Ga. Cotton chopper, cultivator, and plow	284,930	Sept. 11	942	264	24	1072
White, Henry J., Auburn, N. Y. Swing	281,216	July 10	1089	300	24	199
White, Henry K., assignor to Wilcox & White Organ Company, Meriden, Conn. Reed-organ	274,686	Mar. 27	1865	520	23	1179
White, Henry K., assignor to Wilcox & White Organ Company, Meriden, Conn. Reed-organ action	286,516	Oct. 9	918	248	25	177
White, J. Clarence, <i>et al.</i> , trustees. (See Grout, Charles P., assignor.)						
White, J. Clarence, <i>et al.</i> , trustees. (See Starr, Eli T., assignor.)						
White, James, Canton, Ohio. Burglar-proof safe	287,787	Oct. 30	2570	691 692	25	498
White, James H., assignor to Manhattan Brass Company, New York, N. Y. Lamp	283,177	Aug. 14	836	234	24	655
White, James W., <i>et al.</i> , trustees. (See Grout, Charles P., assignor.)						
White, James W., <i>et al.</i> , trustees. (See Starr, Eli T., assignor.)						
White, James W., <i>et al.</i> (See Starr, Eli T. and E. E., assignors.)						
White, James W., Philadelphia, Pa. Anti-slipping sandal or shoe	287,748	Oct. 30	2515	678	25	487
White, Jarvis N. B., Mansfield, assignor to R. F. Simmons, E. L. Hixon, and J. L. Sweet, Attleborough Falls, Mass. Ring for charms	288,899	Nov. 20	1399	383	25	766
White, Jessie W., Red River Iron Works, Ky. Car-coupling	284,108	Aug. 28	2006	558	24	885
White, John E., Cleveland, Ohio, assignor to H. A. Coit, Concord, N. H. Railway-car	273,922	Mar. 13	879	239 240	23	992
White, John S., Portland, Me. Brush	282,137	July 31	2288	628	24	420
White, John S., Portland, Me. Bristle-washing machine	282,940	Aug. 7	548	155	24	598
White, John W., Dedham, Mass., and J. C. Farmer, Providence, R. I. Horseshoe	280,889	July 10	681	191	24	127
White, Joseph P., Savannah, Ga. Lock	271,962	Feb. 6	454	124	23	521
White, Joseph W., Brighton, Iowa. Corkscrew	280,697	July 3	431	122	24	77
White, Le Roy S., Waterbury, Conn. Electric gas lighting and extinguishing device	282,816	Aug. 7	406	115	24	572
White, Le Roy S., Waterbury, Conn. Electric call and signal	284,348	Sept. 4	231	65	24	943
White, Leonard A., Taunton, Mass. Stove	286,664	Oct. 16	1112	299	25	218
White, Leonard A., Attleborough, assignor to Taunton Iron Works Company, Taunton, Mass. Stove-shelf	279,620	June 19	1254	348	23	2351
White, Merritt, Adams, Mass. Nautical signal	284,522	Sept. 4	444	126	24	980
White, Merritt F., and D. G. Sheridan, Bridgeport, Conn. Combined bridle and halter	290,826	Dec. 25	1856	513	25	1235
White, Micajah C. (See Holman, William J., assignor.)						
White, Miller, Gatesville, Tex. Washing-machine	286,245	Oct. 9	570	157	25	114
White, Milton, Sr., Philadelphia, Pa. Toy or self-righting egg	276,109	Apr. 17	1596	441	23	1516
White, Nelson S., Canton, Mass. Manufacture of metallic-surfaced india-rubber fabric	278,206	May 22	2073		23	2003
White, Nelson S., Canton, Mass. Electric lighting apparatus	289,590	Dec. 4	274	77	25	935
White, Otis C., Hopkinton, Mass. Mechanical movement	279,897	June 19	1578	442	23	2408
White, Peter, St. Louis, Mo. Hydrant	270,354	Jan. 9	628	185	23	132
White, Peter, St. Louis, Mo. Valve	270,355	Jan. 9	629	185	23	133
White, Peter, St. Louis, Mo. Water-closet valve	285,191	Sept. 18	1275	358	24	1137
White, R. Cornell, <i>et al.</i> (See Dey, David P., assignor.)						
White, Ralph M. (See O'Conner and White.)						
White, Reynolds T., Boston, Mass. Routing-machine	275,002	Apr. 3	149	42	23	1251
White, Reynolds T., Boston, Mass. Invalid-bedstead	276,515	Apr. 24	2108	586	23	1612
White, Rollin, Lowell, Mass. Ring for spinning and twisting frames and traveler therefor	280,377	Dec. 18	1249	351	25	1123
White, Ross, New York, N. Y. Paper-holder	271,177	Jan. 23	1670	481	23	334
White, Samuel K. (See Bradwell and White.)						
White, Samuel K., assignor to E. P. Hatch, Chicago, Ill. Machine for cutting grain	286,980	Oct. 16	1513	416	25	286
White, Samuel S. (See Starr, Eli T., assignor.)						
White Sewing Machine Company. (See Baker, George W., assignor.)						
White Sewing Machine Company. (See Shaw, William, assignor.)						
White, Thomas C., Cartersville, Ill. Coffee-roaster	274,538	Mar. 27	1690	469	23	1147
White, Van Rensslear G., assignor to W. Bartholomay, Rochester, N. Y. Branding-machine	289,480	Dec. 4	129	37	25	909
White, Welcome, Everett, Mass. Roofing composition	282,138	July 31	2288		24	420
White, Welcome, Everett, Mass. Roofing-felt	282,139	July 31	2289	628	24	420
White, William. (See Don, William, assignor.)						
White, William, McMinnville, Tenn. Brake-shoe	277,647	May 15	1396	376	23	1878
White, William B., Quincy, Mass. Case for eyeglasses and spectacles	289,946	Dec. 11	711	201	25	1018
White, William H., Cincinnati, Ohio. Combined harrow, roller and cultivator	288,900	Nov. 20	1392	384	25	766
White, William H., and H. F. Ruddell, Atlanta, Ga. Car-coupling	287,749	Oct. 30	2517	678	25	487
White, William O., Lake Village, and W. D. Huse, Laconia, N. H. Steam-trap	278,381	May 29	2328	637	23	2055
White, William R., Neoga, Ill. Sliding gate	282,140	July 31	2290	628 629	24	420
White, William R., Aurora, Nebr. Seed-planter	283,178	Aug. 14	837	234	24	655
White, William W., Kirksville, Ohio. Feed-rack	285,716	Sept. 25	1905	541	24	1257
Whiteford, James, Greenock, county of Renfrew, Scotland. Permanent way of railways	273,923	Mar. 13	880	240	23	993



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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Whitehall, Samuel. (See Newlin and Whitehall.)						
Whitehead & Atherton Machine Company. (See Potter, James, assignor.)						
Whitehead & Atherton Machine Company. (See Whitehead, William E., assignor.)						
Whitehead, John B., <i>et al.</i> (See Bule, Duncan M., assignor.) (Reissue.)						
Whitehead, Samuel B., San Francisco, Cal. Hand or wire vise	269,903	Jan. 2	95	28	23	20
Whitehead, Samuel B., San Francisco, Cal. Ticket-distributing box	286,352	Oct. 9	727	194	25	142
Whitehead, Thomas, assignor to Porter Needle Company, Watertown, Mass. Sewing-machine shuttle	279,208	June 12	743	204	23	2260
Whitehead, William E., assignor to Whitehead & Atherton Machine Company, Lowell, Mass. Carding-machine	270,715	Jan. 16	1104	316	23	231
Whitehead, William E., assignor to Whitehead & Atherton Machine Company, Lowell, Mass. Carding-machine	275,447	Apr. 10	767	204	23	1365
Whitehead, William E., assignor to Whitehead & Atherton Machine Company, Lowell, Mass. Railway-head	284,585	Sept. 4	521	146	23	992
Whitehead, William E., Lowell, Mass., assignor to Whitehead & Atherton Machine Company. Carding-machine	271,558	Jan. 30	2152	620	24	427
Whitehill, Robert. (See Dixon, Charles A., assignor.)						
Whitehill, Robert, Milwaukee, Wis. Sewing-machine	279,621	June 19	1255	348	23	2351
Whitehill, Robert, Milwaukee, Wis. Sewing-machine stand and treadle	279,622	June 19	1259	349	23	2352
Whitehill, Robert, Milwaukee, Wis. Hub for couplings or pulleys	279,623	June 19	1260	349	23	2352
Whitehill, Robert, Milwaukee, Wis. Shaft-hanger	279,624	June 19	1261	349	23	2352
Whitehill, Robert, Milwaukee, Wis. Sewing-machine shuttle	279,625	June 19	1262	349	23	2353
Whitehurst, Robert W., assignor of two-thirds to A. and M. L. Wrenn, Norfolk, Va. Plow	275,304	Apr. 3	536	147	23	1317
Whitehurst, Robert W., assignor of two-thirds to A. and M. L. Wrenn, Norfolk, Va. Baling-press	282,017	July 24	2113	579	24	386
Whiteley, Fassler & Kelly. (See Whiteley and Bayley, assignors.)						
Whiteley, Fassler & Kelly. (See Whiteley, Bayley, and Lee, assignors.)						
Whiteley, Fassler & Kelly. (See Whiteley, William N., assignor.)						
Whiteley, William N., <i>et al.</i> (See Green, George F., assignor.)						
Whiteley, William N., assignor to Whiteley, Fassler & Kelly, Springfield, Ohio. Reaper and mower	284,931	Sept. 11	943	265	24	1072
Whiteley, William N., and W. Bayley, Springfield, Ohio. Traction-wheel for harvesters	279,061	June 5	551	151	23	2217
Whiteley, William N., and W. Bayley, assignors to Whiteley, Fassler & Kelly, Springfield, Ohio. Knotting mechanism for self-binders	274,870	Mar. 27	2084	579	23	1216
Whiteley, William N., W. Bayley, and L. H. Lee, assignors to Whiteley, Fassler & Kelly, Springfield, Ohio. Self-binder	274,071	Mar. 13	1058	292	23	1023
Whiteley, William N., W. Bayley, and L. H. Lee, assignors to Whiteley, Fassler & Kelly, Springfield, Ohio. Self-binder	283,445	Aug. 21	1183	{ 332 333 }	{ 24 24 }	{ 725 725 }
Whitlock, Samuel E. (See Ireton and Whitlock.)						
Whitlock, Samuel E., <i>et al.</i> (See Ireton, William, assignor.)						
Whitely, William, Housatonic, Mass. Safety-stop for elevators	282,817	Aug. 7	408	115	24	572
Whitely, William, Housatonic, Mass. Rag-engine for paper-making	282,818	Aug. 7	409	115	24	572
Whiteman, Abram V., New York, N. Y. Stopper or cover for bottles or jars	275,101	Apr. 3	290	80	23	1276
Whiteman, Abram V., New York, N. Y. Stopper for bottles and jars	284,523	Sept. 4	446	126	24	980
Whiteman, John B., Centerville, Oreg. Gate	290,509	Dec. 18	1441	398	25	1156
Whitenbarger, Henry. (See Bear and Whitenbarger.)						
Whiteside, James L., Chattanooga, Tenn. Auger	277,966	May 22	1773	483	23	1950
Whitesides, George C., Philadelphia, Pa. Water-gage reflector	270,530	Jan. 9	865	252	23	179
Whitfield, John A., <i>et al.</i> (See Brooks, Austin A., assignor.)						
Whitfield, William A. (See Boone and Whitfield.)						
Whiting, Albert, assignor to C. Whiting, Rochester, N. Y. Apparatus for scouring and fleshing hides, &c.	275,305	Apr. 3	538	147	23	1318
Whiting, Catharine. (See Whiting, Albert, assignor.)						
Whiting, Charles D., Chicago, Ill. Car-brake	286,353	Oct. 9	727	195	25	142
Whiting, Eleanor, assignor one-half to J. M. Smith, Brooklyn, N. Y. Car-axle box	274,159	Mar. 20	1175	{ 324 325 }	{ 23 23 }	{ 1051 1051 }
Whiting, Eleanor, and J. N. Smith; said Smith assignor to J. M. Smith, Brooklyn, N. Y. Car-truck	274,160	Mar. 20	1178	325	23	1052
Whiting, George A. (See Malone and Whiting.)						
Whiting, Henry A., Brooklyn, and W. J. Winghart, New York, N. Y. Combined umbrella and cane	288,144	Nov. 6	432	121	25	583
Whiting, Henry W. (See Blumenberg and Whiting.)						
Whiting, James M., assignor of one-half to J. Carroll, and G. C. Elliott, Providence, R. I. Car-wheel	282,593	Aug. 7	144	43	24	526
Whiting, John L., Boston, Mass. Brush	271,559	Jan. 30	2154	620	23	428
Whiting, Lewis P., Cleburne, Tex. Car-coupling	276,205	Apr. 24	1716	475	23	1544
Whiting, Nathaniel T., San Francisco, Cal. Elevated water-tank	288,901	Nov. 20	1393	384	25	766
Whiting, Stiles H. (See Dean and Whiting.)						
Whiting, William D., North Attleborough, Mass. Manufacture of sewing-thimbles	273,924	Mar. 13	883	240	23	993
Whitlock, Daniel, Newark, N. J. Heeling-machine	287,489	Oct. 30	2163	{ 587 588 }	{ 25 25 }	{ 420 420 }
Whitlock, E. Walter, New Haven, Conn. Tube-coiling machine	280,983	July 10	797	222	24	146
Whitlock, Sturges, New Haven, Conn. Air-cushioning device	284,524	Sept. 4	447	127	24	980
Whitman Agricultural Company. (See Kelley, Patrick J., assignor.)						
Whitman, Gustavus F., St. Louis, Mo. Baling-press	274,871	Mar. 27	2085	579	23	1216
Whitman, James N., and T. A. Taylor, Beverly, Mass. Channeling and grooving knife	277,092	May 8	736	193	23	1758
Whitman, James N., and T. A. Taylor, Beverly, Mass. Groover for channeling-machines	277,093	May 8	737	193	23	1758
Whitman, Josiah P., Ithaca, Mich. Carriage-top-bow support	272,814	Feb. 20	1551	435	23	727
Whitman, Orrin M., Boston, Mass. Refrigerator or butter-cooler	279,296	June 12	844	234	23	2277
Whitmire, C. M., <i>et al.</i> (See Thomas, John W., assignor.)						
Whitmore, Andrew E., Springfield, Mass. Breech-loading fire-arm	282,941	Aug. 7	550	{ 155 156 }	{ 24 24 }	{ 598 598 }
Whitmore, Andrew E., Springfield, and J. Tonks, Malden, Mass. Breech-loading fire-arm	282,429	July 31	2656	728	24	484
Whitmore, Enoch, San Francisco, Cal. Two-wheeled vehicle	272,815	Feb. 20	1551	435	23	727
Whitney, Arthur E., Winchester, Mass. Machine for unhairing, scouring, and fleshing hides	280,698	July 3	431	122	24	77
Whitney, Benjamin F., Eldon, Iowa. Car-coupling	275,306	Apr. 3	539	147	23	1318
Whitney, Benjamin P., Potter Valley, Cal. Two-wheeled vehicle	272,177	Feb. 13	734	203	23	579
Whitney, Catherine M. (See Whitney, William A., assignor.)						
Whitney, Charles, assignor to himself, C. W. and W. W. Marsh, Sycamore, Ill. Grain-binder	279,297	June 12	845	{ 234 235 236 }	{ 23 23 23 }	{ 2277 2277 2277 }
Whitney, Charles, assignor to himself, C. W. and W. W. Marsh, Sycamore, R. Emerson, and W. A. Talcott, Rockford, Ill. Grain-harvesting machine	281,811	July 24	1864	{ 509 510 }	{ 24 24 }	{ 343 343 }

*Alphabetical list of patentees—Continued.*

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Whitney, Charles, assignor to himself, C. W. and W. W. Marsh, Sycamore, Ill. Grain-binder.	283,179	Aug. 14	838	234 235	24	656
Whitney, Charles P., Milford, N. H. Folding umbrella.	274,687	Mar. 27	1866	520	23	1179
Whitney, Edwin R., Montreal, Quebec, Canada. Secondary battery.	277,394	May 8	1087	242	23	1820
Whitney, Eli, New Haven, Conn. Magazine fire-arm.	273,654	Mar. 6	528	142	23	924
Whitney, Frank A. (See Carter, John H., assignor.)						
Whitney, Frank J., <i>et al.</i> (See Bush, Arthur W., assignor.)						
Whitney, James A., Dobb's Ferry, N. Y. Envelope or covering for cigars.	271,006	Jan. 23	1462	421	23	300
Whitney, James F., Hartford, Conn. Centering device.	272,995	Feb. 27	1789	501	23	774
Whitney, James H., Brooklyn, N. Y. Sewing-machine.	275,966	Apr. 17	1418	391	23	1486
Whitney, Jonah D. (See Penn and Whitney.)						
Whitney, Leonard, <i>et al.</i> (See Keith, Thomas K., assignor.)						
Whitney, Leonard F., and T. K. Keith, Haverhill, Mass. Permutation-lock.	279,298	June 12	851	236	23	2278
Whitney, Lewis, Salisbury, and H. K. Jackson, Amesbury, Mass. Picker-staff check for looms.	285,941	Oct. 2	210	59	25	40
Whitney, Ruel W., New York, N. Y. Automatic tension for sewing-machines.	277,094	May 8	738	193	23	1758
Whitney, Ruel W., New York, N. Y., assignor of one-half to J. Crowell, Jr., Glenville, Ohio. Lock for drawers.	276,516	Apr. 24	2110	586	23	1612
Whitney, William A., assignor to himself and C. M. Whitney, Hudson, Mich. Wheelbarrow.	290,156	Dec. 11	964	272	25	1065
Whitney, William F., Poughkeepsie, N. Y. Rack for pool-balls.	272,609	Feb. 20	1294	361	23	681
Whitsett, Barton A., Lebanon, Ind. Tenon and turning chuck.	271,753	Feb. 6	203	57	23	475
Whittaker, Henry B. (See Godley and Whittaker.)						
Whittemore, Albert O. (See Huntley, Rollin D., assignor.)						
Whittemore, D. (See Eppler and Ray, assignors.)						
Whittemore, David H., Worcester, Mass. Apple parer, corer, and slicer.	273,418	Mar. 6	229	62	23	873
Whittemore, J. H. (See North, John, assignor.)						
Whittemore, James R., <i>et al.</i> (See Farr, George, assignor.)						
Whittemore, John A., Springfield, Mass. Car-coupling.	289,049	Nov. 27	1581	436	25	806
Whittemore, Kendall W., and L. J. Couch, Providence, R. I. Portable blackboard.	288,145	Nov. 6	433	122	25	583
Whitten, Alonzo H., <i>et al.</i> (See Silliman, Herbert R., assignor.)						
Whittier, Charles, Boston, Mass. Elevator.	275,003	Apr. 3	151	42	23	1252
Whittier, George. (See Locke, Charles S., assignor.)						
Whittier, Joseph G., Attica, Ind. Sole and upper protector.	289,736	Dec. 4	459	129	25	967
Whittier, William H., Fremont, Neb. Hay and straw furnace.	272,110	Feb. 13	662	180	23	566
Whittingham, Charles, Cleveland, Ohio, and J. Whittingham, Detroit, Mich., assignors of one-third to W. A. Murray, Cleveland, Ohio. Vapor-burner.	270,268	Jan. 9	521	153	23	112
Whittingham, Joseph. (See Whittingham, Charles and J.)						
Whittington, George W., Xenia, Ohio. Car-coupling.	276,110	Apr. 17	1597	441	23	1516
Whittington, Virginia, Valdosta, Ga. Brace-corset.	283,050	Aug. 14	688	193	24	629
Whittle, John T., assignor of one-half to J. I. Vogeler, Baltimore, Md. Tumbler-washer.	289,737	Dec. 4	460	130	25	967
Whitzel, Russell B., assignor to P. Wilson & Sons, Cincinnati, Ohio. Hame.	279,510	June 12	1127	312	23	2322
Whitzel, Russell B., assignor to P. Wilson & Sons, Cincinnati, Ohio. Hame.	279,511	June 12	1127	312	23	2322
Whitzel, Russell B., assignor to P. Wilson & Sons, Cincinnati, Ohio. Hame.	282,619	Aug. 7	411	116	24	573
Whitzel, Russell B., assignor to P. Wilson & Sons, Cincinnati, Ohio. Snap-hook.	287,397	Oct. 23	2045	556	25	390
Whitzel, Russell B., assignor to P. Wilson & Sons, Cincinnati, Ohio. Hame.	287,398	Oct. 23	2046	556	25	390
Whorf, Charles F., St. Louis, Mo. Oven for oil and gas stoves.	271,670	Feb. 6	101	27	23	457
Whyte, James. (See Meatyard and Whyte.)						
Whyte, Oliver, Boston, Mass. Broiler.	285,864	Oct. 2	106	31	25	21
Wiard, Edward, Louisville, Ky. Plow.	279,469	June 12	1071	297	23	2313
Wiard, George, assignor to Wiard Plow Company, Batavia, N. Y. Chilled plow-point.	277,816	May 15	1587	434	23	1912
Wiard, George, assignor to Wiard Plow Company, Batavia, N. Y. Sulky-plow.	278,613	May 29	2648	724	23	2110
Wiard, Harry, and W. R. Bullock, Syracuse, N. Y. Sulky-plow.	286,517	Oct. 9	918	248	25	177
Wiard, Norman, assignor to R. C. Schenck and H. D. Cooke, Washington, D. C. Manufacture of gunpowder.	273,209	Feb. 27	2058	578 579	23	822
Wiard Plow Company. (See Wiard, George, assignor.)						
Wich, Conrad. (See Fisher, Bernard, assignor.)						
Wich, Henrietta, administratrix. (See Fisher, Bernard.)						
Wichman, Frederick J. H., <i>et al.</i> (See Eger, John, assignor.)						
Wickersham, Eli, Chicago, Ill., assignor of one-half to G. P. Merrill, St. Louis, Mo. Hand-truck.	272,817	Feb. 20	1554	436	23	728
Wickersham, Henry N. (See Huston, William, assignor.)						
Wickersham, Henry N., <i>et al.</i> (See Mills, Isaac N., assignor.)						
Wickersham, Henry N., and W. Huston, Wilmington, Del. Ejector.	272,816	Feb. 20	1553	435	23	728
Wickersham, Henry N., and W. Huston, Wilmington, Del. Exhaust-nozzle.	285,192	Sept. 18	1275	358	24	1137
Wickersham, James T., Red Oak, Iowa. Mechanical movement.	278,644	May 29	2649	724	23	2111
Wickersham, Samuel M., Allegheny, Pa. Eye-bar.	283,730	Aug. 21	1520	428	24	789
Wickersham, William, Worcester, Mass. Nail-cutting machine.	269,904	Jan. 2	96	29	23	20
Wickersham, William, Worcester, Mass. Cutter for nail-machines.	287,600	Oct. 30	2319	627	25	450
Wickes, James H., East Rochester, N. Y. Refrigerator.	279,062	June 5	551	152	23	2318
Wickey, Andrew, Quincy, Ill. Draft-equalizer.	273,210	Feb. 27	2059	579	23	822
Wicks, Frederick, Glasgow, county of Lanark, Scotland. Machinery for composing types.	276,947	May 1	539	140 141	23	1718
Wicks, Frederick, Glasgow, county of Lanark, Scotland. Type making and arranging machinery.	280,699	July 3	432	123 124	24	77
Wicks, Pierson J., Saltersville, N. J. Bill-file.	274,688	Mar. 27	1867	520	23	1179
Wickwire, Chester F., Cortland, N. Y. Loom for weaving wire.	282,430	July 31	2658	729	24	484
Widdifield, Watson P., Uxbridge, Ontario, Canada. Car-brake.	277,436	May 8	1138	307	23	1823
Widney, Robert M., Los Angeles, Cal. Lawn-sprinkler.	287,984	Nov. 6	251	72	25	551
Wieber, Henry E., Rondout, N. Y. Stove-pipe thimble.	290,157	Dec. 11	965	273	25	1065
Wiebers, Marx C., Mineral Point, assignor of one-half to M. M. Cothren, Iowa County, Wis. Corn or bean planter.	283,051	Aug. 14	689	193 194	24	629
Wiederer, Peter. (See Hufeland, Philip, assignor.)						
Wiedersheim, John A., Philadelphia, Pa. Ice-pick.	289,738	Dec. 4	461	130	25	967
Wiedersum, Frederick P., <i>et al.</i> (See Mueller, Henry A., assignor.)						
Wiedersum, Maria, <i>et al.</i> (See Mueller, Henry A., assignor.)						
Wiedersum, William J., <i>et al.</i> (See Mueller, Henry A., assignor.)						
Wiedmann, Heinrich, assignor of one-half to G. Speckhart, Nuremberg, Germany. Hammer.	281,217	July 10	1090	300	24	199
Wiegand, John H., San Francisco, Cal. Sole trimming and channeling machine.	277,395	May 8	1088	292	23	1820
Wiegand, S. Lloyd, Philadelphia, Pa. Lubricator for car-journals.	282,594	Aug. 7	145	43	24	526
Wiehl, Alfred, New York, N. Y. Advertising-fan.	290,827	Dec. 25	1857	513	25	1235
Wiehl, Joseph H., Allegheny, Pa. Steam-engine lubricator.	290,828	Dec. 25	1858	514	25	1235
Wieland, Perry J., Farmersville, Ohio. Automatic gate.	271,963	Feb. 6	456	125	23	521



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Wiener, Oscar, H. Coates, and S. Wiener, Newark, N. J. Bridle-bit .....	285,717	Sept. 25	1906	541	24	1257
Wiener, Simon. (See Wiener, Coates, and Wiener.)						
Wienman, Christian J., Dayton, Ohio. Shoe-heel-beading machine .....	284,349	Sept. 4	233	65	24	943
Wienman, Lorns, Columbus, Ohio. Steam-actuated valve .....	273,655	Mar. 6	530	142	23	925
Wienke, Carl F. A., assignor to R. Dolberg, Rostock, Mecklenburg, Germany. Lever-cork-screw .....	283,731	Aug. 21	1520	429	24	789
Wier, Stephen M., New Haven, Conn. Two-wheeled vehicle .....	275,307	Apr. 3	540	147	23	1318
Wiesbauer, Joseph, Buffalo, N. Y. Jeweler's card and tag cabinet .....	271,007	Jan. 23	1464	421	23	300
Wiesbauer, Joseph, Buffalo, N. Y. Jeweler's tag .....	278,674	May 29	2681	734	23	2117
Wiesendanger, Emil U., Comanche, Tex. Lamp-chimney cap .....	286,753	Oct. 16	1236	331	25	237
Wieser, Max. (See Wolf and Wieser.)						
Wieser, Max, New York, N. Y. Die for indenting wire .....	271,178	Jan. 23	1671	481	23	334
Wietheger, Henry. (See Kasehagen and Wietheger.)						
Wiggin, George B., South New Market, N. H., assignor of one-half to J. Burnham, Lawrence, Mass. Machine for cutting tin, &c. ....	272,501	Feb. 20	1157	{ 324 325 }	{ 23	657
Wiggin, Joseph N. (See Hartnagel, Jacob, assignor.)						
Wiggins, Jefferson G., Auburn, N. Y. Shoe-button .....	280,270	June 26	2033	572	23	2494
Wiggins, William H., Brooklyn, assignor to United States Standard Billiard Table Company, New York, N. Y. Pool-triangle .....	283,732	Aug. 21	1521	429	24	789
Wight Fire Proofing Company. (See Wight, Peter B., assignor.)						
Wight, George R., New York, N. Y. Refrigerating apparatus .....	275,556	Apr. 10	901	244	23	1388
Wight, George R., New York, N. Y. Refrigerating-car .....	281,421	July 17	1351	373	24	251
Wight, George R., New York, N. Y. Refrigerator .....	284,932	Sept. 11	944	266	24	1072
Wight, Peter B., Chicago, Ill., assignor to Wight Fire Proofing Company, of Illinois. Fire-proof arch and ceiling .....	273,419	Mar. 6	230	62	23	873
Wight, Peter B., Chicago, Ill., assignor to Wight Fire Proofing Company, of Illinois. Hollow-tile arch for ceilings .....	285,452	Sept. 25	1585	445	24	1198
Wightman, Ira C. (See Carter and Wightman.)						
Wightman, Thomas T., et al. (See Nugent, Richard C., assignor.)						
Wightman, William, Denver, Colo. Fire-escape .....	288,902	Nov. 20	1393	384	25	766
Wignore, William H. (See Doerr and Wignore.)						
Wigmore, William H., assignor of one-half to J. H. Doerr, Philadelphia, Pa. Sleeping-car .....	274,689	Mar. 27	1868	{ 520 521 }	{ 23	1179
Wigmore, William H., assignor of one-half to H. Clayton, Philadelphia, Pa. Blower .....	284,698	Sept. 11	665	187	24	1023
Wilbur, John D., Towanda, Pa. Door-hanger .....	279,698	June 19	1580	442	23	2408
Wilbur, William H. (See Packard and Wilbur.)						
Wilbur, Elijah M., Taunton, Mass. Machine for cutting sheet metal .....	285,091	Sept. 18	1153	322	24	1115
Wilbourn, William R., Lexington, Va. Side-saddle tree .....	270,269	Jan. 9	522	153	23	112
Wilbourn, William R., Lexington, Va. Riding-saddle .....	270,270	Jan. 9	523	{ 153 154 }	{ 23	112
Wilbraham, James. (See Wilbraham, Thomas and J. W., assignors.)						
Wilbraham, James, et al. (See Wilbraham, John W., assignor.)						
Wilbraham, John W. (See Wilbraham, Thomas and J. W.)						
Wilbraham, John W., assignor to himself, T. and J. Wilbraham, Philadelphia, Pa. Stuffing-box for journals .....	272,819	Feb. 20	1557	437	23	728
Wilbraham, John W., assignor to himself, T. and J. Wilbraham, Philadelphia, Pa. Attachment to lathes for turning crank-pins .....	272,820	Feb. 20	1557	437	23	728
Wilbraham, Thomas, et al. (See Wilbraham, John W., assignor.)						
Wilbraham, Thomas and J. W., assignors to themselves and J. Wilbraham, Philadelphia, Pa. Rotary engine .....	272,818	Feb. 20	1555	{ 436 437 }	{ 23	728
Wilbur, Alfred, Allegheny, Pa. Flanging-machine .....	274,872	Mar. 27	2086	579	23	1216
Wilbur, Alfred, Allegheny, Pa. Flanging-machine .....	276,111	Apr. 17	1598	441	23	1516
Wilbur, Alpheus O., assignor of one-half to S. M. Wilbur, Romeo, Mich. Wagon-bolster .....	278,645	May 29	2650	725	23	2111
Wilbur, George W., Providence, R. I., assignor to A. E. Brackett, Branford, Conn. Pipe-tongs .....	284,933	Sept. 11	945	266	24	1072
Wilbur, Sylvanus M. (See Wilbur, Alpheus O., assignor.)						
Wilbur, William C. (See Leete and Wilbur.)						
Wilcox, Charles K., Dayton, Ohio. Carriage-hub .....	290,724	Dec. 25	1726	476	25	1213
Wilcox, Edward M., assignor to Winchester & Partridge Manufacturing Company, White-water, Wis. Horse-power sweep for grinding-mills .....	270,531	Jan. 9	866	252	23	179
Wilcox, Edward M., assignor of one-third to J. Morris, Omaha, Nebr. Grain-car door .....	275,448	Apr. 10	768	204	23	1365
Wilcox, Harvey, Los Gatos, Cal. Cultivator .....	285,193	Sept. 18	1276	359	24	1137
Wilcox, Heman D., Boston, Mass. Cutter-head .....	290,158	Dec. 11	966	273	25	1065
Wilcox, Henry M., et al. (See Brooks, Austin A., assignor.)						
Wilcox, James M. (See De Smedt, Edward J., assignor.)						
Wilcox, Joshua L., Flint, Mich. Cider-press .....	271,387	Jan. 30	1936	560	23	389
Wilcox, Joshua L., Flint, Mich. Apple-parer .....	287,601	Oct. 30	2321	628	25	450
Wilcox, Lyman, Cone, Mich. Windmill .....	278,642	June 5	231	68	23	2162
Wilcox, Marcus M. (See Laskey, John H., assignor.)						
Wilcox, Martin, Paskenta, Cal. Grain-separator .....	272,178	Feb. 13	736	203	23	579
Wilcox, Myrou L., Brooklyn, N. Y. Paper-box .....	289,790	Dec. 4	516	143	25	976
Wilcox, Reuben G., Hiram Rapids, Ohio. Horseshoe .....	271,008	Jan. 23	1465	421	23	301
Wilcox, Silas, Portland, Oreg. Grease-trap .....	280,545	July 3	250	67	24	45
Wilcox, Stephen, Brooklyn, N. Y. Hot-air engine .....	289,481	Dec. 4	131	37, 38	25	910
Wilcox, Stephen, Brooklyn, N. Y. Hot-air engine .....	289,482	Dec. 4	135	38, 39	25	910
Wilcox & White Organ Company. (See White Henry K., assignor.)						
Wilcox, William R., Nashua, N. H. Eaves-trough support .....	272,925	Feb. 27	1711	479	23	761
Wilcox, William W., Chicago, Ill. Baggage-check .....	280,427	July 3	112	30	24	21
Wilcoxon, Jeremiah, Canton, Ill. Bow and scarf fastener .....	264,699	Sept. 11	607	167	24	1023
Wild, Joseph H. (See Jones and Wild.)						
Wild, William E., Candalara, Nev. Machine for re boring cylinders .....	275,102	Apr. 3	291	80	23	1276
Wild, William E., Candalara, Nev. Boring, drilling, and facing machine .....	275,103	Apr. 3	292	80, 81	23	1276
Wild, William E., Candalara, Nev. Grain cleaner, separator, and grader .....	275,104	Apr. 3	294	81	23	1277
Wild, William E., Candalara, Nev. Grain cleaner, separator, and grader .....	275,105	Apr. 3	296	81	23	1277
Wild, William E., San Francisco, Cal. Ore-feeder .....	283,180	Aug. 14	842	{ 235 236 }	{ 24	656
Wild, William G., Bangor, Me. Boot for soaking horses' feet .....	280,107	June 26	1843	519	23	2461
Wilde, Daniel, Washington, Iowa. Steam-generator .....	275,449	Apr. 10	769	205	23	1365
Wilde, Daniel, Washington, Iowa. Bagasse-furnace .....	284,101	Aug. 28	1997	556	24	884
Wilde, Henry, Newark, N. J. Stave-jointing machine .....	271,009	Jan. 23	1466	{ 421 422 }	{ 23	301
Wilde, Robert, Philadelphia, Pa. Lap-feeding device for carding-machines .....	290,378	Dec. 18	1251	351	25	1123
Wilde, Samuel, Williams, Cal. Heel for boots or shoes .....	285,194	Sept. 18	1277	359	24	1137
Wilde, William A., Chicago, Ill. Car-brake .....	283,446	Aug. 21	1184	333	24	726

*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Wilder, Charles O., assignor to North Western Steele Wheel Company, Chicago, Ill. Making metallic wheels	286,754	Oct. 16	1226	331	25	237
Wilder, Henry C., Ashby, Mass. Safety-valve	272,926	Feb. 27	1713	479	23	761
Wilder, Moses G., Philadelphia, Pa. Bolt-heading machine	282,475	July 31	2711	{ 746 747 }	24	493
Wilder, Moses G., and C. T. Parry, assignors to said Parry, E. H. Williams, W. P. Henszey, E. Longstreth, J. H. Converse, and G. Burnham, Philadelphia, Pa. Metal-punching machine	277,817	May 15	1587	{ 434 435 }	23	1912
Wildey, Eli W., and W. L. Simone, Richmond, Ind. Wind-engine	273,370	Feb. 13	970	271	23	620
Wildey, George, and A. Rollins, Brooklyn, N. Y. Press	271,754	Feb. 6	204	57	23	475
Wiles, Robert H. (See Dean, George S., assignor.)						
Wiles, Robert H., Freeport, Ill. Spring-hinge	274,161	Mar. 20	1181	325	23	1052
Wiley & Russell Manufacturing Company. (See Smart, Albert J., assignor.)						
Wilford, Joseph L. (See Northway, Winelow P., assignor.)						
Wilkerson, Basil M., New York, N. Y. Combined comb and brush	288,534	Nov. 13	940	256	25	679
Wilkerson, Lafayette, Scipio, Ind. Car-coupling	271,179	Jan. 23	1672	481	23	334
Wilkerson, Lafayette, Scipio, Ind. Car-brake	290,379	Dec. 18	1252	{ 351 352 }	25	1123
Wilkes, James, Winnipeg, Manitoba, Canada. Nut-lock	279,299	June 12	852	236	23	2278
Wilkes, Washington, Sylacauga, Ala. Cotton thinner and cultivator	283,181	Aug. 14	844	236	24	656
Wilkes, William J., Chicago, Ill. Grain-binder	285,330	Sept. 18	1428	{ 403 404 }	24	1165
Wilkie, David, and G. A. Duggan, Detroit, Mich. Milk-can	287,205	Oct. 23	1807	496	25	347
Wilkie, John E., assignor to J. P. Barrett, Chicago, Ill. Ambulance	273,925	Mar. 13	883	241	23	993
Wilkin, Theodore S., East Saginaw, Mich. Device for keeping journals cool	290,159	Dec. 11	967	273	25	1066
Wilkin, William M., East Saginaw, Mich. Saw-buckle for reciprocating saws	286,354	Oct. 9	728	195	25	142
Wilkin, William M., East Saginaw, Mich. Reciprocating-saw mill	286,355	Oct. 9	729	{ 195 196 }	25	142
Wilkin, William M., East Saginaw, Mich. Saw-relief mechanism for saw-mills	286,356	Oct. 9	731	196	25	143
Wilkin, William M., East Saginaw, Mich. Feed mechanism for saw-mills	286,357	Oct. 9	732	196	25	143
Wilkins, Alexander G. (See Zellers and Wilkins.)						
Wilkins, Alexander G., assignor to Wilkins Shoe Button Fastener Company, Meadville, Pa. Machine for attaching buttons	282,821	Aug. 7	412	{ 116 117 }	24	573
Wilkins, Charles L. (See Harker and Wilkins.)						
Wilkins, Daniel W., Boston, Mass. Shield for shirt-studs	276,741	May 1	275	70	23	1671
Wilkins, Fred B., Clinton, Mass. Finishing woven cotton fabrics	270,868	Jan. 16	1283		23	265
Wilkins, George A., Philadelphia, Pa. Adjustable telephone support and switch	286,518	Oct. 9	922	{ 248 249 }	25	177
Wilkins, Henry E., and J. L. Dole, Springfield, Mass. Heel-iron	271,755	Feb. 6	205	57	23	475
Wilkins, John. (See Wilkins, William F., assignor.)						
Wilkins Shoe Button Fastener Company. (See Wilkins, Alexander G., assignor.)						
Wilkins Shoe Button Fastener Company. (See Zellers, Mahlon M., assignor.)						
Wilkins Shoe Button Fastener Company. (See Zellers and Wilkins, assignors.)						
Wilkins, William F., Adamsville, Quebec, assignor of one-third to J. Wilkins, Toronto, Ontario, Canada. Belt-fastener	271,010	Jan. 23	1468	422	23	301
Wilkinson, Algernon L., Huntsville, Ala. Automatic switch-signal	289,739	Dec. 4	462	130	25	967
Wilkinson, Elias A. (See Woodward and Fairbanks, assignors.)						
Wilkinson, Elias A., trustee. (See Fairbanks, Charles M., assignor.)						
Wilkinson, Frederick. (See Higgins and Wilkinson.)						
Wilkinson, Harris C. (See Hart, Louis H., assignor.)						
Wilkinson, Job D., Plainwell, Mich. Spring bed-bottom	285,331	Sept. 18	1429	404	24	1165
Wilkinson, John D., assignor of one-half to J. M. and W. L. Wever, Plattsburg, N. Y. Horseshoe-nail machine	284,934	Sept. 11	946	266	24	1073
Wilkinson, John P., Abbeville, Miss. Key-hole guard	282,018	July 24	2115	579	24	386
Wilkinson, Warren W. (See Morlan and McKeehen, assignors.)						
Wilkinson, William, Wigan, county of Lancaster, England. Tramway-locomotive	276,948	May 1	541	141	23	1718
Wilkinson, William, Wigan, county of Lancaster, England. Vertical multitubular boiler	279,470	June 12	1073	297	23	2314
Wilkinson, William, Wigan, county of Lancaster, England. Traction-engine	280,428	July 3	113	30	24	21
Wilkinson, William R., Brooklyn, N. Y. Fertilizer	290,829	Dec. 25	1859		25	1236
Will, Fred. (See Borst, George, assignor.)						
Will, Frederick. (See Borst and Will.)						
Willard, Bradford. (See Crane, Gerard, assignor.)						
Willard, Bradford, et al. (See Stilwell, Rickason, assignor.)						
Willard, Charles A., West De Pere, Wis. Smoke and flame outlet for buildings	282,822	Aug. 7	414	117	24	574
Willard, Charles W., Chicago, Ill. Helve of power-hammers	285,718	Sept. 25	1907	541	24	1257
Willard, Frank, Meadville, Mo. Automatic driving-gate	279,063	June 5	552	152	23	2218
Willard, Henry F., et al. (See Paul, George D., assignor.)						
Willard, William L. (See Poage, Walter R., assignor.)						
Willcox, Charles H. (See Borton and Willcox.)						
Willcox, Charles H., New York, N. Y., and C. Carleton, Providence, R. I., assignors to Willcox & Gibbs Sewing Machine Company, New York, N. Y. Sewing-machine	276,112	Apr. 17	1600	442	23	1516
Willcox, Charles H., New York, N. Y., and G. H. Noble, Providence, R. I., assignors to Willcox & Gibbs Sewing Machine Company, New York, N. Y. Thread-controlling device for sewing-machines	276,113	Apr. 17	1603	442	23	1517
Willcox & Gibbs Sewing Machine Company. (See Borton, Stockton, assignor.)						
Willcox & Gibbs Sewing Machine Company. (See Borton and Willcox, assignors.)						
Willcox & Gibbs Sewing Machine Company. (See Ryder, Martin H., assignor.)						
Willcox & Gibbs Sewing Machine Company. (See Willcox and Carleton, assignors.)						
Willcox & Gibbs Sewing Machine Company. (See Willcox and Noble, assignors.)						
Willcox, John S. M., Whitby, Ontario, Canada. Fire-escape	289,050	Nov. 27	1582	437	25	807
Willemin, Gustave. (See Shaw, Charles H., assignor.)						
Willis, Henry A. (See Waterhouse, Samuel S., assignor.)						
Willet, Nathaniel S., assignor to M. P. Cooper, Newark, N. J. Brick-drying apparatus	280,271	June 26	2034	572	23	2494
Willetts, Stephen T., et al. (See Swift, Horace E., assignor.)						
Willetts, George. (See Morrison and Willett.)						
Willetts, George, Englewood, Ill. Cash-railway	273,211	Feb. 27	2060	579	23	822
Willetts, Robert A. (See Eubank, Thomas, assignor.)						
Willetts, Jesse, and W. Buttle, Pittsburg, Pa. Tool for forming the open ends of hollow glassware	280,546	July 3	251	68	24	45
Willetts, Jesse, and W. Buttle, Pittsburg, Pa. Manufacture of lamp-chimneys	285,719	Sept. 25	1908	541	24	1257
Willey, George W., Athol, Mass. Railway-track cleaner	288,903	Nov. 20	1394	{ 384 385 }	25	766
Willey, Thomas M., East Haddam, Conn. Manufacture of bed-coverings, &c.	274,690	Mar. 27	1869	521	23	1180
Williams, Napoleon W., Philadelphia, Pa. Governor for steam-engines	280,984	July 10	798	222	24	147



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Williams, Napoleon W., Philadelphia, Pa. Cut-off valve.....	281,812	July 24	1866	510	24	344
Williams, Alanson B., Cleveland, Ohio. Can for preserving butter.....	285,332	Sept. 18	1430	404	24	1166
Williams, Alfred H., Peckham, county of Surrey, England. Ponton.....	280,272	June 26	2037	573	23	2495
Williams, Allen T., Taunton, Mass. Compensation-pendulum. (Reissue).....	10,425	Dec. 11	1013	285	25	1074
Williams, Andrew J., Macon, Ga. Cotton cleaner and feeder.....	284,151	Aug. 28	2065	572 } 573 } 573 }	24	894
Williams, Andrew J., Macon, Ga. Rib for cotton-gins.....	284,152	Aug. 28	2066	573	24	895
Williams, B. H., et al. (See Orton, Chester B., assignor.).....						
Williams, Benjamin H., Lawrenceville, Pa. Sight for fire-arms.....	283,447	Aug. 21	1187	334	24	726
Williams, Bennett, assignor to himself and W. J. Griffiths, Boston, Mass. Pencil-sharp- ening machine.....	282,823	Aug. 7	416	117	24	574
Williams, Charles, Jr., et al. (See Flint, Edward, Jr., assignor.).....						
Williams, Charles, Jr. (See Lane, Thomas W., assignor.).....						
Williams, Charles, Chicago, Ill. Folding bed.....	272,502	Feb. 20	1158	325	23	657
Williams, Charles E., Westfield, Mass. Machine for twisting snaps for whips.....	277,967	May 22	1773	483 } 484 } 203 }	23	1950
Williams, Charles H., Worcester, assignor to T. C. Bates, North Brookfield, Mass. Corset.....	272,179	Feb. 13	737	204 }	23	579
Williams, Charles H., assignor to T. C. Bates, Worcester, Mass. Corset.....	276,114	Apr. 17	1605	442	23	1517
Williams, Charles H., and F. Saker, Charlestown, N. H. Flue-stopper.....	280,700	July 3	436	124	24	78
Williams, Charles I. (See Williams, Irvin A. and C. I.).....						
Williams, Chester L., New York, N. Y. Ventilating-skylight.....	288,535	Nov. 13	940	257	25	679
Williams, Clarence A., Webster City, Iowa. Work-bench.....	289,947	Dec. 11	712	201	25	1018
Williams, Clarence A., Webster City, Iowa. Device for jointing lumber.....	289,948	Dec. 11	713	201 } 202 }	25	1018
Williams & Co., B. S. (See Williams and Marvel, assignors.).....						
Williams, Daniel W., Springville, Cal. Sawing and channeling machine.....	270,532	Jan. 9	867	252	23	180
Williams, David B. (See White, Francis M., assignor.).....						
Williams, David G., assignor of one-half to E. Percival, Port Huron, Mich. Spoon.....	280,985	July 10	800	222	24	147
Williams, Delbert. (See Haight and Williams.).....						
Williams, Eben B., assignor of one-half to D. D. Earle, Forestdale, R. I. Gate for turbine wheels.....	271,671	Feb. 6	102	28	23	457
Williams, Edward G., et al. (See Ives, Edward R., assignor.).....						
Williams, Edward G., Brooklyn, assignor to Ives, Blakeslee & Co., New York, N. Y. Game.....	275,308	Apr. 3	541	148	23	1318
Williams, Edward H., et al. (See Wilder and Parry, assignors.).....						
Williams, Edwin S., Howard, assignor of one-third to A. V. Cleland, Niles, Mich. Sheaf- gatherer for self-binding harvesters.....	279,300	June 12	853	236	23	2278
Williams, Elias, Parish of St. John Baptist, La. Bagasse-furnace.....	281,218	July 10	1091	300 } 301 }	24	200
Williams, Elijah L., Marianna, Fla. Paddle-wheel.....	278,477	May 29	2443	667	23	2076
Williams, Eugene C., et al. (See Kelly, Robert M., assignor.).....						
Williams, Francis R., Shreveport, La. Chalk-replacing device for billiard-tables.....	282,476	July 31	2714	747	24	493
Williams, Frank E., New York, N. Y. Duplex sleeve-button.....	277,005	May 8	739	194	23	1758
Williams, Frank R., Syracuse, assignor to H. H. Hebbard, Brockport, N. Y. Apple-parer.....	284,935	Sept. 11	947	267	24	1073
Williams, George. (See Brown and Williams.).....						
Williams, George E., et al. (See Engelking, George L., assignor.).....						
Williams, George L., and J. Dunstedter, Edwardsville, Ill. Grain-binder.....	279,210	June 12	745	204 } 205 }	23	2260
Williams, George W., Winona, Minn. Spring for piston-heads.....	291,009	Dec. 25	2095	577	25	1274
Williams, Gilbert L., Bonham, Tex. Mosquito-bar frame.....	286,665	Oct. 16	1113	300	25	218
Williams, Gordon H., assignor of one-half to L. M. Dennison, Greensburg, Ohio. Vehicle-axle.....	286,358	Oct. 9	733	196	25	144
Williams, Harry B., Brooklyn, N. Y. Brush.....	286,886	Oct. 16	1391	382	25	266
Williams, Henry B., assignor of one-half to J. Gerber, Fremont Centre, Mich. Pipe-wrench.....	275,106	Apr. 3	297	82	23	1277
Williams, Henry G., Jersey City, N. J., assignor of one-half to A. R. Morgan, New York, N. Y. Heating-drum.....	281,219	July 10	1092	301	24	200
Williams, Henry S., assignor of one-half to E. L. and J. D. Shipman, New York, N. Y. Binder for pamphlets, &c.....	274,429	Mar. 20	1521	418	23	1112
Williams, Henry S., assignor of one-half to E. L. and J. D. Shipman, New York, N. Y. Newspaper file and binder.....	274,430	Mar. 20	1523	418	23	1112
Williams, Irvin. (See McMurtry, Williams, and Okie.).....						
Williams, Irvin A. and C. I., Utica, N. Y. Locomotive head-light with signal attachment.....	281,327	July 17	1236	342 } 343 }	24	231
Williams, Isaac F., Bristol, R. I. Manufacture of vulcanized-rubber goods.....	284,936	Sept. 11	951	267	24	1074
Williams, J. J., et al. (See Gossett, William J., assignor.).....						
Williams, J. P. Auguste, Chicago, Ill. Process of and apparatus for the manufacture of dipped candies.....	279,209	June 12	744	204	23	2260
Williams, Jacob S., St. Louis, Mo. Furnace.....	286,887	Oct. 16	1392	382 } 383 }	25	266
Williams, James, High Lane, near Stockport, county of Chester, England. Regulator for engine-governors.....	288,146	Nov. 6	433	122	25	583
Williams, Jay C. (See Chandler and Williams.).....						
Williams, Jay L., Lone Tree, Iowa. Car-coupling.....	284,937	Sept. 11	953	267	24	1074
Williams, Jay S. (See Williams, John and J. S.).....						
Williams, John and J. S., Kalamazoo, Mich. Fruit-evaporator.....	272,927	Feb. 27	1714	479	23	761
Williams, John C., Scotland Neck, N. C. Machine for measuring bagging and other fabrics.....	280,547	July 3	253	68	24	45
Williams, John L., Youngstown, Ohio. Metal-rolling mill.....	275,309	Apr. 3	542	148	23	1318
Williams, John L., Shenandoah, Pa. Miner's safety-lamp.....	290,510	Dec. 18	1443	398	25	1156
Williams, John M., Boston, Mass. Cuff and collar fastener.....	273,656	Mar. 6	530	143	23	925
Williams, John R., Mount Pleasant, Iowa. Wheeled dirt-scraper.....	286,246	Oct. 9	571	157	25	115
Williams, John R., Newark, N. J. Machine for cutting blanks.....	287,073	Oct. 23	1639	450	25	316
Williams, John R., Newark, N. J. Cigar-making apparatus.....	290,954	Dec. 25	2015	556	25	1262
Williams, John S., Chicago, Ill. Shirt.....	277,527	May 15	1255	337	23	1854
Williams, John T. (See Williams, Richard H. and J. T.).....						
Williams, Joseph, San José, Cal. Window-blind.....	275,557	Apr. 10	902	245	23	1388
Williams, Joseph, San José, Cal. Window-blind.....	283,941	Aug. 28	1782	503	24	847
Williams, Joseph C., Etna, Pa. Gas-burning puddling-furnace.....	289,201	Nov. 27	1764	489	25	840
Williams, Joshua H., East Craftsbury, Vt. Floor-jack.....	286,981	Oct. 16	1516	416	25	287
Williams, Lewis, and E. M. Bates, Johnstown, Pa. Apparatus for elevating and holding spools of wire.....	290,300	Dec. 18	1149	322	25	1104
Williams, Lewis E., Peekskill, N. Y. Burglar-alarm and door-bell.....	279,064	June 5	554	152	23	2218
Williams, Louise A. (See Woods, William A., assignor.).....						
Williams, Luke A., Meadville, Mo. Check-rower.....	271,756	Feb. 6	206	57	23	475
Williams, Malcolm B., and H. Marvel, assignors to B. S. Williams & Co., Kalamazoo, Mich. Spring-tooth harrow and drill.....	289,548	July 3	254	68	24	46

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Williams Manufacturing Company. (See Haines, Frank P., assignor.)						
Williams Manufacturing Company. (See McDonald, Hugh, assignor.)						
Williams Manufacturing Company. (See Palmer, George M., assignor.)						
Williams Manufacturing Company, C. W. (See Thomas, Eddy T., assignor.)						
Williams Manufacturing Company. (See Thomas, Eddy T., assignor.) (Reissue.)						
Williams, Nathaniel B., Bridgeport, Conn. Sewing-machine guide.....	272,503	Feb. 20	1160	325	28	657
Williams, Nicholas H., Joliet, Ill. Cultivator.....	288,289	Nov. 13	618	169	25	624
Williams, Paul W., assignor to himself, T. M. Gibson, and Z. L. Wise, Dardanelle, Ark. Cultivator.....	282,824	Aug. 7	417	118	24	574
Williams, Pliny B., <i>et al.</i> (See Hill, Thomas, assignor.)						
Williams, Pliny B., <i>et al.</i> (See Little, James R., assignor.)						
Williams, Richard H., Mount Vernon, N. Y. Domino.....	278,646	May 29	2650	725	23	2111
Williams, Richard H. and J. T., Mount Vernon, N. Y. Puzzle.....	284,525	Sept. 4	448	127	24	980
Williams, Robert. (See Bowker, William, assignor.)						
Williams, Robert, Boston, assignor, by mesne assignments, to himself and W. Bowker, Somerville, Mass. Machine for sawing hoops from poles.....	271,672	Feb. 6	104	28	23	458
Williams, Robert, Boston, and W. Bowker, Somerville, Mass. Machinery for sawing barrel-hoops from poles.....	272,996	Feb. 27	1790	501	23	774
Williams, Robert M., New Market, Va. Cultivator.....	288,288	Nov. 13	618	169	25	624
Williams, Samuel B., Sailor's Rest, Tenn. Plow attachment.....	288,904	Nov. 20	1395	385	25	767
Williams, Samuel T., Troy, N. Y. Reel for coiling wire, rods, or ropes.....	269,905	Jan. 2	97	29	23	21
Williams, Samuel T., assignor of one-half to R. W. Hunt, Troy, N. Y. Rolling-mill.....	284,700	Sept. 11	667	188	24	1023
Williams, Samuel T., Red Bank, assignor of one-half to A. Albright, Newark, N. J. Plank-ing and pavement.....	276,545	Apr. 24	2147	597 598	23	1618
Williams, Seth J., and H. Richey, Sing Sing, N. Y. Manufacture of baking-pans.....	271,388	Jan. 30	1937	560 561	23	390
Williams, Sheldon, Providence, R. I. Making bases for rings of watch-case columns.....	284,526	Sept. 4	448	127	24	980
Williams, Steward, Granville, Ind. Fence.....	283,182	Aug. 14	846	237	24	657
Williams, Talcott. (See Dorr and Williams.)						
Williams, Thomas. (See Ulrick and Williams.)						
Williams, Thomas, Woonsocket, R. I. Knife-hone.....	281,744	July 24	1771	482	24	326
Williams, Thomas, Brooklyn, N. Y. Banjo.....	288,905	Nov. 20	1396	385	25	767
Williams, Thomas, Jr., Gee Street, and W. Sangster, Compton Buildings, Goswell Road, county of Middlesex, England; said Sangster assignor to said Williams. Sausage-stuff-ing machine.....	276,115	Apr. 17	1606	442	23	1517
Williams, William, assignor of one-half to R. W. Roberts and C. F. Obetz, Caledonia, Ohio. Thill-coupling.....	283,309	Aug. 14	1002	281	24	687
Williams, William A., Sioux Falls, Dak. Ter. Mail-bag.....	280,429	July 3	114	30	24	22
Williams, William E., Dodgeville, Wis. Windmill.....	272,821	Feb. 20	1558	438	23	729
Williams, William H., <i>et al.</i> (See Bemis, Charles, assignor.)						
Williams, William H., Cincinnati, Ohio. Seal-lock.....	282,019	July 24	2116	579	24	386
Williams, William H., Brooklyn, assignor to Van Wagoner & Williams, New York, N. Y. Spring-hinge.....	281,594	July 17	1566	428	24	286
Williams, William H., assignor of one-half to P. Mohr, Cincinnati, Ohio. Producing an electroplating bath and salts.....	286,359	Oct. 9	733	.....	25	144
Williams, William H. H. (See Myers and Williams.)						
Williamson, Benjamin F., St. Louis, Mo. Stirrup.....	283,310	Aug. 14	1003	281	24	687
Williamson, Cornelius T., Newark, N. J. Corkscrew.....	274,539	Mar. 27	1690	469	23	1147
Williamson, Douw D. (See Darton and Williamson.)						
Williamson, Douw D., New Brunswick, N. J. Marker for lawn-tennis courts.....	285,092	Sept. 18	1155	322	24	1115
Williamson, E. A. (See Williamson, Willie E., assignor.)						
Williamson, Eli S., Bradford, Pa. Apparatus for pumping and flowing oil-wells.....	276,116	Apr. 17	1608	443	23	1517
Williamson, George, <i>et al.</i> (See Williamson, William C., assignor.)						
Williamson, George, Cambridge, assignor of one-half to W. G. Chase, Brookline, Mass. Printing-press.....	276,517	Apr. 24	2111	586 587	23	1612
Williamson, George, Cambridge, assignor to J. O. Hayden, Somerville, and W. G. Chase, Brookline, Mass. Printing-press.....	290,301	Dec. 18	1150	322 323	25	1105
Williamson, George W., assignor of one-half to G. W. Williamson, Sr., New Ross, Ind. Straw-stacking machine.....	274,540	Mar. 27	1692	469 470	23	1147
Williamson, George W., assignor of one-half to G. W. Williamson, Sr., New Ross, Ind. Straw-stacking machine.....	281,654	July 17	1647	449	24	209
Williamson, James, J. and G. Swindells, Lancaster, England. Letting-off motion for looms.....	279,626	June 19	1263	350	23	2353
Williamson, James E., Berlin, Wis. Merchant's stand for paper bags.....	286,099	Oct. 2	395	108	25	72
Williamson, John D., <i>et al.</i> (See Williamson, William C., assignor.)						
Williamson, John J., Boston, Mass. Postal-card.....	283,841	Aug. 23	1660	469	24	825
Williamson, John W., Jamaica, N. Y. Combined lubricating and cooling compound.....	278,067	May 22	1890	.....	23	1971
Williamson, L. N., <i>et al.</i> (See Blakely, Caleb J., assignor.)						
Williamson, Lucius N., <i>et al.</i> (See Angell, Russell R., assignor.)						
Williamson, S. D., <i>et al.</i> (See Williamson, S. Stuart, assignor.)						
Williamson, S. Stuart, assignor of one-eighth to D. K. Cartter, Washington, D. C. Balanced slide-valve.....	272,393	Feb. 13	1014	283	23	627
Williamson, S. Stuart, Bridgeport, Conn., assignor to A. F. Carman, Brooklyn, N. Y., and S. D. Williamson, Washington, D. C. Car-truck.....	286,565	Oct. 9	981	264	25	188
Williamson, William A., assignor of one-half to J. M. Moore, Clayton, N. J. Fruit-jar.....	280,701	July 3	437	124 125	24	78
Williamson, William C., assignor of two-thirds to G. and J. D. Williamson, Philadelphia, Pa. Steam steering-engine.....	276,117	Apr. 17	1610	443	23	1518
Williamson, Willie R., assignor to E. A. Williamson, Wheeler, Ind. Bale-tie.....	273,926	Mar. 13	884	241	23	993
Willets, Jesse. (See Blair and Willets.)						
Willis, Charles E., Oyster Bay, N. Y. Anchor.....	270,168	Jan. 2	402	116	23	82
Willis, Daniel, Harrison, assignor of one-half to E. G. Duvall, Dayton, N. J. Spring shade-roller.....	273,657	Mar. 6	531	143	23	925
Willis, Henry T., assignor to himself and R. C. Flower, Boston, Mass. Vapor-generator for bathing apparatus.....	286,666	Oct. 16	1113	300	25	218
Willis, John, Canton, Ohio. Wood-polishing machine.....	278,647	May 29	2651	725	23	2111
Willis, Walter N., Trappe, Md. Steam-engine.....	288,684	Nov. 20	1131	311	25	719
Williston, Henry M. (See Forbes and Williston.)						
Willits, George S., Philadelphia, Pa. Elevating and supporting device for trunk-trays.....	290,380	Dec. 18	1254	352	25	1124
Willits, Horace A., Philadelphia, Pa. Jump-seat iron.....	284,153	Aug. 28	2066	573	24	895
Willits, Warren J., assignor to Sheffield Velocipede Car Company, Three Rivers, Mich. Hand-car.....	269,906	Jan. 2	98	29, 30	24	21
Willits, Warren J., assignor to Sheffield Velocipede Car Company, Three Rivers, Mich. Car-wheel.....	280,702	July 3	438	125	24	78



*Alphabetical list of patentees—Continued.*

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Willmer, Samuel L., assignor of one-half to S. Wolf, Anderson, Cal. Combined wrench and pinchers	270,356	Jan. 9	630	186	23	133
Willoughby, James D., deceased; D. E. Adams, Pittsburg, Pa., administrator. Speed-governor for steam-engines	282,480	Aug. 7	1	1	24	501
Wills, Harry A., and J. D. Kingsland, assignors to Northwestern Horse Nail Company, Chicago, Ill. Automatic feeder for horseshoe-nail-blank-finishing machines	275,558	Apr. 10	903	246	23	1389
Wills, John B., Keeseville, N. Y. Machine for finishing horseshoe-nail blanks	257,206	Oct. 23	1808	496	25	347
Wills, Samuel, assignor of one-half to R. Clark, Camden, N. J. Journal-bearing	256,982	Oct. 16	1517	417	25	287
Willsie, George E., assignor of one-half to H. L. Chaffee, Des Moines, Iowa. Dish pan and drainer	284,264	Sept. 4	133	37	24	927
Willson, Albert O., Madison, Ga. Traction-engine	251,813	July 24	1867	510	24	344
Willson, Henry, Chicago, Ill. Ink-fountain for printing-presses	279,301	June 12	854	237	23	2279
Willson, Osborn, Aurora, Ill. Two-wheeled vehicle	272,928	Feb. 27	1715	480	23	761
Willson, Robert W., New Haven, Conn. Device for synchronizing clocks	288,906	Nov. 20	1397	385	25	767
Willson, Robert W., assignor to Standard Time Company, New Haven, Conn. Electrical control for pendulum-clocks	270,533	Jan. 9	868	253	23	180
Willson, Robert W., assignor to Standard Time Company, New Haven, Conn. Device for making and breaking electric circuits	271,560	Jan. 30	2155	620	23	428
Willson, Sam A., Rusk, Tex. Horse-detacher	272,394	Feb. 13	1015	283	23	627
Willson, Thomas A., and G. W. Meigs, Reading, Pa., assignors to said Willson. Spectacles and eyeglasses	289,740	Dec. 4	463	130	25	967
Willmans, Frederick A., Dallas, Tex. Condenser	282,020	July 24	2116	550	24	386
Wilmarth, Thomas D., Providence, R. I. Thread-guide for spinning-machines	270,169	Jan. 2	403	116 117	23	82
Wilmington Dental Manufacturing Company. (See Robinson, Alfred S., assignor.)						
Wilmington, William, Toledo, Ohio. Car-wheel chill	270,869	Jan. 16	1284	370	23	265
Wilmington, William, Toledo, Ohio. Casting car-wheels	273,658	Mar. 6	532	143	23	925
Wilmington, William, Toledo, Ohio. Casting car-wheels	281,422	July 17	1353	373	24	251
Wilmington, William, Toledo, Ohio. Car-wheel chill	282,825	Aug. 7	418	118	24	574
Wilmington, William, Toledo, Ohio. Casting car-wheels	283,311	Aug. 14	1004	281	24	687
Wilmington, William, Toledo, Ohio. Casting car-wheels	289,741	Dec. 4	464	131	25	968
Wilmot, Samuel R., assignor to himself and W. F. Hobbs, Bridgeport, Conn. Rolling-mill	281,595	July 17	1568	429	24	286
Wilmot, Samuel R., assignor to himself and W. F. Hobbs, Bridgeport, Conn. Rolling-mill						
Wilmot, Samuel R., assignor to himself and W. F. Hobbs, Bridgeport, Conn. Rolling-mill	281,596	July 17	1571	429	24	287
Wilmot, Samuel R., assignor to himself and W. F. Hobbs, Bridgeport, Conn. Rolling-mill	281,597	July 17	1572	429	24	287
Wilsey, Sara L. (See Campbell, Charles, assignor.)						
Wilson, Abiel E., Worcester, Mass. Balanced rotary valve	278,648	May 29	2652	725	23	2111
Wilson, Arthur G., New York, N. Y. Paper box and lid	286,360	Oct. 9	735	197	25	144
Wilson, Arthur R., et al. (See Betts, Edgar K., assignor.)						
Wilson, Bennet C. (See Hunt and Wilson.)						
Wilson, Charles E., Chicago, Ill. Coffin-lifter	270,620	Jan. 16	979	283	23	208
Wilson, Charles E., Hyde Park, Ill. Mold for burial-cases	275,004	Apr. 3	152	42	23	1252
Wilson, Charles H., Paducah, Ky. Furnace	289,591	Dec. 4	275	77	25	936
Wilson, Charles H. and S. S., Paducah, Ky. Steam-boiler furnace	272,504	Feb. 20	1161	325	23	658
Wilson, Charles H., assignor to Western Electric Company, Chicago, Ill. Spring-jack and circuit for through telephone-lines	283,312	Aug. 14	1005	282	24	687
Wilson, Charles R., Detroit, Mich. Side spring	283,052	Aug. 14	691	194	24	630
Wilson, Darins. (See Osgood, James H., assignor.)						
Wilson, David H., et al., executors. (See Rendle, William E.)						
Wilson, Edward L., assignor to American Bell Telephone Company, Boston, Mass. Telephone-transmitter	275,310	Apr. 3	545	148	23	1319
Wilson, Edward L., Boston, Mass., assignor to American Bell Telephone Company, of Massachusetts. Telephone-transmitter	287,490	Oct. 30	2167	588	25	421
Wilson, Eliza, New York, N. Y. Fire-escape	279,900	June 19	1583	444	23	2400
Wilson, Eugene M., assignor of one-half to E. P. Carpenter, Worcester, Mass. Looping-in mechanism for telephone switch-boards	279,471	June 12	1074	298	23	2314
Wilson, F. Cortez, and Z. H. Bools, Chicago, Ill.; said Bools assignor to said Wilson. Machine for wiring sheet metal	277,180	May 8	846	224 225	23	1777
Wilson, F. Cortez, and Z. H. Bools; said Bools assignor to said Wilson, Chicago, Ill. Machine for cutting sheet metal	279,899	June 19	1581	443	23	2408
Wilson, Fitzland L., assignor to Wilson Hoop Company, West Bay City, Mich. Hoop-cutting machine	283,942	Aug. 28	1783	504	24	848
Wilson, Frank, assignor of two-thirds to J. E. and J. L. Wilson, Easton, Pa. Grinding-mill	281,814	Oct. 23	1869	510	24	345
Wilson, George, Toledo, Ohio. Machine for grooving boards for boxes	287,207	Oct. 23	1810	497	25	347
Wilson, George, and E. B. Loback, Vinton, Iowa. Nutmeg-grater	274,073	Mar. 13	1060	292	23	1024
Wilson, George F., New Castle, Pa. Stove-leg	280,273	June 26	2038	573	23	2495
Wilson, George W., assignor of one-half to B. A. Man, Lanesborough, Minn. Separator and purifier for meal, &c	281,655	July 17	1648	449	24	299
Wilson, Harry E. (See Betts and Wilson.)						
Wilson, Henry D., Abbeville, S. C. Head-rest and attachment for railway-car seats	272,395	Feb. 13	1015	284	23	627
Wilson, Henry W., Boston, Mass. Storage-basin for water-works	289,877	Dec. 11	633	176	25	1004
Wilson, Herbert S. (See Hammond and Wilson.)						
Wilson, Herbert S., assignor of one-half to H. J. Hammond, Kalamazoo, Mich. Windmill-motor	273,212	Feb. 27	2063	580	23	823
Wilson Hoop Company. (See Wilson, Fitzland L., assignor.)						
Wilson, J. Wall, New York, N. Y. Dumping boat or scow	279,683	June 19	1334	371	23	2364
Wilson, J. Wall, New York, N. Y. Dumping boat or scow	279,684	June 19	1336	371	23	2365
Wilson, James, Monndsville, W. Va. Wagon-lock	282,826	Aug. 7	419	118	24	574
Wilson, James B., Philadelphia, Pa. Umbrella-runner	273,330	Mar. 6	117	34	23	854
Wilson, James B., Philadelphia, Pa. Umbrella-runner	273,331	Mar. 6	118	34	23	854
Wilson, James E., et al. (See Wilson, Frank, assignor.)						
Wilson, James F. (See Fitts and Wilson.)						
Wilson, Jefferson, Beaver Falls, Pa. Washing-machine	274,072	Mar. 13	1059	292	23	1023
Wilson, Jesse B., et al. (See Simpson, Andrew J., assignor.)						
Wilson, John, Newark, N. J. Machine for curling hat-brims	289,202	Nov. 27	1765	489	25	840
Wilson, John A., Baltimore, Md. Gas-burner	275,311	Apr. 3	547	148	23	1319
Wilson, John A., assignor to P. Wilson & Sons, Cincinnati, Ohio. Hame	277,818	May 15	1590	435	23	1913
Wilson, John A., Spencer, assignor to J. R. Torrey, Worcester, Mass. Razor-strop	288,389	Nov. 13	766	206	25	648
Wilson, John C., Boston, Mass. Electrical apparatus for automatic signaling	279,065	June 5	555	152 153	23	2218
Wilson, John C., Boston, Mass. Individual call	283,448	Aug. 21	1187	334	24	726
Wilson, John C., Boston, Mass. Multiple signal-box for fire and district telegraphs	284,527	Sept. 4	449	127 128	24	980

## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Wilson, John C., Boston, Mass. District signal apparatus .....	290,302	Dec. 18	1152	323	25	1105
Wilson, John C. Boston, and M. G. Davis, West Somerville, Mass.; said Davis assignor to said Wilson. Electric-signal box .....	288,536	Nov. 13	941	{ 257 258 }	25	679
Wilson, John C., Cameron, Tex. Steam-engine .....	280,703	July 3	439	125	24	78
Wilson, John H. H., Sanguis, Mass. Dipper-handle .....	280,274	June 26	2039	573	23	2495
Wilson, John L., <i>et al.</i> (See Wilson, Frank, assignor.) .....						
Wilson, John N., Carthage, Mo. Book-clamp .....	277,096	May 8	740	194	23	1758
Wilson, John N., Carthage, Mo. Writer's hand-relief .....	282,595	Aug. 7	146	43	24	526
Wilson, John N., Carthage, Mo. Adding-machine .....	289,483	Dec. 4	142	39	25	911
Wilson, John S., Indianapolis, Ind. Adjustable table .....	274,162	Mar. 20	1182	326	23	1052
Wilson, John T. (See Simpson and Wilson.) .....						
Wilson, John T., Easton, Mo. Corn-sheller .....	284,991	Sept. 11	1019	286	24	1066
Wilson, Joseph H., <i>et al.</i> (See Chamberlain, Blanchard, assignor.) .....						
Wilson, Joseph L., Waltham, Mass. Bicycle-seat .....	274,163	Mar. 20	1183	326	23	1053
Wilson, Joseph W., Wyandotte, Kans. Middlings-purifier .....	278,207	May 22	2074	571	23	2003
Wilson, Liston B., Zanesville, Ohio. Combined match and tooth-pick box .....	271,011	Jan. 23	1469	422	23	301
Wilson, Liston B., Zanesville, Ohio. Churn .....	280,890	July 10	681	192	24	127
Wilson, Nahum T. (See Wilson, Samuel J. and N. T.) .....						
Wilson, Obadiah, Plainville, N. Y. Rack and truck .....	290,160	Dec. 11	968	273	25	1066
Wilson, Ransom F. (See Knapp, Charles H., assignor.) .....						
Wilson, Richard T., <i>et al.</i> (See Greene, Jonathan H., assignor.) .....						
Wilson, Riley P., Cleveland, Ohio. Reverberatory smelting-furnace .....	284,992	Sept. 11	1019	286	24	1087
Wilson, Robert, Greenup, Ky. Air separator and feeder for bolts, &c .....	271,389	Jan. 30	1938	561	23	390
Wilson, Robert J., Pittsburg, Pa. Relief-valve for railway pressure-brakes .....	284,154	Aug. 28	2067	574	24	895
Wilson, Robert M., Brooklyn, N. Y. Fire-escape ladder .....	289,876	Dec. 11	631	176	25	1003
Wilson, Samuel J. and N. T., Rogersville, Mich. Milk-cooler .....	273,659	Mar. 6	534	{ 143 144 }	23	925
Wilson, Samuel J. and N. T., Rogersville, Mich. Cover for vessels .....	286,755	Oct. 16	1227	331	25	238
Wilson, Samuel S. (See Wilson, Charles H. and S. S.) .....						
Wilson & Sons, P. (See Whitzel, Russell B., assignor.) .....						
Wilson & Sons, P. (See Wilson, John A., assignor.) .....						
Wilson, Stanislaus. (See Simpson and Wilson.) .....						
Wilson, Thomas. (See Dutton, Chauncey N., assignor.) .....						
Wilson, Thomas, and C. N. Dutton, Washington, D. C. Water-closet .....	280,108	June 26	1844	520	23	2461
Wilson, Thomas A., Lodi, Cal. Composition for ague .....	287,602	Oct. 30	2323	628	25	451
Wilson, Thomas L., Port Hope, Ontario, assignor of one-half to S. Davis, Montreal, Quebec, Canada. Railway-car .....	277,819	May 15	1591	435	23	1913
Wilson, Thomas L., Port Hope, assignor of one-half to E. H. Davis, Toronto, Ontario, Canada. Railway-car .....	282,827	Aug. 7	420	118	24	574
Wilson, Thornton, Fillmore, Ind. Mechanism for converting motion .....	276,206	Apr. 24	1717	475	23	1545
Wilson, Walker & Co. (See Simpson and Wilson, assignors.) .....						
Wilson, Washington, <i>et al.</i> (See Betts, Edgar K., assignor.) .....						
Wilson, William H., Westfield, N. Y. Magazine or base-burning steam-generator .....	287,603	Oct. 30	2323	628	25	451
Wilson, William, Jr., assignor of one-half to C. Green, Greenville, Del. Apparatus for making barbed fence-wire .....	289,950	Dec. 11	715	202	25	1019
Wilson, William, Jr., assignor of one-half to C. Green, Greenville, Del. Apparatus for looping and cutting wire .....	290,955	Dec. 25	2015	556	25	1262
Wilson, William A., G. Duncan, Liverpool, England, and G. Lauder, Pittsburg, Pa. Apparatus for separating and folding paper .....	276,369	Apr. 21	1929	535	23	1560
Wilson, William B., <i>et al.</i> (See Shallus, William W., assignor.) .....						
Wilson, Zachariah G., New York, N. Y. Gummed money-strip .....	271,964	Feb. 6	457	125	23	521
Wilton, Benjamin A., Bergen Point, N. J. Motor for light machinery .....	276,518	Apr. 24	2112	587	23	1612
Wilton, Benjamin A., Bergen Point, assignor of one-half to J. McDonald, Bayonne, N. J. Bedstead-fastening .....	278,649	May 29	2653	726	23	2112
Wiltse, Charles G., New York, N. Y. Machine for bottling powders .....	283,313	Aug. 14	1007	282	24	688
Wilverth, Henry, St. Charles, Ky. Mining-machine .....	289,742	Dec. 4	466	131	25	968
Wilzin, Henry H. (See Bush and Wilzin.) .....						
Wimmer, George W. (See Kelly and Wimmer.) .....						
Winmee, William, and J. C. Printup, Rome, Ga. Cotton-cleaner .....	283,733	Aug. 21	1522	429	24	780
Winmpe, William F., Centre, Ala. Fruit-picker .....	288,685	Nov. 20	1132	311	25	719
Winby, Frederick C., Westminster, England. Railway-rail and fish joint, &c., for railway-rails .....	284,155	Aug. 28	2069	574	24	895
Winchell, Addison H., <i>et al.</i> (See Lennon, Sayres N., assignor.) .....						
Winchell, James F., Springfield, Ohio. Power-converter .....	270,621	Jan. 16	980	283	23	208
Winchell, James F., Springfield, Ohio. Grinding-mill .....	273,927	Mar. 13	885	{ 241 242 }	23	993
Winchell, James F., Springfield, Ohio. Sewing-machine-needle attachment .....	290,161	Dec. 11	969	274	25	1066
Winchell, James F., Springfield, Ohio. Sewing-machine .....	290,162	Dec. 11	970	274	25	1066
Winchester, Gilman K., Providence, R. I. Stop-motion for braiding-machines .....	280,109	June 26	1845	520	23	2461
Winchester & Partridge Manufacturing Company. (See Wilcox, Edward M., assignor.) .....						
Winchester Repeating Arms Company. (See Gardner, John, assignor.) .....						
Winchester Repeating Arms Company. (See Mason, William, assignor.) .....						
Winchester Repeating Arms Company. (See Parker, Edward, assignor.) .....						
Winchester, Theodore H., New Haven, Conn. Feed-gage for printing-presses .....	277,396	May 8	1089	293	23	1820
Wine, M. J. (See Roberts, Robert R., assignor.) .....						
Wine, Miletus J. (See Baden, Thomas E., assignor.) .....						
Wine, Miletus J. (See Gheen, John S., assignor.) .....						
Wine, Miletus J., Washington, D. C. File-box .....	290,615	Dec. 18	1576	433	25	1179
Wine, Miletus J., Washington, D. C. File-box .....	290,616	Dec. 18	1577	{ 433 434 }	25	1179
Winebrener, John, Cromwell, Ind. Ice-hook .....	277,437	May 8	1141	307	23	1828
Wintree, Reuben. (See Taylor, Andrew W., assignor.) .....						
Winfree, Reuben, Keytesville, Mo. Horse hay-rake .....	290,725	Dec. 25	1727	477	25	1213
Wineman, Parker, Chicago, Ill. Two-wheeled vehicle .....	281,328	July 17	1239	343	24	231
Wing, Henry S., assignor to J. A. Wing, Ashtabula, Ohio. Carpet-stretcher .....	283,053	Aug. 14	692	194	24	630
Wing, Jennie A. (See Wing, Henry S., assignor.) .....						
Wing, Levi J., Brooklyn, N. Y. Grip for endless-cable ways .....	281,815	July 24	1870	511	24	345
Wing, Levi J., Brooklyn, N. Y. Ventilating apparatus .....	285,865	Oct. 2	107	32	25	21
Wingard, Adam, San Francisco, Cal. Dry-ore pulverizer and concentrator .....	289,791	Dec. 4	517	143	25	976
Wingate, Robert H., Wesson, Miss. Rail-supporter .....	288,907	Nov. 20	1399	386	25	707
Wingate, Thomas H. (See Woodward, T. Trask, assignor.) .....						
Winger, Elam B. (See Devore and Stover, assignors.) .....						
Winget, J. S. (See Winget, Marion A., assignor.) .....						
Winget, Marion A., assignor to J. S. Winget, Columbus, Ohio. Machine for coloring cigars .....	290,617	Dec. 18	1578	434	25	1179



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Wingfield, George W. (See Wingfield, John H., assignor.)						
Wingfield, John H., Milford, Conn., assignor to G. W. Wingfield, Brooklyn, N. Y. Carpet-lining	276,118	Apr. 17	1611	444	23	1518
Winghart, William J. (See Whiting and Winghart.)						
Winghart, William J., and W. H. Rochford, New York, N. Y. Hat-tip	274,873	Mar. 27	2090	580	23	1216
Winkelmann, Johann F. A., and M. L. Stewart, Schell City, Mo. Vehicle-reach	272,929	Feb. 27	1717	480	23	762
Winkler, Charles F., Bakersfield, Cal. Incubator	286,756	Oct. 16	1223	332	25	238
Winkler, Gustavus R., Williamsport, Pa. Rocking piston-engine	277,648	May 15	1398	376 377	23	1878
Winkless, William, Newport, Ky. Friction-clutch for elevators	285,866	Oct. 2	108	32	25	21
Winn, Ammi C. (See Barnes and Winn.)						
Winn, Charles, Birmingham, county of Warwick, England. Water-waste preventive for flushing water-closets	280,275	June 26	2039	574	23	2495
Winn, James H. (See Barnes and Winn, assignors.)						
Winn, James H., Benicia, assignor to Baker & Hamilton, San Francisco, Cal. Header	285,720	Sept. 25	1909	542	24	1257
Winn, John E., et al. (See Van Slyke, James M., assignor.)						
Winn, Walter W., Troy, N. Y. Apparatus for tempering and preparing clay for making brick	287,074	Oct. 23	1641	450 451	25	316
Winne, Francis, Orland, Cal. Tire-setter	275,967	Apr. 17	1420	391	23	1486
Winnen, Jacob, and A. Hensch, Chicago, Ill. Machine for cutting meat	289,051	Nov. 27	1583	437 438	25	807
Winslow, Charles F., Pawtucket, R. I. Pliers	289,052	Nov. 27	1586	438	25	807
Winslow, Henry O., assignor to E. Miller & Co., Meriden, Conn. Extension-chandelier	290,618	Dec. 18	1579	434	25	1179
Winsor, Ira. (See Jones, Idwal M., assignor.)						
Winsor, Joseph S., Providence, R. I. Loom for weaving flag matting	280,891	July 10	682	192 193	24	127
Winter, Albert, Plainfield, N. J. Cloth-measuring machine	270,870	Jan. 16	1284	370	23	265
Winter, Charles G., Boston, Mass. Skin-measuring machine	281,745	July 24	1771	482	24	326
Winter, David T., assignor to H. W. Winter, Peabody, Mass. Step-motion or safety-brake for machinery	289,949	Dec. 11	714	202	25	1019
Winter, Frederick, et al. (See Rinehart, Thomas M.)						
Winter, Frederick A., Thomson, Ga. Cartridge-loading machine	289,592	Dec. 4	276	77, 78	25	936
Winter, George K. (See Muirhead and Winter.)						
Winter, Helena W. (See Winter, David T., assignor.)						
Winter, Henry, Hanover, Ill. Hand-saw attachment	275,559	Apr. 10	907	246	23	1389
Winter, Herman, Brooklyn, N. Y., assignor to American Ship Windlass Company, Providence, R. I. Gearing-lubricator	276,987	May 1	588	155	23	1727
Winter, Herman, Brooklyn, N. Y., and F. S. Manton, assignors to American Ship Windlass Company, Providence, R. I. Power-windlass	276,988	May 1	589	155	23	1727
Winter, Martha A., Jersey City, N. J. Wardrobe	287,399	Oct. 23	2047	557	25	390
Winter, William, Albany, N. Y. Piano-pedal stool	280,163	Dec. 11	971	274	25	1066
Winterbottom, William S., Philadelphia, and J. Murray, Conshohocken, Pa. Bedstead	280,704	July 3	439	125	24	78
Winters, Milton I., Hamlin, Mich. Vehicle-wheel	287,075	Oct. 23	1642	451	25	317
Wire, Alfred P. (See Barff and Wire.)						
Wire, Theodore B., Geneva, Ohio. Car-dumper	280,430	July 3	115	31	24	22
Wirrick, John A. (See Cochran, John, Jr., assignor.)						
Wirsching, Aloys, Brooklyn, N. Y. Printing-telegraph	286,667	Oct. 16	1115	300 301	25	218
Wirt, Paul E., Bloomsburg, Pa. Fountain-pen	288,290	Nov. 13	619	170	25	624
Wirth, Richard. (See Giersberg and Wirth.)						
Wise, August B. and M. D., Piqua, Ohio. Thill-coupling	275,740	Apr. 10	1131	309	23	1428
Wise, David, Paradise, Tex. Seed-planter	277,397	May 8	1090	293	23	1820
Wise, David, Cottondale, Tex. Cultivator	286,983	Oct. 16	1517	417	25	287
Wise, Joseph, assignor to J. Wise & Son, Watertown, N. Y. Combined drawer pull and lock	277,398	May 8	1091	293	23	1820
Wise, Michael D. (See Wise, August B. and M. D.)						
Wise & Son, J. (See Wise, Joseph, assignor.)						
Wise, Zenas L., et al. (See Williams, Paul W., assignor.)						
Wiseman, Edmund, Luton, county of Bedford, England. Presser-foot for straw-braid sewing-machines	285,333	Sept. 18	1431	404	24	1166
Wiseman, Ella, Fulton, Cal. Dish-washing machine	281,598	July 17	1573	430	24	287
Wiser, Samuel C., Chicago, Ill. Stock-car	274,240	Mar. 20	1285	354	23	1071
Wishard, Joseph, Indianapolis, Ind. Spring bed-bottom	273,660	Mar. 6	535	144	23	925
Wishard, Lucinda B. J., assignor of two-thirds to H. E. Drew and R. E. Springsteen, Indianapolis, Ind. Doll	280,986	July 10	800	223	24	147
Wisner, Son & Co., J. O. (See Heath, James S., assignor.)						
Wisniewski, Anton, et al. (See Klein, Joseph, assignor.)						
Wistance, Edward H., Springfield, Ohio. Fertilizer-distributor	286,361	Oct. 9	736	197	25	144
Wiswall, Alvah, assignor of one-half to M. Britton, Cincinnati, Ohio. Electric burglar-alarm	285,334	Sept. 18	1431	405	24	1166
Wiswall, Alvah, assignor of one-half to M. Britton, Cincinnati, Ohio. Portable circuit-closer for electric alarms	286,100	Oct. 2	396	109	25	73
Wiswall, Alvah, assignor of one-half to M. Britton, Cincinnati, Ohio. Protecting device for bank-safes	286,566	Oct. 9	982	264	25	188
Wiswall, Alvah, assignor to F. Voelckel, Cincinnati, Ohio. Electro-magnetic alarm	286,888	Oct. 16	1396	383	25	267
Wiswall, Francis, and W. H. Collier, Manchester, county of Lancaster, England. Construction of river and other weirs and sluice-gates	281,599	July 17	1574	430 515	24	287
Wiswell, Frederick A., Beebe Plain, assignor to C. C. Colby, Stanstead, Quebec, Canada. Manufacturing wire ropes and cables	276,315	Apr. 24	1850	516 517	23	1567
Wiswell, Frederick A., Beebe Plain, assignor to C. C. Colby, Stanstead, Quebec, Canada. Manufacturing wire rope	276,316	Apr. 24	1857	517 518	23	1567
Wiswell, Frederick A., Beebe Plain, assignor to C. C. Colby, Stanstead, Quebec, Canada. Machine for the manufacture of wire rope	276,317	Apr. 24	1861	518 519	23	1568
Wiswell, Frederick A., Beebe Plain, assignor to C. C. Colby, Stanstead, Quebec, Canada. Machine for making wire rope	276,318	Apr. 24	1870	519 520	23	1569
Wiswell, George T., assignor to G. H. Warren, Shelburne Falls, Mass. Fork-guard	286,668	Oct. 16	1119	301	25	219
Wiswell, James M., et al. (See Ferguson, Robert W., assignor.)						
Wiswell, James M., et al. (See Foster, Hickman E., assignor.)						
Witherell, Alonzo E., Medford, and D. B. Clement, Boston, Mass. Bung-valve for barrels	288,390	Nov. 13	767	207	25	648
Witherow, James P. (See Gordon, Fredrick W., assignor.)						
Withers, Walter S., Atlanta, Ga. Molder's jointless plate	279,627	June 19	1264	350 351	23	2353
Witherspoon, Frank, Paris, Tex. Windmill	279,066	June 5	557	153	23	2218

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Withington, James, Chambersburg, assignor to Trenton Iron Company, Trenton, N. J. Acid-tank	274,241	Mar. 20	1285	354	23	1071
Withington, James, Chambersburg, assignor to Trenton Iron Company, Trenton, N. J. Belt-tightener	280,276	June 26	2041	574	23	2496
Withrow, Mathew M., Sherman, Ill. Flood-fence	284,523	Sept. 4	451	128	24	981
Witman, George. (See Weldy and Witman.)						
Witmer, Joseph, Hope, Ark. Sawing attachment to planing-machine	288,147	Nov. 6	436	123	25	584
Witmer, Tobias, Williamsville, N. Y. Raising and supporting ladders	271,289	Jan. 30	1809	524	23	366
Witsil, George L., Camden, assignor to A. J. Delp, Woodbury, N. J. Button-hook	277,181	May 8	848	225	23	1777
Witt, Otto N. (See Koehlin and Witt.)						
Witt, Pleasant, Conking, Tenn. Lifting-jack	280,000	June 26	1712	480	23	2437
Witte, William. (See Manneck and Witte.)						
Wittich, Frederick A. (See Southwick and Wittich.)						
Wittich, Frederick A. (See Strader and Wittich.)						
Wittich, Frederick A., and P. W. Strader, Ashtabula, Ohio. Attaching elevator-buckets to belts	281,746	July 24	1773	483	24	327
Wittman, George, assignor to D. Neustadter, San Francisco, Cal. Drawers	281,816	July 24	1872	511	24	345
Wittman, George, assignor to David Neustadter, San Francisco, Cal. Drawers	285,195	Sept. 18	1277	359	24	1137
Witzmann, Franz, New Haven, Conn. Stave-cutting machine	271,290	Jan. 30	1809	524	23	366
Wock, John, Canton, Ohio. Pump	285,093	Sept. 18	1156	323	24	1116
Wode, August, and J. Mifflin, Jr., Jersey City, N. J. Clothes-hook	285,094	Sept. 18	1157	323	24	1116
Woer, Amos, Davenport, Iowa. Two-wheeled vehicle	277,968	May 22	1776	484	23	1950
Woer, Amos, assignor of one-fourth to J. E. Bloom, Cincinnati, Ohio. Flying target	287,985	Nov. 6	252	72	25	551
Woelk, Edward A., Springfield, Mo., assignor to American Bell Telephone Company, Boston, Mass. Alarm-signal apparatus for telephone-exchanges	272,505	Feb. 20	1163	326	23	658
Woepell, Ignatz, assignor to S. Shepard & Co., Buffalo, N. Y. Tea-kettle handle	290,956	Dec. 25	2018	557	25	1262
Woerd, Charles V., Waltham, Mass. Rolling-machine	270,170	Jan. 2	404	117	23	82
Woerd, Charles V., Waltham, Mass. Watch	271,965	Feb. 6	458	125	23	521
Woerd, Charles V., Waltham, Mass. Apparatus for grinding lathe-cutters	271,966	Feb. 6	460	126	23	521
Woerd, Charles V., Waltham, Mass. Machine for pointing, drilling, and tapping watch-balances	271,967	Feb. 6	461	126	23	521
Woerd, Charles V., Waltham, Mass. Velocipede	288,537	Nov. 13	944	258	25	680
Wogaman, Frank, <i>et al.</i> (See Kienardt, John A., assignor.)						
Wohlens, Emil, New York, N. Y. Injector	276,319	Apr. 24	1874	520	23	1570
Wohlmann, Wilhelm, New York, N. Y. Catarrh remedy	276,119	Apr. 17	1611		23	1518
Wohnlich, Louis J., assignor to R. J. Scholes, W. and A. McFarland, Detroit, Mich. Capsule-stripper	270,716	Jan. 16	1105	316	23	231
Wolcott, Joseph L., assignor to Shaw, Kendall & Co., Toledo, Ohio. Relief-cock	273,213	Feb. 27	2064	580	23	823
Wolcott, Nelson A., Elmhurst, N. Y. Double-acting pump	278,208	May 22	2075	572	23	2003
Wolcott, Townsend, New York, N. Y. Armature for dynamo-electric machines	286,247	Oct. 9	574	158	25	115
Wolf, Abraham N., Allentown, Pa. Grinding-mill	279,067	June 5	558	153	23	2219
Wolf, Abraham N., assignor of one-half to W. Wood, Allentown, Pa. Roller-mill	288,750	Nov. 20	1217	333	25	733
Wolf, Atchison and J., Roanoke, Ind. Pitman-coupling	275,560	Apr. 10	908	246	23	1389
Wolf, Augustus, <i>et al.</i> (See Hunter, Edwin, assignor.)						
Wolf, David, Avon, Pa. Horse-power	269,980	Jan. 2	184	54	23	38
Wolf, Frederick W. (See Weing, Paul, assignor.)						
Wolf, Frederick W., Chicago, Ill. Discharge-valve for maltsters' steep-tanks	282,477	July 31	2715	747	24	493
Wolf, George, <i>et al.</i> (See Le Grande, William W., assignor.)						
Wolf, George W. (See Rogers and Wolf.)						
Wolf, Jacob D. (See Washington, George L., assignor.)						
Wolf, John. (See Wolf, Atchison and J.)						
Wolf, Leopold, New York, N. Y. Toilet-case	279,302	June 12	855	237	23	2279
Wolf, Max, Brooklyn, N. Y. Fluid-measure	276,652	May 1	132	35	23	1649
Wolf, Paul. (See Platz, Rudolf, assignor.)						
Wolf, Samuel. (See Willmer, Samuel L., assignor.)						
Wolfe, Charles A., <i>et al.</i> (See Wolfe, Harvey R., assignor.)						
Wolfe, Edward W., assignor to Reading Iron Works, Reading, Pa. Machine for pushing tubes into furnaces	275,312	Apr. 3	548	149	23	1319
Wolfe, Harvey R., assignor to C. A. Wolfe, T. Brennan, W. G. Munna, and J. Leamy, Louisville, Ky. Smoke-consuming furnace	272,930	Feb. 27	1718	480	23	762
Wolfe, Horace S., assignor of three-fourths to W. H. McCourtie and C. Kellogg, Kalamazoo, Mich. Car-step	290,957	Dec. 25	2018	557	25	1262
Wolfe, William C., Hagerstown, Md. Portable steam-engine	284,701	Sept. 11	669	188	24	1023
Wolffenden, Shore & Co. (See Kaye, John, assignor.)						
Wolff, Arthur J. (See Miltmore and Wolff.)						
Wolff, George, and M. Wieser, New York, N. Y. Registering-turnstile	274,431	Mar. 20	1524	419	23	1112
Wolff, Justus, assignor to Albany Aniline and Chemical Works, Albany, N. Y. Production of coloring-matters from diazoamid compounds	277,182	May 8	849		23	1777
Wolff, Justus, assignor to Albany Aniline and Chemical Works, Albany, N. Y. Manufacture of cardinal-red coloring-matter	285,335	Sept. 18	1433		24	1166
Wolff, Lewis, London, England. Eraser	286,889	Oct. 16	1396	383	25	267
Woltinger, Francis R., Chicago, Ill. Window-sash	288,751	Nov. 20	1218	333	25	733
Wolfrath, William H., New York, N. Y. Sash-fastener	280,987	July 10	801	223	24	147
Wolston, Romannus T., and S. W. Printz, Bonanza, Colo. Thill-coupling	276,120	Apr. 17	1612	444	23	1518
Wollensak, John F., Chicago, Ill. Bell	281,747	July 24	1775	483	24	327
Wolley, Albert L. (See Coffield, Peter T., assignor.)						
Wolstenholme, Thomas, <i>et al.</i> (See Maybury, William, assignor.)						
Womack, Alexander, Emmettsville, Idaho Terr. Road-scraper	282,141	July 31	2291	629	24	421
Womelsdorf, James W., Middleport, Ohio. Railway-ticket	286,101	Oct. 2	397	109	25	73
Womelsdorf, James W., assignor of one-half to F. L. Hersey, Guyandotte, W. Va. Ratchet-wrench	272,822	Feb. 20	1561	439	23	729
Wommack, Jesse H. (See Allmon, Wommack, and Highfill.)						
Wood, Alexander M., <i>et al.</i> (See Venner, Orange H., assignor.)						
Wood, Alfred, assignor of sixty-six one-hundredths to H. H. Humphrey and S. W. Itself, Detroit, Mich. Mechanical speeding device	286,890	Oct. 16	1397	384	25	267
Wood, Augustus B., Fountain Hill, Ark. Seed-planter	285,336	Sept. 18	1433	405	24	1166
Wood, Augustus B., Fountain Hill, Ark. Rotary steam-engine	286,102	Oct. 2	398	109	25	73
Wood, Aurin, Worcester, Mass. Belt-pulley	280,775	July 3	547	152	24	96
Wood, Aurin, Worcester, Mass. Shaft-coupling	289,329	Nov. 27	1917	532	25	870
Wood, Calvin M., and R. M. Healdsburg, Cal. Car-axle box	273,928	Mar. 13	886	242	23	933
Wood, Charles A., Philadelphia, Pa. Sewing-machine	283,449	Aug. 21	1189	334	24	727
Wood, Edmund L., Eastland, Tex. Combined blacking-brush and blacking-box holder	275,107	Apr. 3	297	82	23	1277



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Wood, Edwin A., Thompson, assignor of two-thirds to E. F. Brock and J. Bircher, Sterling, Ill. Child's carriage	270,561	Jan. 9	903	261	23	186
Wood, Elbridge J., Palmer, Mass. Book-holder	290,381	Dec. 18	1256	352	25	1124
Wood, Emery M., Chicago, Ill. Device for handling eggs	283,738	Aug. 21	1529	431	24	791
Wood, Frank B., assignor, by mesne assignments, to Gamewell Fire Alarm Telegraph Company, New York, N. Y. Automatic signaling apparatus	275,005	Apr. 3	154	43	23	1252
Wood, Frank B., assignor, by mesne assignments, to Gamewell Fire Alarm Telegraph Company, New York, N. Y. Automatic electric signaling apparatus	275,006	Apr. 3	159	43	23	1253
Wood, George B., Chicago, Ill. Animal trap	280,431	July 3	116	31, 32	24	22
Wood, George H. (See Thayer, George B., assignor.)						
Wood, George H., Springfield, Mass. Bench-vise	274,242	Mar. 20	1286	354	23	1071
Wood, Harvey, Albany, N. Y. Wagon-tongue support	272,150	Feb. 13	738	204	23	580
Wood, James F., Woodyards, Ohio. Cane-mill	280,705	July 3	440	126	24	78
Wood, James J., Brooklyn, N. Y. Electric lamp	279,512	June 12	1123	{ 312 313 299 }	{ 23 23 23 }	{ 2322 2314 1719 }
Wood, James J., Brooklyn, assignor to Fuller Electrical Company, New York, N. Y. Electric lamp	279,472	June 12	1076	{ 298 299 }	{ 23 23 }	{ 2279 1179 }
Wood, James S., Aledo, Ill. Hinge for sliding and rolling gates	276,949	May 1	543	142	23	1719
Wood, John, Cooperstown, N. Y. Car-coupling	279,303	June 12	856	237	23	2279
Wood, John F., Boston, Mass. Combined knife-brick box and grinder	290,619	Dec. 18	1580	434	25	1179
Wood, John H., assignor of one-half to F. L. McGowan, Boston, Mass. Stopper for jars and bottles	272,823	Feb. 20	1561	439	23	729
Wood, John M., assignor of two-thirds to W. H. Busser and M. M. Fouts, New Castle, Ind. Two-wheeled vehicle	272,396	Feb. 13	1016	284	23	627
Wood, Joseph S. (See Hadden and Wood.)						
Wood, Joseph S., Brooklyn, N. Y. Disinfecting apparatus	287,208	Oct. 23	1811	497	25	347
Wood, Joseph S., Brooklyn, N. Y. Gas-machine	288,752	Nov. 20	1219	333	25	734
Wood, Joseph S., Brooklyn, N. Y. Gas-machine	289,593	Dec. 4	278	78	25	936
Wood, Lorenzo D. C., Newark, N. J., and T. B. Dorrell, Brooklyn, N. Y. Fire-kindler	286,103	Oct. 2	399	109	25	73
Wood, Lyman C., and J. S. Taylor, Wichita, Kans. Thill-coupling	282,021	July 24	2117	580	24	386
Wood Mowing and Reaping Machine Company, Walter A. (See Rosebrooks, John M., assignor.)						
Wood, Myron G., Church's Corners, assignor of one-half to E. Van Patin, Wheatland, Mich. Cattle-stanchion	290,620	Dec. 18	1581	435	25	1180
Wood, Richard G., assignor of one-half to A. W. Osler, Cincinnati, Ohio. Carriage-coupling	282,142	July 31	2291	629	24	421
Wood, Richard G., assignor to Cincinnati Sulky Buggy Company, Cincinnati, Ohio. Two-wheeled vehicle	288,538	Nov. 13	945	258	25	680
Wood, Reldo M. (See Wood, Calvin M. and R. M.)						
Wood, Thomas W., assignor of one-half to T. M. Shaffo, Asbury Park, N. J. Spirit-level	280,706	July 3	441	126	24	78
Wood, W. Dewees. (See Morgan, Thomas K., Sr., assignor.)						
Wood, Walter J., Atlanta, Ga. Store-shelf	279,068	June 5	558	153	23	2219
Wood, William A., Meadville, Mo. Railway-switch	280,988	July 10	802	223	24	148
Wood, William B., Bowling Green, assignor of one-half to L. C. Garrigus, Russellville, Ky. Railway crossing and station signal	275,313	Apr. 3	549	149	23	1319
Wood, William E., Houston, Tex. Cap	290,621	Dec. 18	1582	435	25	1180
Wood, William H., assignor of one-half to D. G. Weaver, Rochester, N. Y. Insole for boots	278,302	May 22	2212	{ 606 607 }	{ 23 23 }	{ 2026 1971 }
Wood, William M., and W. L. Bailie, U. S. Navy. Compressing engine or pump	278,068	May 22	1891	518	23	1971
Wood, William M., and W. L. Bailie, Washington, D. C. Ice-machine	283,054	Aug. 14	693	1945	24	630
Wood, Winslow. (See Wolf, Abraham N., assignor.)						
Woodard, James H., assignor of one-half to J. W. Sherwood, Indianapolis, Ind. Machine for sealing newspapers	285,337	Sept. 18	1434	405	24	1166
Woodard, James H., assignor of one-half to J. W. Sherwood, Indianapolis, Ind. Seal for newspapers	285,370	Sept. 18	1480	417	24	1173
Woodard, Lyman E., Owosso, Mich. Horse-collar	272,824	Feb. 20	1562	439	23	729
Woodard, Stephen, Delano, Minn. Siding-bracket	276,950	May 1	544	142	23	1719
Woodard, William H., Cleveland, Ohio. Vapor-burner	281,423	July 17	1354	373	24	251
Woodbridge, James E., assignor to himself and F. N. Gardner, Hartford, Conn. Die for cutting screw-threads	309,981	Jan. 2	186	54	23	39
Woodbridge, William E., Washington, D. C. Wire-wound gun	271,561	Jan. 30	2157	621	23	428
Woodbury, Charles J. H., Lynn, Mass. Electric testing apparatus	274,074	Mar. 13	1060	293	23	1024
Woodbury, Clark. (See Sawyer, Woodbury, and Lane.)						
Woodbury, Clark, assignor of one-half to E. A. Allen, Oldtown, Me. Safety device and cut-off for chimney-funnels	278,069	May 22	1893	519	23	1971
Woodbury, Daniel A., Rochester, N. Y. Life-preserver	276,121	Apr. 17	1613	444	23	1518
Woodbury, Edward F. (See Woodbury, Merrill, Patten, and Woodbury.)						
Woodbury, George E., San Francisco, Cal. Street-sweeping machine	274,164	Mar. 20	1184	326	23	1053
Woodbury, James A., J. Merrill, G. Patten, and E. F. Woodbury, Boston, Mass. Air-engine heater	289,484	Dec. 4	142	39	25	911
Woodbury, James A., J. Merrill, G. Patten, and E. F. Woodbury, Boston, Mass. Heater for air-engines	289,485	Dec. 4	143	40	25	911
Woodbury, Joseph D., Springfield, Mass. Hair-crimper	283,183	Aug. 14	847	237	24	657
Woodbury, Madison L., St. Albans, Vt. Compound packing for hot journals on cars, &c.	280,277	June 26	2042		23	2496
Woodbury, Oscar D., New York, N. Y. Stop for spring-rollers	285,772	Sept. 25	1984	561	24	1269
Woodbury, Seth D., Lynn, Mass. Fire-escape	282,478	July 31	2717	748	24	494
Woodcock, Richard. (See Bushey and Woodcock.)						
Woodcock, William, Elizabeth, N. J. Brake-beam for railway-cars	270,871	Jan. 16	1286	370	23	265
Woodcock, William, Elizabeth, N. J. Metallic brake-beam	276,122	Apr. 17	1615	444	23	1519
Woodford, Hervey M., Marcellus, N. Y. Wagon-tongue support	284,529	Sept. 4	452	128	24	981
Woodford, Romanta D., Cortland, N. Y. Vehicle-seat lock	281,600	July 17	1576	431	24	287
Woodhouse, Thomas, Plainville, Conn. Machine for cutting and folding strips of cloth	273,790	Mar. 13	716	194	23	965
Woodin, Charles M., Everett, Mass. Slat-supporter for bedsteads	273,332	Mar. 6	120	34	23	854
Wooding, Ralph A. (See Griswold and Wooding.)						
Wooding, Ralph A., Kensington, assignor to C. Parker Company, Meriden, Conn. Shading clamp	273,420	Mar. 6	231	62	23	873
Wooding, Ralph A., Kensington, assignor to C. Parker Company, Meriden, Conn. Extension-fixture for chandeliers	281,656	July 17	1649	450	24	300
Woodlie, George T., and G. R. Dunn, Calvert, Tex. Boot and shoe indicator	275,108	Apr. 3	298	82	23	1277
Woodman, Horace, Saco, Me. Mechanism for stripping the top-flats of carding-engines	280,774	July 3	545	152	24	96
Woodman, Joel H., New York, N. Y. Seat and back of chairs, settees, car-seats, &c.	271,757	Feb. 6	206	58	23	476
Woodman, Joseph C., assignor to F. H. & D. Briggs & Co., Auburn, Me. Shirt	271,180	Jan. 23	1673	481	23	334
Woodman, Robert, Malden, Mass. Ticket-punch	285,867	Oct. 2	109	32	25	21
Woodman, William F., and J. C. Johansen, Easton, Pa. Combined sofa and lounge	276,123	Apr. 17	1615	445	23	1519

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Woodmancy, Henry F. (See Taft and Woodmancy.)						
Woodrough, James R., Cincinnati, Ohio. Saw-handle.	272,007	Feb. 6	518	139	23	529
Woodruff, Brock, Albert Lea, Minn. Treating iron.	286,104	Oct. 2	400		25	73
Woodruff, Eliza M., <i>et al.</i> (See Woodruff, Theodore T., assignor.)						
Woodruff, Isaac B., Winsted, Conn. Striking apparatus for clocks and alarms	284,583	Sept. 4	518	145	24	991
Woodruff, Isaac B., G. B. Owen, and H. W. Beecher, assignors to W. L. Gilbert Clock Company, Winsted, Conn. Clock-pendulum	287,604	Oct. 30	2328	629	25	451
Woodruff, John N., Fairton, N. J. Oyster-dredge.	284,156	Aug. 28	2070	575	24	896
Woodruff, Joseph, Rahway, N. J. Blower.	270,271	Jan. 9	524	154	23	113
Woodruff, Joseph, Rahway, N. J. Balanced feed-water regulator	273,929	Mar. 13	888	243	23	994
Woodruff, M. N., <i>et al.</i> (See Pearce, William, assignor.)						
Woodruff, Nelson, Grand Rapids, Mich. Burial-case	277,969	May 22	1777	484	23	1950
Woodruff, Nelson, Grand Rapids, Mich. Burial-case	277,970	May 22	1777	485	23	1950
Woodruff, Stephen L., Chicago, Ill. Toy target.	288,605	Nov. 13	1028	282	25	696
Woodruff, Theodore T., assignor to E. M. Woodruff and I. I. Gerson, Philadelphia, Pa. Folding bedstead	276,546	Apr. 24	2148	598	23	1618
Woodruff, William N. (See Johnson, Moses C., assignor.)						
Woodruff, William P., New York, N. Y. Steam and other packing	271,390	Jan. 30	1939	561	23	390
Woods, Benjamin F., Arlington, Mass. Apparatus for filtering and purifying sewage, &c.	272,997	Feb. 27	1792	501	23	775
Woods, Henry T. (See Carter and Woods.)						
Woods, John, Melbourne, Victoria. Railway-brake	273,214	Feb. 27	2065	580	23	823
Woods, William A. (See Garcelon and Woods.)						
Woods, William A., Woodford's Corner, Me., assignor to himself and L. A. Williams, Boston, Mass. Steam snow-shovel	278,382	May 29	2330	637	23	2055
Woodside, Thomas F., Modesto, Cal. Folding crate for fowls	275,968	Apr. 17	1421	392	23	1487
Woodside, Thomas F., Modesto, Cal. Crate for fowls	275,969	Apr. 17	1422	392	23	1487
Woodward, Abel B. (See Woodward, William and A. B.)						
Woodward, Abijah, Keene, N. H. Turbine	280,001	June 26	1713	480	23	2437
Woodward, Abner, Shelburne Falls, Mass. Combined milk bucket and stool	271,291	Jan. 30	1810	525	23	367
Woodward, Abner, Shelburne Falls, Mass. Combined milk-stool and bucket-holder	271,292	Jan. 30	1811	525	23	367
Woodward, Abner, Shelburne Falls, Mass. Milk-bucket	271,293	Jan. 30	1811	525	23	367
Woodward, David, Clinton, Mich. Plow-jointer	281,817	July 24	1873	512	24	345
Woodward, Delbert K., Lordstown, Ohio. Easel attachment	280,278	June 26	2042	574	23	2496
Woodward, Delbert K., Lordstown, Ohio. Easel.	280,279	June 26	2043	574	23	2496
Woodward, Ferdinand, Sacramento, Cal. Car-coupling	284,769	Sept. 11	785	218	24	1042
Woodward, Frank R., Hill, N. H. Fire-escape	287,491	Oct. 30	2168	588	25	421
Woodward, Frank R., Hill, N. H. Fire-escape	287,492	Oct. 30	2169	588	25	421
Woodward, James N., <i>et al.</i> (See Shields, Francis M., assignor.)						
Woodward, Orrin L. (See Woodward, Oscar H. and O. L.)						
Woodward, Oscar H. and O. L., Clinton Junction, Wis. Lock	279,112	June 5	632	172	23	2230
Woodward, Stephen, assignor of one-half to F. Flanders, Franklin, N. H. Knitting-machine	288,962	Nov. 20	1467	405	25	780
Woodward, T. Trask, assignor to D. T. Davis, Pana, Ill. Vapor-burner	270,194	Jan. 2	431	125	23	88
Woodward, T. Trask, Pana, assignor of one-half to T. H. Wingate, Decatur, Ill. Vapor-burner	272,998	Feb. 27	1793	502	23	775
Woodward, T. Trask, Pana, assignor of one-half to T. H. Wingate, Decatur, Ill. Vapor-burner	272,999	Feb. 27	1794	502	23	775
Woodward, Thomas C., New York, N. Y., and C. M. Fairbanks, Hartford, Conn., assignors to E. A. Wilkinson, Newark, N. J. Sewing-machine treadle	270,920	Jan. 23	1353	390	23	283
Woodward, William and A. B., Nashville, Tenn. Brick-machine	283,184	Aug. 14	847	{ 237 238 }	24	657
Woodworth, Albert L. (See Goodwin, James T., assignor.)						
Woodworth, Laurin D. (See Lane and Woodworth.)						
Woodworth, Laurin D., Youngstown, Ohio. Mold for glass tiles for floors, &c	286,984	Oct. 16	1519	{ 417 418 }	25	287
Woodworth, Orson H., Columbia City, Ind. Clock-alarm	271,012	Jan. 23	1470	422	23	301
Woodworth, Robert D., Orange, N. J. Telephone-transmitter	274,075	Mar. 13	1062	293	23	1024
Woolard, Francis M., Fairfield, Ill. Poultry-coop	275,314	Apr. 3	550	{ 149 150 }	23	1320
Wooldrige, Silas H., Venice, Ill. Vehicle-spring	284,582	Sept. 4	517	145	24	991
Woolever, Lester B., Austinburg, Ohio. Millstone-dress	291,010	Dec. 25	2096	578	25	1274
Woolley, Leonidas G., assignor, by mesne assignments, to Ohio Power and Light Company, Dayton, Ohio. Combined steam-engine and electric generator	286,985	Oct. 16	1521	418	25	288
Woolsey, John B., Bloomfield, Iowa. Trace-buckle	270,534	Jan. 9	869	253	23	180
Woolsey, John S., Gilroy, Cal. Road-engine	285,942	Oct. 2	211	59	25	40
Woolson, Orosco C., Newark, N. J. Rope-driving apparatus	285,095	Sept. 18	1158	323	24	1116
Woolson, Orosco C., Newark, N. J. Rope-driving apparatus. (Reissue.)	10,407	Nov. 20	1471	406	25	781
Wooster, Daniel B., Marshfield, Vt. Milk-cooler	275,315	Apr. 3	552	150	23	1320
Wooster, Daniel B., Marshfield, Vt. Milk-cooler	285,773	Sept. 25	1985	562	24	1269
Wooster, Daniel B., Northfield, Vt. Churn	282,143	July 31	2293	629	24	421
Worcester, Edward J., Worcester, Mass. Drilling-machine	274,243	Mar. 20	1288	355	23	1071
Worcester, Edward J., Worcester, Mass. Drilling-machine	287,209	Oct. 23	1812	497	25	348
Worcester, William W., Cincinnati, Ohio. Fence stay or brace	275,007	Apr. 3	163	43	23	1254
Worden, Catharine A., Jersey City, N. J. Abdominal supporter	283,734	Aug. 21	1523	430	24	790
Worden, Edwin E. (See Grover and Worden.)						
Worden, Oliver E., assignor to himself and M. J. Schnbert, Pierre, Dak. Ter. Frying-pan	283,314	Aug. 14	1008	282	24	688
Worden, William S., Kearney Junction, Nebr. Drawing apparatus	280,432	July 3	119	32	24	22
Work, Charles L., Mount Vernon, Ohio. Book-holder	272,006	Feb. 6	518	139	23	530
Worline, Chauncey E., Radnor, Ohio. Clamp device	282,479	Jan. 31	2718	748	24	494
Worn, Philip J., and P. A. O. Kober, Philadelphia, Pa. Play-bill holder	286,757	Oct. 16	1231	332	25	238
Worrall, Hodgetts F. (See Perry, William L., assignor.)						
Worrall, Thomas D., Concord, N. H. Corner for picture-frames	269,907	Jan. 2	100	30	23	21
Worswick, James E., Montgomery, Ala. Device for removing piston-rods from cross-heads	282,828	Aug. 7	421	119	24	575
Worswick, William W., and N. W. Cutter, Cleveland, Ohio. Journal-box	289,053	Nov. 27	1566	439	25	807
Worth, William H., Petaluma, Cal. Horse-power	276,320	Apr. 24	1876	{ 520 521 }	23	1570
Wortham, John B., assignor of one-half to G. S. Crane, Winchester, Va. Syringe-piston	282,144	July 31	2294	630	24	421
Worthen, Edgar C., assignor to W. C. Morgan, Charlotte, N. C. Gearing for changing speed	278,070	May 22	1893	519	23	1971
Worthen, Edgar C., assignor to W. C. Morgan, Charlotte, N. C. Hay and cotton press	287,750	Oct. 30	2518	679	25	487
Worthington, Charles C. (See Hines, Perry, and Worthington.)						
Worthington, Charles C., <i>et al.</i> (See Levitt, Erasmus D., Jr., assignor.)						
Worthington, Charles C., Irvington, N. Y. Duplex engine	283,315	Aug. 14	1008	282	24	688
Worthington, David S., Dunham, Ill. Clothes-bar	288,148	Nov. 6	437	123	25	584



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Worthington, George, Howard County, Md. Exercising apparatus.....	277,399	May 8	1093	294	23	1820
Worthington, James K., Kirkwood, assignor of one-tenth to W. T. Gauss, St. Louis, Mo. Bundle carrier and dropper for harvesters.....	282,942	Aug. 7	532	156	24	599
Worthington, Frank O., Boston, Mass. Standard for garden hose-pipes and sprinklers.....	271,562	Jan. 30	2159	621	23	428
Wortley, A. H. P. Stuart, London, county of Middlesex, England. Gas-stove.....	286,160	Oct. 2	464	126	25	86
Wortley, A. H. P. Stuart, London, county of Middlesex, England. Type-writing machine.....	286,161	Oct. 2	465	127	25	86
Wray, Robert T. (See Herron and Wray.)						
Wray, Simon T., assignor of one-half to W. F. Supple, Buffalo, N. Y. Polishing or huffing wheel.....	275,561	Apr. 10	909	246	23	1390
Wren, William A., assignor of one-half to J. M. Blythe, Indianapolis, Ind. Machine for bending iron.....	275,741	Apr. 10	1132	310	23	1428
Wren, William C., assignor to W. C. Benjamin, Brooklyn, N. Y. Refrigerator and means for producing artificial cold.....	277,649	May 15	1402	377	23	1878
Wrenn, Aurelius, <i>et al.</i> (See Whitehurst, Robert W., assignor.)						
Wrenn, McDonald L., <i>et al.</i> (See Whitehurst, Robert W., assignor.)						
Wright, Alexander, Potsdam, N. Y. Wheelwright's tool.....	275,742	Apr. 10	1133	310	23	1428
Wright, Andrew, Robnerville, Cal. Hand-loom.....	273,333	Mar. 6	120	34	23	854
Wright, Anna M. (See Wright, William E., assignor.)						
Wright, Augustus, Providence, R. I. Support for electric cables.....	277,528	May 15	1255	337	23	1854
Wright, Benjamin F., assignor of one-half to J. P. Raymond, Hartwell, Ohio. Target-trap.....	276,124	Apr. 17	1616	445	23	1519
Wright, Benjamin F., assignor of one-half to J. P. Raymond, Hartwell, Ohio. Flying target.....	276,125	Apr. 17	1618	445	23	1519
Wright, Benjamin G., Osceola, Iowa. Wall-paper hanger.....	286,669	Oct. 16	1120	302	25	219
Wright, Caleb, assignor to J. B. Rohrer, Philadelphia, Pa. Sheet-metal-seaming machine.....	284,584	Sept. 4	519	{ 145 146 }	24	992
Wright, Charles A., Philadelphia, Pa. Gilder's gold-leaf-carrying apparatus.....	289,486	Dec. 4	144	40	25	911
Wright, Charles A., Philadelphia, Pa. Machine for gilding cards.....	290,303	Dec. 18	1154	{ 323 324 }	25	1105
Wright, Charles A., assignor to A. Collins, E. Cope, and H. H. Collins, Philadelphia, Pa. Manufacturing picture mounts and frames.....	275,316	Apr. 3	553	151	23	1320
Wright, Charles A., assignor to himself and E. C. Hathaway, Boston, Mass. Ear for attaching bails to pails.....	283,316	Aug. 14	1010	283	24	688
Wright, Charles D., and C. A. Fisher, Petersburg, Ill. Cut-out for telephones.....	288,908	Nov. 20	1400	386	25	767
Wright, Charles D., and C. A. Fisher, Petersburg, Ill. Automatic resistance cut-out for telephones.....	288,909	Nov. 20	1402	{ 386 387 }	25	768
Wright, Charles L., New York, N. Y. Coloring photographs.....	290,655	Dec. 18	1623	.....	25	1187
Wright, D. Pratt, (See Groesbeck, Sterling, Ball, and Wright.)						
Wright, Edmund, <i>et al.</i> (See Wright and Bechter, assignors.)						
Wright, Edward, assignor to Wright Machine Company, Worcester, Mass. Governor.....	283,842	Aug. 28	1661	469	24	825
Wright, George, Brooklyn, N. Y. Furniture-varnish.....	283,450	Aug. 21	1190	.....	24	727
Wright, George M., <i>et al.</i> (See Shoup, James C., assignor.)						
Wright, Gilbert A., L. H. Fowler, and S. Shaw, Napa City, Cal. Two-wheeled vehicle.....	269,982	Jan. 2	187	54	23	39
Wright, Hezekiah, Ava, N. Y. Shingle-sawing machine.....	290,164	Dec. 11	972	274	25	1067
Wright, Homer, Pittsburg, Pa. Spring-jug-top.....	274,244	Mar. 20	1289	345	23	1071
Wright, Horace A. (See Bower, James, assignor.)						
Wright, Howell W., New York, assignor to A. J. Brownell, Brooklyn, N. Y. Lamp.....	271,181	Jan. 23	1674	482	23	335
Wright, J. Thompson, New Albany, Ind. Car-coupling.....	272,009	Feb. 6	519	139	23	530
Wright, Jacob P., New Haven, assignor to Diamond Match Company, Westville, Conn. Planer-chuck.....	286,362	Oct. 9	737	{ 197 198 }	25	144
Wright, John. (See Wright, William A., assignor.)						
Wright, John H., Bridgeport, Conn. Friction-clutch.....	288,291	Nov. 13	621	170	25	624
Wright, Joseph, and J. M. Bechter, assignors to said Wright, E. Wright, Philadelphia, Pa., and J. H. Filson, New York, N. Y. Umbrella-stick.....	288,606	Nov. 13	1029	282	25	696
Wright, Luther D., Carpentersville, Ill. Clamp.....	273,215	Feb. 27	2066	581	23	823
Wright Machine Company. (See Laffin, Perley, assignor.)						
Wright Machine Company. (See Wright, Edward, assignor.)						
Wright, Mitchell C., Newark, Ohio. Sleigh-runner.....	280,989	July 10	803	223	24	148
Wright, Noah D., assignor of three-fourths to E. R. Seely and J. H. Gurney, Covington, Ky. Compound railway-rail.....	285,196	Sept. 18	1278	359	24	1138
Wright, Palmer C., New Haven, Conn. Metal-drilling device.....	287,986	Nov. 6	254	72	25	552
Wright, Parvin, Denver, Colo. Baling-press.....	289,364	Nov. 27	1957	{ 544 545 }	25	877
Wright, Phny J., and S. Rust, South Hadley Falls, Mass. Device for dressing valve-seats of globe-valves.....	278,478	May 29	2445	667	23	2076
Wright, Richard S., Monticello, Ark. Combined seed-planter and fertilizer-distributor.....	270,535	Jan. 9	869	253	23	180
Wright, Rufus, Akron, Ohio. Door-check.....	277,820	May 15	1592	435	23	1913
Wright, Sarah, Battle Creek, Mich. Washing-machine.....	276,126	Apr. 17	1618	446	23	1519
Wright, Sidney B., Wyandotte, Mich. Metallic railway-tie.....	280,110	June 26	1845	520	23	2461
Wright, Thomas H. (See Binkley and Wright.)						
Wright, Timothy G. (See Thayer and Wright.)						
Wright, William A., La Grange, Ga. Wash-boiler.....	274,076	Mar. 13	1063	293	23	1024
Wright, William A., Centreton, N. J. Chair.....	281,424	July 17	1355	{ 373 374 }	24	251
Wright, William A., Centreton, Burlington county, assignor to J. Wright, Trenton, N. J. Pick.....	277,183	May 8	850	225	23	1777
Wright, William A., Centreton, N. J., assignor of two-thirds to A. J. Lamborn, Philadelphia, Pa. Pick.....	286,986	Oct. 16	1522	419	25	288
Wright, William E., assignor to A. M. Wright, Rome, N. Y. Burning peat, &c., in steam and hot-air furnaces.....	278,209	May 22	2076	572	23	2003
Wright, William H., assignor of one-half to S. J. Morriss, Atlanta, Tex. Burglar-alarm.....	280,002	June 26	1714	480	23	2437
Wright, William J., Pittsburg, Pa. Apparatus for rapidly cooling and straining mixed beverages.....	272,506	Feb. 20	1165	326	23	658
Wright, William R., Princeton, Ind. Camera-stand.....	277,650	May 15	1403	378	23	1878
Wright, William S., Dover, N. J. Ottoman.....	272,825	Feb. 20	1563	439	23	730
Wrightsmen, Joseph, Harper, Kans. Advertising device.....	275,450	Apr. 10	770	205	23	1366
Wrightsmen, Joseph, Harper, Kans. Window-shutter.....	277,971	May 22	1778	485	23	1951
Wrigley, Frederick, and J. Robertson, Bury, county of Lancaster, England. Machinery or apparatus to be used in the manufacture of paper, wood pulp, and other kindred industries.....	276,989	May 1	591	155	23	1727
Wrigley, John, Elmira, N. Y. Feed-table gage for curved work.....	273,000	Feb. 27	1795	{ 502 503 }	23	775
Wrigley, Thomas, Paterson, N. J. Machine for winding silk, thread, &c.....	286,363	Oct. 9	739	198	25	144
Wrisley & Co., George A. (See Wrisley, George A., assignor.)						
Wrisley, George A., assignor to G. A. Wrisley & Co., Chicago, Ill. Soap.....	282,145	July 31	2295	630	24	421

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Wuerfel, Ernest, New York, N. Y. Button.....	281,425	July 17	1356	374	24	251
Wuerfel, John C., Toledo, Ohio. Saw-mill.....	272,610	Feb. 20	1296	361	23	681
Wullen, Frederick, and C. Mayser, Buffalo, N. Y. Machine for pitching barrels.....	270,272	Jan. 9	524	154	23	113
Wunderlich, Edmund J. (See Bechtel, Wunderlich, and Stetzelberger.)						
Wunderlich, Jacob H., Allegheny city, Pa., assignor of one-half to W. H. Johnston, North Fairfield, Ohio. Burial apparatus.....	289,878	Dec. 11	635	176	25	1004
Wünsche, Richard, Herrnhut, Saxony, Germany. Potato-planter.....	283,317	Aug. 14	1011	283	24	688
Wurth, Charles N., Camden, N. J., assignor to J. Loeb, Cheltenham, M. and D. Schoenfeld, Philadelphia, Pa. Embroidering-machine.....	271,182	Jan. 23	1675	482 483 484	23	335
Wuterich, Christian, and G. V. Sheffield, assignors to Sheffield & Wuterich Sewing Machine Company, New York, N. Y. Sewing-machine.....	276,653	May 1	133	35, 36	23	1650
Wuth, William A. O., Pittsburg, Pa. Manufacture of steel by the open-hearth process.....	279,473	June 12	1081		23	2315
Wyatt, Thomas, and J. F. Holmes, Providence, R. I. Fire-escape ladder.....	280,433	July 3	120	32	24	23
Wyckoff, Ambrose C., Danville, Va. Shutter-worker.....	281,748	July 24	1775	483	24	327
Wyckoff, Arcalous, Elmira, N. Y. Vehicle-wheel.....	278,479	May 29	2445	667	23	2076
Wyckoff, James, <i>et al.</i> (See Benedict, Richard W., assignor.)						
Wyckoff, James, <i>et al.</i> (See Sweet, Lebbens, assignor.)						
Wyer, John D., assignor to W. W. Wyer, Fillmore, Ohio. Wagon-brake.....	274,874	Mar. 27	2090	580	23	1217
Wyer, William W. (See Wyer, John D., assignor.)						
Wyeth, David G., Newark, Ohio. Buggy-top.....	270,195	Jan. 2	432	125	23	88
Wygant, John C., Outville, Ohio. Drag-saw machine.....	271,968	Feb. 6	465	127	23	522
Wyke, John, Boston, Mass. Screw-cutting gage.....	284,702	Sept. 11	670	188	24	1024
Wylie, James J., Sodus, N. Y. Combined hammer and box opening and scraping device.....	281,818	July 24	1874	512	24	345
Wyman, Horace. (See Crompton and Wyman.)						
Wyman, Horace, Worcester, Mass. Mechanical movement.....	275,008	Apr. 3	163	44	23	1254
Wyman, Horace, Worcester, Mass. Mechanical movement.....	283,364	Aug. 14	1082	304	24	701
Wyman, Horace, Worcester, Mass. Mechanical movement.....	283,451	Aug. 21	1191	334 355	24	727
Wyman, Horace, assignor to G. Crompton, Worcester, Mass. Mechanical movement.....	275,109	Apr. 3	299	82	23	1278
Wynkoop, Jebiel F., Philadelphia, Pa. Dust-pan.....	280,990	July 10	804	224	24	148
Wynne, James A., Poore's Mills, Ga. Riding-saddle.....	270,196	Jan. 2	433	125	23	89
Wynns, George W., Union, N. C. Hog-cholera remedy.....	289,487	Dec. 4	146		25	912
Wyrick, Clarence M. (See Davis, Wyrick, and Parker.)						
Wythe, William W., Red Bank, N. J. Automatic brake for hoisting-machines.....	279,304	June 12	856	237	23	2279
Wythe, William W., Red Bank, N. J. Hoisting apparatus.....	279,305	June 12	857	238	23	2279
Wythe, William W., Red Bank, N. J. Clutch.....	283,452	Aug. 21	1192	335	24	727
Yagn, Nicholas, St. Petersburg, Russia. Hydraulic motor.....	273,930	Mar. 13	890	243	23	994
Yakel, Levi, Allegheny, Pa., assignor to Brown & Co. Machine for rolling socket-blanks for oil-well rods. (Reissue).....	10,314	Apr. 10	1222	334	23	1442
Yale Lock Manufacturing Company. (See Capen, Thomas W., assignor.)						
Yale Lock Manufacturing Company. (See Harrison and Underhill, assignors.)						
Yale Lock Manufacturing Company. (See Weston, Thomas A., assignor.)						
Yale & Towne Manufacturing Company. (See Capen, Thomas W., assignor.)						
Yale & Towne Manufacturing Company. (See Kempson, Frank K., assignor.)						
Yale & Towne Manufacturing Company. (See Stockwell, Emory, assignor.)						
Yale & Towne Manufacturing Company. (See Stockwell, Emory and H. C., assignors.)						
Yale & Towne Manufacturing Company. (See Stockwell, Herbert C., assignor.)						
Yale & Towne Manufacturing Company. (See Taylor, Warren H., assignor.)						
Yancey, William L., assignor to M. E. Page and R. P. Pattison, Chicago, Ill. Candy-machine.....	286,567	Oct. 9	984	264 265	25	189
Yard, Henry C., <i>et al.</i> (See Malick, Wesley, assignor.)						
Yarian, David, Swan, Ind. Chart-holder.....	281,601	July 17	1577	431	24	287
Yarrington, Charles H., Torrington, Conn. Making brass-headed nails.....	272,010	Feb. 6	520	140	23	530
Yarnall, Ace, Williamsport, Pa. Binding-roller for gang-saw mills.....	288,910	Nov. 20	1405	387	25	768
Yaryan, Homer T., Toledo, Ohio. Process of and apparatus for purifying oxidizable liquids.....	280,549	July 3	255	68	24	46
Yaryan, Homer T., Toledo, Ohio. Percolator for extracting oil from seeds, &c.....	280,550	July 3	256	69	24	46
Yates, Arthur P., Syracuse, N. Y. Combined pocket-case and cigar-clipper.....	283,055	Aug. 14	694	195	24	630
Yates, Henry G., San Francisco, Cal., assignor to Planetary Wheel Manufacturing Company, of California. Car-wheel.....	278,843	June 5	232	68	23	2163
Yates, Henry G., assignor of two-thirds to L. W. Boyer, Philadelphia, Pa., and R. G. Brush, San Francisco, Cal. Anti-friction bearing.....	281,950	July 24	2032	556	24	373
Yates Manufacturing Company. (See Bridgman and Challoner, assignors.)						
Yeager, Joseph, <i>et al.</i> (See Collings, William, assignor.)						
Yeagley, Jacob B., Indianapolis, Ind. Apparatus for raising water from wells having water-bearing strata of different hydrostatic levels.....	285,774	Sept. 25	1986	562	24	1269
Yeaw, Isaac H., assignor of one-half to J. Knight, Hope, R. I. Derrick.....	285,781	Sept. 25	1910	542	24	1258
Yeiter, Jacob, Lowell, Mich. Fence.....	277,821	May 15	1593	436	23	1913
Yellott, George, Towson, Md. Hydraulic ram.....	281,749	July 24	1776	483	24	327
Yentzer, Enoch S., assignor to G. W. and F. M. Yentzer, Ottawa, Ill. Ruffler for sewing-machines.....	274,077	Mar. 13	1063	293 294	23	1024
Yentzer, Frank M., <i>et al.</i> (See Yentzer, Enoch S., assignor.)						
Yentzer, George W., <i>et al.</i> (See Yentzer, Enoch S., assignor.)						
Yeoman, William, and E. M. Drum, Versailles, Ky. Sulky.....	272,397	Feb. 13	1017	284	23	627
Yerby, Henry C., and E. B. Stulson, Leslie, assignors of one-third to W. S. Palmer, Lansing, J. and H. Sayers, Leslie, Mich. Hand-power log-saw.....	282,943	Aug. 7	553	156	24	599
Yerance, James. (See Burnett, William H., assignor.)						
Yoeh, Benhard, St. Louis, Mo. Brake and truck for mining-machines.....	283,943	Aug. 28	1784	504	24	848
Yoeh, Benhard, St. Louis, Mo. Steam-engine for mining purposes.....	286,105	Oct. 2	400	110	25	73
Yoeh, Benhard, St. Louis, Mo. Mining-machine.....	286,364	Oct. 9	740	198	25	145
Yocum, James, Jr., Philadelphia, Pa. Divided casting.....	279,069	June 5	559	154	23	2219
Yocum, James, Jr., Philadelphia, Pa. Shears.....	283,056	Aug. 14	696	195	24	631
Yoder, Aaron B., and A. Schwenk, Kansas City, Mo. Apparatus for laying and stretching carpets.....	282,596	Aug. 7	147	44	24	526
Yoder, Christian P., and C. C. Carmien, Goshen, Ind. Hand broadcast-seeder.....	277,861	May 15	1645	448	23	1992
Yoder, Lorenzo T., Pittsburg, Pa. Manufacture of candy.....	289,488	Dec. 4	146	40	25	912
Yoe, Philip, Cincinnati, Ohio, assignor to Indicator Lock Company, Bloomington, Ill. Indicator-lock.....	274,875	Mar. 27	2091	580 581	23	1217
Yoe, Philip, Cincinnati, Ohio, and J. Kirby, Jr., Ludlow, Ky. Padlock.....	275,970	Apr. 17	1422	392	23	1487
Yolton, Madison. (See Lance and Yolton.)						
Yonge, Robert G., St. Louis, Mo. Combination-tool.....	284,109	Aug. 28	2007	559	24	885
Yonker, Charles D. (See Voher, William F., assignor.)						
Yonley, Harvey W., Denver, Colo. Device for opening and closing carriage-doors.....	282,597	Aug. 7	148	44	24	526



## Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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York, Edward L., <i>et al.</i> (See McAllister, Guy W., assignor.)						
York, Levi D. (See Bowater and York.)						
York, Levi D., Portsmouth, Ohio. Blast-furnace for burning gaseous fuel	288,607	Nov. 13	1029	283	25	696
York, Levi D., assignor to York Manufacturing Company, (limited,) Portsmouth, Ohio. Road-scraper. (Reissue.)	10,390	Oct. 2	472	129	25	88
York Manufacturing Company. (See York, Levi D., assignor.) (Reissue.)						
York, Nathaniel S., and A. W. Lane, Rockport, Mass. Manufacture of oiled water-proof fabrics	270,717	Jan. 16	1106	316	23	231
Yost, Charles F. (See Lancy and Yost.)						
Yost, George W. N., New York, N. Y., assignor to American Writing Machine Company, of New York. Type-writer.	285,096	Sept. 18	1158	323	24	1116
Young, Albert C. (See Ellerbeck and Young.)						
Young, Alexander J., Atlanta, Ga. Memorandum-pointer	282,829	Aug. 7	421	119	24	575
Young, Barker C., Boston, Mass. Machine for securing buttons	271,183	Jan. 23	1680	484	23	335
Young, Charles M., assignor of one-third to Donnett Harvesting Machine Company, (limited,) Milwaukee, Wis. Bundle-discharging device for grain-binders	285,540	Sept. 25	1686	475	24	1217
Young, Charles W., Dartmouth, Nova Scotia, Canada. Swing	270,872	Jan. 16	1286	371	23	265
Young, Cornelius, Selma, Ala. Seed-planter and fertilizer-distributor	287,210	Oct. 23	1813	{ 497 498 }	25	348
Young, Cornelius, assignor of one-half to Howland & Co., Sandy Hill, N. Y. Stuff-regulator for paper-machines	276,127	Apr. 17	1619	446	23	1520
Young, David G., Columbia, N. Y. Curd-cutter	271,969	Feb. 6	465	127	23	522
Young, Edmund L., and L. Dyer, Millbridge, Me. Axle-lubricator	272,398	Feb. 13	1018	284	23	627
Young, Franklin, assignor to Palmer Wire Company, Palmer, Mass. Hook for hats, &c.	282,023	July 24	2119	580	24	386
Young, Franklin E., Canton, Ohio. Traction-wheel	282,032	July 24	2118	580	24	386
Young, Franklin E., Canton, Ohio. Surgical chair	289,743	Dec. 4	467	{ 131 132 }	25	968
Young, Hannah G. (See Young, Leonard, assignor.)						
Young, Henry M., Minneapolis, Minn. Steam-boiler heater	285,453	Sept. 25	1586	446	24	1198
Young, Horace A., Worcester, Mass. Removing surplus material from articles coated with melted metal	287,076	Oct. 23	1643	451	25	317
Young, Hugh, and H. G. Hubert, New York, N. Y. Machine for scouring and polishing stone	290,304	Dec. 18	1156	324	25	1106
Young, J. B. (See Macpherson, David J., assignor.)						
Young, James. (See Young, Peter and J.)						
Young, James B., <i>et al.</i> (See Seaman, Joseph S., assignor.)						
Young, James E., assignor of one-half to O. M. Avery, Genoa, N. Y. Calendar-clock	279,850	June 19	1523	426	23	2398
Young, James W. (See Bachman, Albert, assignor.)						
Young, John. (See Haskins, Benjamin H., assignor.)						
Young, John M., Baldwinville, N. Y. Metallic rake and rake-blank	277,529	May 15	1257	338	23	1854
Young, John R., Jr., Norfolk County, Va. Fertilizer	278,383	May 29	2331		23	2056
Young, John R., Jr., Norfolk County, Va. Fertilizer	278,384	May 29	2331		23	2056
Young, John R., Jr., Norfolk County, Va. Fertilizer	278,480	May 29	2446		23	2076
Young, John W., Fort Moroni, Ariz. Ter. Safety device for bridges and elevated-railway structures	282,024	July 24	2120	581	24	387
Young, John W., Fort Moroni, Ariz. Ter. Metallic railway-tie	284,157	Aug. 23	2071	575	24	896
Young, Josiah L., Tarrytown, N. Y. Type-writing machine	289,489	Dec. 4	147	40, 41	25	912
Young, Leonard, assignor to H. G. Young, Sing Sing, N. Y. Ice-creeper	290,165	Dec. 11	973	275	25	1067
Young, McClintock, Frederick, Md., assignor to Diamond Match Company, of Connecticut. Apparatus for filling match-splints for dipping	271,563	Jan. 30	2159	{ 621 622 623 }	23	429
Young, Peter and J., Monticello, Iowa. Apparatus for tightening tires	272,826	Feb. 20	1564	440	23	730
Young, Robert, Hartford, Conn. Fluting-iron	278,650	May 29	2653	726	23	2112
Young, Robert T. (See Peet, Benjamin F., assignor.)						
Young, Sutton E., and E. P. Pongley, Sioux Falls, Dak. Ter. Fence-post	273,334	Mar. 6	121	35	23	854
Young, Thomas J., North Plainfield, N. J. Toy pistol	287,987	Nov. 6	255	73	25	552
Young, Ward W., Paulding, Ohio. Sleeve or cuff button	274,245	Mar. 20	1290	355	23	1072
Young, Wesley. (See Norris and Young.)						
Young, Wesley, Dayton, Ohio. Hedge-fence	275,317	Apr. 3	554	151	23	1320
Young, Wesley, Dayton, Ohio. Implement for wiring hedge-fences	287,077	Oct. 23	1644	451	25	317
Young, Wesley, M. Neil, and C. M. Wetzel, Dayton, Ohio; said Neil and Wetzel assignors to said Young. Implement for driving staples	288,191	Nov. 6	489	136	25	593
Young, William, and A. Neilson, Clippens, county of Renfrew, Scotland, assignors to J. and J. Siddeley, Liverpool, England. Refrigerating liquids and means employed therefor; also apparatus for the subsequent treatment of the refrigerated liquids	277,822	May 15	1594	426	23	1914
Young, William E., Clayton, Ill. Stock-watering device	282,146	July 31	2296	630	24	421
Young, William H., <i>et al.</i> (See Anderson, David H., assignor.)						
Young, William H., assignor of one-half to B. MacMackin, Wilmington, Del. Pipe-organ	272,181	Feb. 13	739	204	23	580
Young, William H. H., Baltimore, Md. Railway-car	280,280	June 26	2044	575	23	2496
Young, William S., St. John, Mo. Trace-carrier	279,474	June 12	1083	299	23	2315
Young, Wyman, assignor to Palmer Wire Company, Palmer, Mass. Wire bale-tie	285,338	Sept. 18	1435	405	24	1166
Youngman, Charles A., assignor of one-half to J. W. Fowler, Louisville, Ky. Fire-escape	288,149	Nov. 6	438	123	25	584
Youns, Fred E. (See Conroy and Young.)						
Youns, George B., assignor of one-half to A. H. Nirdlinger, Rochester, N. Y. Spirit-level	285,775	Sept. 25	1990	563	24	1269
Yount, Albert R., Yonkersville, Ind. Fire-escape	285,197	Sept. 18	1279	360	24	1138
Yount, Warren, assignor to himself and P. N. Staff, Terre Haute, Ind. Piano-stool	270,273	Jan. 9	526	154	23	113
Yule, John, Paterson, N. J., assignor to McNab & Harlin Manufacturing Company, of New York. Lubricator	287,988	Nov. 6	256	73	25	552
Zabekow, Otto, Berlin, Germany. Mechanical musical instrument	290,726	Dec. 25	1727	477	25	1213
Zacharias, Christof, Vienna, Austria-Hungary. Smoke-consuming furnace	275,451	Apr. 10	771	206	23	1366
Zachos, John C., New York, N. Y. System or method of reporting speech	290,830	Dec. 25	1859	514	25	1236
Zachringer, William, New Orleans, La. Billiard-cue	286,670	Oct. 16	1121	302	25	219
Zahn, Bernhard F., St. Paul, Minn. Hanging device for exhibiting goods	280,434	July 3	122	32	24	23
Zander, Franz, assignor to I. and S. Kaufmann, New York, N. Y. Box for toilet-sets	275,110	Apr. 3	300	83	23	1278
Zane, Joseph, Boston, Mass. Ball-cock	279,685	June 19	1337	372	23	2365
Zane, Joseph, Boston, Mass. Spring-compression faucet	286,365	Oct. 9	741	{ 198 199 }	25	145
Zassenhaus, Friedrich, Cleves, Prussia, Germany. Device for converting motion	284,530	Sept. 4	453	128	24	991
Zegenbine, Henry. (See Heverling, John B., assignor.)						
Zehnder, Henry F., assignor of one-fourth to M. Deutscher, Buffalo, N. Y. Machine for cutting green corn from the cob	278,210	May 22	2078	{ 572 573 }	23	2003
Zeigler, George W., Norwalk, Ohio. Carpet-sweeper	280,435	July 3	123	33	24	23
Zeigler, George W., Norwalk, Ohio. Carpet-sweeper	283,318	Aug. 14	1012	{ 283 284 }	24	689

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Zeis, Victor. (See Schnuessler, August T., assignor.)						
Zeising, Charles A., Atlantic City, N. J., and H. A. Weihmann, Jr., Philadelphia, Pa. Device for affixing postage-stamps, &c.	279,070	June 5	561	154	23	2219
Zell, Robert R., Baltimore, Md. Gas combining and heating block for furnace bridge-walls, &c.	273,661	Mar. 6	536	144	23	926
Zeller, John H., <i>et al.</i> (See Gilliland, James F., assignor.)						
Zeller, John J. (See Zeller, Melancthon E., assignor.)						
Zeller, Joseph S. (See Shute and Albright, assignors.)						
Zeller, Melancthon E., Bluffton, Ohio. Harness pad and tree	274,078	Mar. 13	1067	294	23	1025
Zeller, Melancthon E., Bluffton, Ohio, assignor to O. B. North & Co., New Haven, Conn. Harness-buckle	271,564	Jan. 30	2163	623	23	429
Zeller, Melancthon E., Bluffton, Ohio, assignor to O. B. North & Co., New Haven, Conn. Gag-runner	271,970	Feb. 6	467	127	23	522
Zeller, Melancthon E., Bluffton, assignor of one-half to J. J. Zeller, Ottawa, Ohio. Thill-coupling	273,791	Mar. 13	717	195	23	965
Zeller, Thomas B., Centre Road Station, assignor of one-half to J. C. Gehr, Gehrton Station, Pa. Animal-trap	272,507	Feb. 20	1166	326	23	658
Zellers, Mahlon M., Kent, Ohio. Valve	272,827	Feb. 20	1565	440	23	730
Zellers, Mahlon M., Kent, Ohio. Machine for making rope, &c.	275,743	Apr. 10	1144	310 311	23	1428
Zellers, Mahlon M., Kent, Ohio. Machine for making button-fasteners	284,158	Aug. 28	2072	575 576	24	896
Zellers, Mahlon M., Kent, Ohio, assignor to Wilkins Shoe Button Fastener Company, Meadville, Pa. Machinery for applying shoe-button fasteners	282,830	Aug. 7	422	119 120	24	575
Zellers, Mahlon M., Kent, Ohio, and A. G. Wilkins, assignors to Wilkins Shoe Button Fastener Company, Meadville, Pa. Hand-machine for attaching buttons	284,159	Aug. 28	2075	576 577	24	896
Zellers, Theodor A., assignor to Ottawa Glass Company, Ottawa, Ill. Glass-pot	287,355	Oct. 23	1991	543	25	380
Zellweger, John, Chicago, Ill. Gas-producer	271,673	Feb. 6	105	28	23	458
Zellweger, John, Chicago, Ill. Recuperator-furnace	279,475	June 12	1083	299 300	23	2315
Zellweger, John, Chicago, Ill. Gas-producer	282,025	July 24	2121	581	24	367
Zeltner, Ernst T., and F. Schenk, Hoboken, N. J. Castanet	283,550	Aug. 21	1303	364	24	748
Zengel, Joseph, Dayton, Ohio. Machine for the manufacture of fences	289,490	Dec. 4	149	41	25	912
Zeppenfeld, Robert, St. Louis, Mo. Car-axle box	272,508	Feb. 20	1167	326	23	658
Zerban, Andrew, New York, N. Y. House-cooling device	269,983	Jan. 2	187	54	23	39
Zerban, Andrew, New York, N. Y. Kitchen-ventilator	273,216	Feb. 27	2067	581	23	823
Zerbe, James S. (See Hauss, McNamara, and Zerbe.)						
Zerbe, James S., and A. J. White, Cincinnati, Ohio. Cotton-seed huller and separator	289,365	Nov. 27	1960	546	25	877
Zerman, William, Trenton, N. J. Insertible saw-tooth	274,876	Mar. 27	2033	581	23	1217
Zerr, John, Keokuk, Iowa. Fire-escape	286,519	Oct. 9	923	249	25	178
Zeyen, Leopold. (See Bötter, Carl, assignor.)						
Ziegele, John. (See Gilleland and Ziegele.)						
Zieger, Lewis F., Philadelphia, Pa. Machine for cutting furs	289,594	Dec. 4	280	78	25	936
Ziegler, Benjamin H. (See Ziegler, Enoch and B. H.)						
Ziegler, Charles W., Scranton, Pa. Machine for separating impurities from coal	277,530	May 15	1259	338	23	1854
Ziegler, Enoch and B. H., Berlin, Ontario, Canada. Buggy-gearing	283,843	Aug. 28	1662	469	24	825
Zimmer, Henry, assignor of one-half to M. Hays, Rochester, N. Y. Apparatus for registering votes	272,011	Feb. 6	521	140	23	530
Zimmerling, Charles, assignor to E. K. Tryon, Jr., Philadelphia, Pa. Soap	286,568	Oct. 9	986	265	25	189
Zimmerman, Arnold W., Chicago, Ill. Car-door	281,170	July 10	1021	286	24	187
Zimmerman, Arnold W., Chicago, Ill. Car-door fastener	282,598	Aug. 7	149	45	24	527
Zimmerman, Christian H., Le Roy, Ohio. Car-coupling	285,722	Sept. 25	1911	542	24	1258
Zimmerman, Franklin T. (See Weamer and Zimmerman.)						
Zimmerman, Noah R., Elizabeth City, N. C. Car-coupling	277,823	May 15	1597	437	23	1914
Zincke, Carl F. A., Hamburg, Germany. Horseshoe	289,330	Nov. 27	1917	533	25	870
Zingler, Maximilian. (See Kingzett and Zingler.)						
Zinn & Messer. (See Mulligan, Charles V., assignor.)						
Zins Brothers. (See Zins, Nickolaus, assignor.)						
Zins, Nickolaus, assignor to Zins Brothers, Evansville, Ind. Chill-mold for dog-irons	289,366	Nov. 27	1961	546	25	878
Zinsmaier, Robert, and M. Burt; said Burt assignor to I. B. Grandy and J. B. Burt, Galion, Ohio. Motor for use near railways	272,012	Feb. 6	523	141	23	570
Zipernowsky, Karl, and M. Déri, Buda-Pesth, Austria-Hungary. Dynamo-electric machine.	284,110	Aug. 28	2008	559	24	885
Zistel, Louis, Sandusky, Ohio. Pipe-coupling	284,350	Sept. 4	234	65	24	944
Zook, Jonathan, Hanpatch, Ind. Gate	282,026	July 24	2124	582	24	387
Zschech, Gustavus H., Indianapolis, Ind. Head-block for saw-mills	276,321	Apr. 24	1876	521	23	1570
Zschech, Gustavus H., Indianapolis, Ind. Belt-tightener	284,703	Sept. 11	671	189	24	1084
Zschech, Gustavus H., Indianapolis, Ind. Shaft-coupling	284,704	Sept. 11	672	189	24	1024
Zweifel, Heinrich, Kalk, near Cologne, Germany. Lubricator	290,382	Dec. 18	1256	352	25	1124
Zweighaft, Simon. (See Buschor and Zweighaft.)						
Zwiebel, Anton, Burlington, Wis. Horizontal windmill	274,541	Mar. 27	1693	470	23	1147



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Abbott, Theodore, assignor to J. C. Graham, Philadelphia, Pa. Fringe .....	{ 13,889 } 13,890	May 8	23	1736
Ahn, Robert H., San Francisco, Cal. Bracelet.....	14,438	Nov. 27	25	789
Allen & Co. (See Moniot, Achille, assignor.)				
Allen & Co., Samuel. (See Moniot, Achille, assignor.)				
Allen, Frank, Worcester, Mass. Carpet.....	14,114	July 24	24	305
	{ 13,733 } to 13,735	Mar. 20	23	1035
Allen, Frank, assignor to M. J. Whittall, Worcester, Mass. Carpet.....	{ 14,110 } to 14,113	July 24	24	305
Alpaugh, Spencer M. (See Barlow and Alpaugh.)				
Angell, David D. (See Crosley, James, assignor.)				
Ansonia Brass and Copper Company. (See Hull, Wolcott A., assignor.)				
Ansonia Clock Company. (See Davies, Walter D., assignor.)				
Arnold, Craig R., Philadelphia, Pa. Engine-frame .....	14,404	Nov. 13	25	604
Bailey, Leonard, Hartford, Conn. Hand-wheel .....	13,621	Feb. 20	23	633
Baker, Charles F., <i>et al.</i> (See Wilbur, George E., assignor.)				
Ball, Edmund B. (See Ball, Frank C. and E. B.)				
Ball, Frank C. and E. B., Buffalo, N. Y. Casing for glass oil-cans .....	13,806	Mar. 27	23	1125
Ballou, Walter, North Attleborough, Mass. Ornamental chain .....	13,714	Mar. 13	23	941
Barkentin, George S., assignor to P. & F. Corbin, New Britain, Conn. Ornamental panels on articles of builders' hardware .....	13,568	Feb. 6	23	439
Barlow, James, and S. M. Alpaugh, assignors to said Alpaugh and F. A. Magowan, Trenton, N. J. Earthenware vessel .....	14,388	Nov. 6	25	506
Barlow, Noah. (See Kerr, David B., assignor.)				
Barnes, Howard C. (See Randall, William W., assignor.)				
Barnhart, Alson E., <i>et al.</i> (See Heyer, Charles E., assignor.)				
Barnhart, Arthur M., <i>et al.</i> (See Heyer, Charles E., assignor.)				
Barracough, Horatio. (See Woodhead, Frank A., assignor.)				
Bartel, Rudolph, Jersey City, N. J. Glove.....	14,352	Oct. 23	25	293
Barton, Robert. (See Searle, Thomas A., assignor.)				
Barton, William E., East Hampton, Conn. Sleigh-bell .....	14,236	Aug. 28	24	801
Barton, William E., East Hampton, Conn. Bell .....	14,263	Sept. 11	24	997
Bascom, H. Clay, Troy, N. Y. Heating-stove .....	{ 14,486 } 14,487	Dec. 18	25	1081
Bascom, H. Clay, assignor to N. S. Vedder Pattern Works, Bascom, Galbraith & Co., Troy, N. Y. Cooking-stove .....	14,488	Dec. 18	25	1081
Bascom, H. Clay, and C. A. Hodges, assignors to N. S. Vedder Pattern Works, Bascom, Galbraith, & Co., Troy, N. Y. Parlor-stove .....	14,489	Dec. 18	25	1081
Bascom, H. Clay, and C. A. Hodges, assignors to N. S. Vedder Pattern Works, Bascom, Galbraith, & Co., Troy, N. Y. Cooking-stove .....	{ 14,490 } 14,491	Dec. 18	25	1081
Bascom, H. Clay, and C. A. Hodges, assignors to N. S. Vedder Pattern Works, Bascom, Galbraith, & Co., Troy, N. Y. Globe stove .....	14,492	Dec. 18	25	1081
Bascom, H. Clay, and C. A. Hodges, assignors to Swett, Quimby & Perry, Troy, N. Y. Cooking-stove .....	13,607	Feb. 13	23	543
Bascom, H. Clay, C. A. Hodges, Troy, and T. S. Heister, Lansingburg, assignors to N. S. Vedder Pattern Works, Bascom, Galbraith & Co., Troy, N. Y. Stove .....	13,514	Jan. 9	23	95
Bascom, H. Clay, C. A. Hodges, Troy, and T. S. Heister, Lansingburg, assignors to N. S. Vedder Pattern Works, Bascom, Galbraith & Co., Troy, N. Y. Coal-stove .....	13,917	May 22	23	1929
Bascom, H. Clay, Troy, and T. S. Heister, Lansingburg, assignors to Simonds Manufacturing Company, New York, N. Y. Fire-place heater .....	13,608	Feb. 13	23	543
Bascom, H. Clay, Troy, and T. S. Heister, Lansingburg, assignors to S. S. Jewett & Co., Buffalo, N. Y. Heating-stove .....	13,918	May 22	23	1929
Bascom, H. Clay, Troy, and T. S. Heister, Lansingburg, assignors to Simonds Manufacturing Company, New York, N. Y. Cooking-range .....	13,972	June 12	23	2242
Bascom, H. Clay, and F. Ritchie, assignors to N. S. Vedder Pattern Works, Bascom, Galbraith & Co., Troy, N. Y. Stove .....	13,513	Jan. 9	23	95
Bascom, H. Clay, and F. Ritchie, assignors to N. S. Vedder Pattern Works, Bascom, Galbraith & Co., Troy, N. Y. Parlor-stove .....	13,920	May 22	23	1930
Bascom, H. Clay, and F. Ritchie, Troy, N. Y., assignors to G. W. Gill, Columbus, Ohio. Stove .....	13,605	Feb. 13	23	543
Bascom, H. Clay, and F. Ritchie, Troy, N. Y., assignors to Bergstrom Brothers & Co., Neenah, Wis. Heating-stove .....	13,606	Feb. 13	23	543
Bascom, H. Clay, F. Ritchie, and C. A. Hodges, assignors to N. S. Vedder Pattern Works, Bascom, Galbraith & Co., Troy, N. Y. Heating-stove .....	13,919	May 22	23	1930
Bassett, William R., assignor to Sacks & Brother, New York, N. Y. Fringe .....	14,014	July 3	24	1
Bassett, William R., assignor to Sacks & Brother, New York, N. Y. Curtain-loop .....	14,015	July 3	24	1
Bates, William R., Flint, Mich. Lamp, gas, and electric-light globe or shade .....	14,264	Sept. 11	24	997
Bawden, John, <i>et al.</i> (See Read, Joseph A., assignor.)				
Bawden, John H., <i>et al.</i> (See Read, Joseph A., assignor.)	{ 14,249 } to 14,251	Sept. 4	24	903
Beaumont, Albert, assignor to W. Whitaker & Sons, Philadelphia, Pa. Carpet .....	13,865	Apr. 24	23	1531
Beck, August, New York, N. Y. Skirt or other garment .....	14,237	Aug. 28	24	801
Beck, August, New York, N. Y. Quilted lining .....	14,090	July 17	24	207
Bellman, William, Harrisburg, Pa. Advertising-clock .....	{ 14,134 } 14,135	July 31	24	393
Bend, Frederick, Brooklyn, assignor to Buchanan & Lyall, New York, N. Y. Carpet .....				
Benedikt, Ferdinand A., assignor to P. Benedikt and M. Friedman, New York, N. Y. Article of crockery .....	14,136	July 31	24	393

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Benedikt, Paul, <i>et al.</i> (See Benedikt, Ferdinand A., assignor.)				
Benjamin, Amedee J., Valley Falls, R. I. Hand screw or clamp	13,690	Mar. 6	23	834
Bennett, Ernest H., East Orange, N. J., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	14,288	Sept. 18	24	1093
Berg, Hart O., New York, N. Y. Comb and brush box	14,000	June 26	23	2415
Bergstrom Brothers & Co. (See Bascom and Ritchie, assignors.)				
Bergstrom Brothers & Co. (See Bergstrom, George O., assignor.)				
Bergstrom, George O., assignor to Bergstrom Brothers & Co., Neenah, Wis. Stove	13,899	May 15	23	1835
Berry, Henry, assignor to Derby Silver Company, Birmingham, Conn. Caster-cruet	13,691	Mar. 6	23	834
Berry, Henry, and K. A. Hathaway, Birmingham, Conn. Butter-dish	14,521	Dec. 25	25	1194
Berry, Henry, and K. A. Hathaway, Birmingham, Conn. Tea-pot	14,522	Dec. 25	25	1194
Berry, Henry, and K. A. Hathaway, Birmingham, Conn. Caster	14,523	Dec. 25	25	1194
Berry, Henry, and K. A. Hathaway, Birmingham, Conn. Lamp	14,524	Dec. 25	25	1194
Berry, Henry, and K. A. Hathaway, Birmingham, Conn. Cake or fruit dish	14,525	Dec. 25	25	1194
Berry, Henry, and K. A. Hathaway, Birmingham, Conn. Pitcher	14,526	Dec. 25	25	1194
Bigelow Carpet Company. (See Haldiday, Arthur L., assignor.)				
Bigelow Carpet Company. (See Magee, Charles, assignor.)				
Bigelow Carpet Company. (See McCallum, William, assignor.)				
Bigelow Carpet Company. (See Neil, John, assignor.)				
Bigelow Carpet Company. (See Spring, John, assignor.)				
Blackwell, Garrett B. (See Reed, Charles S., assignor.)				
Bosshardt, Henry, assignor to the Kursbeedt Manufacturing Company, New York, N. Y. Embroidery	13,538	Jan. 23	23	274
Bowen, James H., Philadelphia, Pa. Toy savings-bank	14,238	Aug. 28	24	801
Bowers, James, Newark, N. J. Corset	14,466	Dec. 11	25	983
Bradley, Daniel R., New York, N. Y. Flask and bottle	14,423	Nov. 20	25	702
Bradley & Hubbard Manufacturing Company. (See Patitz, Albert, assignor.)				
Bradley, Robert D., Baltimore, Md. Advertising-column	14,137	July 31	24	393
Brayer, Nicholas, assignor to Co-operative Foundry Company, Rochester, N. Y. Heating-stove	13,539	Jan. 23	23	274
Briggs, Warren W., assignor to S. & B. Lederer, Providence, R. I. Ornamental chain	13,715	Mar. 13	23	941
Bromley, Edward, <i>et al.</i> (See Danby, Arthur, assignor.)				
Bromley, Edward, <i>et al.</i> (See Hemming, R. Paul, assignor.)				
Bromley, Edward, <i>et al.</i> (See Petzold, Adolph, assignor.)				
Bromley, George D., <i>et al.</i> (See Righter, Charles A., assignor.)				
Bromley, James, <i>et al.</i> (See Righter, Charles A., assignor.)				
Bromley, James & George D. (See Righter, Charles A., assignor.)				
Bromley, John H., <i>et al.</i> (See Danby, Arthur, assignor.)				
Bromley, John H., <i>et al.</i> (See Hemming, R. Paul, assignor.)				
Bromley, John H., <i>et al.</i> (See Petzold, Adolph, assignor.)				
Bromley, Joseph H., <i>et al.</i> (See Danby, Arthur, assignor.)				
Bromley, Joseph H., <i>et al.</i> (See Hemming, R. Paul, assignor.)				
Bromley, Joseph H., <i>et al.</i> (See Petzold, Adolph, assignor.)				
Brooks & Son, George. (See Nuffer, Earnest G., assignor.)				
Brown, Felix, New York, N. Y. Pillow-block	14,138	July 31	24	393
Brown, Felix, New York, N. Y. Hanger	14,139	July 31	24	393
Brown, Henry R., Greeneville, Tenn. Show-case	13,521	Jan. 16	23	195
Brown, Robert H., Elk Ridge Landing, Md. Show-box for bottles	{ 14,252 } { 14,253 }	Sept. 4	24	903
Brownell, William H., Brooklyn, N. Y. Plaque	13,971	June 12	23	2242
Brownell, William H., Brooklyn, N. Y. Puff-box	14,016	July 3	24	1
Brownell, William H., Brooklyn, N. Y. Picture-frame and easel	14,115	July 24	24	305
Bruce, David W. (See Herriet, Julius, assignor.)				
Bruce, David W. (See Ihlenburg, Herman, assignor.)				
Brussels Tapestry Company. (See Jansen, Emil, assignor.)				
Buchanan & Lyall. (See Bend, Frederick, assignor.)				
Buck, Charles H., Jr., St. Louis, Mo. Stove	13,540	Jan. 23	23	274
Buermann, August, Newark, N. J. Pattern for casting bridle-bits	13,652	Feb. 27	23	743
Bullock, Milan C. (See Sweet and Bullock.)				
Burr, Brown & Co. (See Remington, John O., assignor.)				
Buschner, Carl F., New York, N. Y. Tassel for trimming	13,866	Apr. 24	23	1531
Bushee, James, Attleborough, Mass. Ornamental chain-link	14,045	July 10	24	103
Butterick Publishing Company. (See O'Hara, Catherine, assignor.)				
Butterick Publishing Company. (See Reed, John Q., assignor.)				
Butterick Publishing Company. (See Shiels, Sarah J., assignor.)				
Butterick Publishing Company. (See Tully, Louise, assignor.)				
Butterick Publishing Company. (See Turner, Mary, assignor.)				
California Jewelry Company. (See Rinn, Philip H., assignor.)				
Camp, Bushrod H. (See Camp, Wallace H., assignor.)				
Camp, Wallace H., Waterbury, Conn., assignor of one-half to B. H. Camp, Boston, Mass. Post-office lock-box door	13,982	June 19	23	2329
Candy, Thomas, Cincinnati, Ohio. Box	13,692	Mar. 6	23	834
Carpenster, Aaron E., Philadelphia, Pa. Background for printed matter	13,609	Feb. 13	23	543
Carter, John R. (See Widdifield, Elias E. and O. H., assignors.)				
Carter, Winfield S., Ashtabula, Ohio. Carpet-sweeper case	14,493	Dec. 18	25	1081
Cary, Charles J. (See Winchester, Theodore H., assignor.)				
Cary, Charles J., Baltimore, Md. Type	14,390	Nov. 6	25	506
Chadwick, Horace E., and H. P. Lester, Providence, R. I. Bracelet	14,391	Nov. 6	25	506
Chambellan, Pierre C., New York, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet	14,017	July 3	24	1
Chapman Manufacturing Company. (See Dalton, Andrew, assignor.)				
Chetwynd, Joseph, East Liverpool, Ohio. China or earthenware dish	13,716	Mar. 13	23	941
Childs, Horace P., Taunton, Mass. Advertising device	13,693	Mar. 6	23	834
Christie, Frederick W. B., Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	14,047	July 10	24	103
Christie, Frederick W. B., Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet				
Chubb, Thomas H., Post Mills, Vt. Fishing-reel	14,180	Aug. 21	24	707
Clark, Charles W., Philadelphia, Pa. Window-shade pull	13,921	May 22	23	1930
	13,900	May 15	23	1835
Cochran, Andrew, assignor to Hood, Bonbright & Co., Philadelphia, Pa. Carpet	{ 13,653 } to { 13,660 }	Feb. 27	23	743
Cochran, Andrew, assignor to J. Kenstner and W. S. Grabam, Philadelphia, Pa. Carpet	14,424	Nov. 20	25	702



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Combs, Gilbert, <i>et al.</i> (See Read, Joseph A., assignor.)				
Condé Swits, Oswego, N. Y. Knit fabric .....	{ 14,001 to 14,004 }	June 26	23	2415
Condé, Swits, Oswego, N. Y. Knit fabric .....	14,046	July 10	24	103
Coudé, Swits, Oswego, N. Y. Knitted overshirt .....	14,239	Aug. 25	24	801
Conner, James M., New York, N. Y. Font of printing-type .....	13,830	Apr. 3	23	1225
Conner, James M., New York, N. Y. Font of printing-type .....	13,844	Apr. 10	23	1339
Conner, James M., New York, N. Y. Font of printing-type .....	14,389	Nov. 6	25	506
Conner, James M., New York, N. Y. Font of printing-type .....	14,405	Nov. 13	25	604
Cooke, Adrian, C. W. Schrieber, and J. S. Morgan, Dubuque, Iowa. Inkstand .....	14,425	Nov. 20	25	702
Cooke, Adrian, C. W. Schrieber, and J. S. Morgan, Dubuque, Iowa. Toilet-stand .....	14,426	Nov. 20	25	702
Co-operative Foundry Company. (See Brayer, Nicholas, assignor.)				
Copper, John C., Philadelphia, Pa. Upholstery-trimming .....	13,843	Apr. 3	23	1226
Corbin, P. & F. (See Barkentin, George S., assignor.)				
Costain, Ernest A., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet .....	14,467	Dec. 11	25	983
Cox, Stephen J., New York, N. Y., assignor to G. W. Stewart, Atlanta, Ga. Ornamenting bottles .....	14,154	Aug. 7	24	499
Cragg, Gowen H., Brooklyn, N. Y. Lady's collar-button .....	13,610	Feb. 13	23	543
Crane, Edward N., Newark, N. J. Harness-trimming .....	13,562	Jan. 30	23	347
Crane, Frederick, Newark, N. J. Harness-trimming .....	13,561	Jan. 30	23	347
Crear, Charles L., New York, N. Y. Thermometer-holder .....	14,091	July 17	24	207
Crease, Orlando, <i>et al.</i> (See Heald, Alfred, assignor.)				
Cresson, Clement, assignor to J. C. Graham, Philadelphia, Pa. Fringe .....	13,891	May 8	23	1736
Cresson, Clement, assignor to J. C. Graham, Philadelphia, Pa. Fringe .....	14,353	Oct. 23	25	293
Crosby, George S., assignor to J. Watson, Jr., Bridgeport, Conn. Toy pistol .....	13,974	June 12	23	2242
Crosley, James, assignor to himself and D. D. Angell, Driftwood, Pa. Hoe .....	14,092	July 17	24	207
Crow, Alexander, and Alexander, Jr. (See Piggott, George W., assignor.)				
Crowe, Eugene A., Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet .....	{ 13,569 to 13,572 }	Feb. 6	23	439
Crowe, Eugene A., Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet .....	{ 13,822 to 13,823 }	Mar. 27	23	1126
Crowe, Eugene A., Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet .....	{ 13,929 to 13,939 }	May 29	23	2036
Crowe, Eugene A., Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet .....	{ 14,048 to 14,058 }	July 10	24	103
Crowe, Eugene A., Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet .....	{ 14,172 to 14,179 }	Aug. 21	24	707
Crowe, Eugene A., Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet .....	{ 14,289 to 14,290 }	Sept. 18	24	1093
Crown Flint Glass Company. (See Kline, George, assignor.)				
Cuning, George E., St. Louis, Mo. Show-stand .....	13,856	Apr. 17	23	1449
Daland, Benjamin A., Philadelphia, Pa. Soap-cake .....	14,240	Aug. 28	24	802
Dalton, Andrew, assignor to Chapman Manufacturing Company, Meriden, Conn. Harness-trimming .....	14,155	Aug. 7	24	499
Danby, Arthur, assignor to Schofield, Mason & Co., Philadelphia, Pa. Carpet .....	{ 13,573 to 13,575 }	Feb. 6	23	439
Danby, Arthur, assignor to Schofield, Mason & Co., Philadelphia, Pa. Carpet .....	13,611	Feb. 13	23	543
Danby, Arthur, assignor to John H., Joseph H., and E. Bromley, Philadelphia, Pa. Carpet .....	14,354	Oct. 23	25	293
Davenport, Henry, Philadelphia, Pa. Gimp .....	13,901	May 15	23	1836
Davies, Henry J., Brooklyn, N. Y. Clock-front .....	14,501	Dec. 25	25	1193
Davies, Walter D., Brooklyn, N. Y., assignor to Ansonia Clock Company, Ansonia, Conn. Clock-case .....	14,392	Nov. 6	25	506
Davis, Henry, Brooklyn, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet .....	14,059	July 10	24	103
Davis, Theodore R., Asbury Park, N. J., assignor to Haviland & Co., New York, N. Y. Cup and saucer .....	13,607	Mar. 27	23	1125
Davis, Theodore R., Asbury Park, N. J., assignor to Haviland & Co., New York, N. Y. Cup and saucer .....	13,845	Apr. 10	23	1339
Davis, Thomas, Scranton, Pa. Bottle .....	13,736	Mar. 20	23	1035
Daykin, Mark R., Cleveland, Ohio. Well-curb .....	13,966	June 5	23	2123
De Planque, Louis, Jersey City, N. J. Panel .....	14,417	Nov. 13	25	604
Derby Silver Company. (See Berry, Henry, assignor.)				
Dietrich, Henry, Pittsburg, assignor to G. A. Macheth, Allegheny City, Pa. Lamp-chimney .....	14,373	Oct. 30	25	398
Diolot, Sainteme, New York, N. Y. Clock dial and hands .....	14,162	Aug. 14	24	605
Dittenhoefer, Myer, New York, N. Y. Case for thermometers, &c .....	{ 13,694 to 13,695 }	Mar. 6	23	834
Doherty, Henry, and J. Wadsworth, Paterson, N. J. Handkerchief .....	13,922	May 22	23	1930
Dolbey, William S., Brooklyn, N. Y. Capital letters .....	14,181	Aug. 21	24	707
Dornan Bros. & Co. (See Righter, Oscar, assignor.)				
Dressel, John A. H., Brooklyn, N. Y. Target .....	14,355	Oct. 23	25	293
Dreyfus, Bernhard, New York, N. Y. Curtain-band .....	13,902	May 15	23	1836
Dreyfus, Bernhard, New York, N. Y. Chenille pendant .....	14,265	Sept. 11	24	997
Dreyfus, Bernhard, New York, N. Y. Pendant .....	14,356	Oct. 23	25	293
Dreyfus Brothers. (See Otto, Charles, assignor.)				
Dreyfus, Isidor, New York, N. Y. Curtain-band .....	13,622	Feb. 20	23	633
Drohan, James, North Pacific Junction, Minn. Bob-sleigh knee .....	14,163	Aug. 14	24	605
Drummond, William W., Louisville, Ky. Ventilator or air-grate .....	14,132	July 24	24	305
Durgin, William B., Concord, N. H. Handle for table-ware .....	13,983	June 19	23	2329
Dwyer, James, Detroit, Mich. Stove .....	13,612	Feb. 13	23	543
Eberhard, George F., Cleveland, Ohio. Harness-bit .....	{ 13,547 to 13,548 }	Jan. 30	23	347
Eberhard, George F., Cleveland, Ohio. Clip-cockeye .....	14,374	Oct. 30	25	398
Economic Motor Company. (See Hopkins, George M., assignor.)				
Edge, William C., Newark, N. J. Watch-chain .....	13,661	Feb. 27	23	743
Edge, William C., Newark, N. J. Watch-chain .....	13,875	May 1	23	1626
Edison Electric Light Company. (See Edison, Thomas A., assignor.)				
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Incandescing electric lamp .....	13,940	May 20	23	2036
Edson, Jarvis B., Adams, Mass. Handle for a brush .....	14,331	Oct. 2	25	1
Edge, Conrad, Roslindale, assignor to Towle Manufacturing Company, Newburyport, Mass. Spoon-handle .....	13,613	Feb. 13	23	543

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Ehrenreich, Moses, New York, N. Y. Match-safe .....	14,153	July 31	24	394
Eldridge, Eli H. and J. H., Taunton, Mass. Coffin-plate .....	13,967	June 5	23	2123
Eldridge, John H. (See Eldridge, Eli H. and J. H.)				
Elmore, Adams & Co. (See Stites, John S., assignor.)				
Engel, William, assignor to A. L. Phillips & Co., New York, N. Y. Ornament for cloaks and other garments .....	14,005	June 26	23	2415
Estey & Co., J. (See Wagner, Albert, assignor.)				
Eustus, John P., Newark, N. J. Toilet ware or vessel .....	14,439	Nov. 27	25	789
Faber, Eberhard. (See Schrag, Philip, assignor.)				
Fajon, Etienne, assignor to Roxbury Carpet Company, Boston, Mass. Carpet .....	13,623	Feb. 20	23	633
Fajon, Etienne, assignor to Roxbury Carpet Company, Boston, Mass. Carpet .....	13,858	Apr. 17	23	1449
Fajon, Etienne, assignor to Roxbury Carpet Company, Boston, Mass. Carpet .....	13,903	May 15	23	1836
Faller, Henry, Middle Village, assignor to J. Thunes, Brooklyn, N. Y. Gate .....	14,156	Aug. 7	24	499
Farmer, Little & Co. (See Jackson, William W., assignor.)				
Fechteler, Casper, <i>et al.</i> (See Haehnel, William, assignor.)				
Fechteler, Julius, <i>et al.</i> (See Haehnel, William, assignor.)				
Ferguson, Joseph, assignor to Stead & Miller, Philadelphia, Pa. Chenille rug .....	{ 14,164 to 14,166 }	Aug. 14	24	605
Fillmann, Emil, Chicago, Ill. Molding for a picture-frame .....	{ 14,375 14,376 }	Oct. 30	25	398
Fisher, Alfred, Heckmondwike, county of York, England. Carpet .....	14,440	Nov. 27	25	789
Fisher & Co., W. D. (See Mackreth, Marmaduke B., assignor.)				
Fisher, Edwin, Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet .....	{ 13,576 to 13,578 }	Feb. 6	23	439
Fisher, Edwin, Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet .....	13,624	Feb. 20	23	633
Fisher, Edwin, Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet .....	{ 13,808 13,809 }	Mar. 27	23	1125
Fisher, Edwin, Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet .....	{ 13,941 to 13,947 }	May 29	23	2036
Fisher, Edwin, Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet .....	13,965	May 29	23	2036
Fisher, Edwin, Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet .....	{ 14,060 to 14,065 }	July 10	24	103
Fisher, Edwin, Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet .....	14,182	Aug. 21	24	707
Folsom, James L., Brooklyn, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet .....	{ 13,737 to 13,792 }	Mar. 20	23	{ 1035 1036 }
Folsom, James L., Brooklyn, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet .....	{ 14,183 to 14,212 }	Aug. 21	24	707
Folsom, James L., Brooklyn, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet .....	14,266	Sept. 11	24	997
Folsom, James L., Brooklyn, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet .....	14,343	Oct. 9	25	9
Förster, Carl, assignor to P. Korn, New York, N. Y. Chain .....	13,857	Apr. 17	23	1449
Foster, William F., New York, N. Y. Lacing-hook for gloves .....	13,846	Apr. 10	23	1339
Foster, William F., New York, N. Y. Lacing-hook .....	13,847	Apr. 10	23	1339
Fowler, Charles A., New York, N. Y. Breastpin .....	14,562	Dec. 25	25	1193
Fowler, Herbert B., New Haven, Conn. Bridle-bit .....	13,867	Apr. 24	23	1531
Freeman, Benjamin S., Attleborough, Mass. Bracelet-chain .....	14,093	July 17	24	207
French, K. Lockwood, New York, N. Y. Pitcher or other similar vessel .....	14,235	Aug. 21	24	707
Friedman, Morris, <i>et al.</i> (See Benedikt, Ferdinand A., assignor.)				
Fries, Gaspard W., Paris, France, assignor to J., S., and S. Solomon, New York, N. Y. Cretonne ..	13,732	Mar. 13	23	942
Fuchs, Gustav, Chicago, Ill. Cigar-lighter .....	13,810	Mar. 27	23	1126
Fuchs, Gustav, Chicago, Ill. Advertising-post .....	14,140	July 31	24	393
Fuller & Warren Company. (See Warren, Walter P., assignor.)				
Fürri, John, Bümpflitz, Berne, and J. Rubly, Wülflingen, Zurich, Switzerland. Stocking .....	14,018	July 3	24	1
Gabay, David A., assignor to McKesson & Robbins, New York, N. Y. Sponge-basket .....	13,508	Jan. 2	23	1
Gadsby, Walter J., Boston, Mass. Carpet .....	14,066	July 10	24	103
Gadsby, Walter J., assignor to Roxbury Carpet Company, Boston, Mass. Carpet .....	13,579	Feb. 6	23	439
Gadsby, Walter J., assignor to Roxbury Carpet Company, Boston, Mass. Carpet .....	13,793	Mar. 20	23	1036
Gadsby, Walter J., assignor to Roxbury Carpet Company, Boston, Mass. Carpet .....	14,291	Sept. 18	24	1093
Garrigues, George L., New York, N. Y. Mirror-frame .....	13,564	Jan. 30	23	347
Gerson, Julius, New York, N. Y. Autograph-sheet .....	13,696	Mar. 6	23	834
Gibbins, James, Springfield, Mass. Inkstand .....	13,948	May 29	23	2036
Giesecke, Georg, Leipsic, Saxony, Germany. Printing-type .....	13,831	Apr. 3	23	1225
Giesecke, George F., Leipsic, Saxony, Germany. Font of type .....	{ 13,794 13,795 }	Mar. 20	23	1036
Gilbert, Conrad M., Philadelphia, Pa. Trimming .....	13,614	Feb. 13	23	543
Gill, George W. (See Bascom and Ritchie, assignors.)				
Goddard, Charles V., Brooklyn, N. Y. Buckle .....	13,898	May 8	23	1736
Godshalk, E. H. (See Goldthorp, Henry, assignor.)				
Godshalk, E. H. (See Goodman, Joseph, assignor.)				
Goldsmith, Daniel, New York, N. Y. Finger-ring setting .....	14,468	Dec. 11	25	983
Goldthorp, Henry, assignor to E. H. Godshalk, Philadelphia, Pa. Fringe .....	{ 13,509 13,510 }	Jan. 2	23	1
Goodman, Joseph, assignor to E. H. Godshalk, Philadelphia, Pa. Fringe .....	13,717	Mar. 13	23	942
Goold, John C., Albany, N. Y. Landau-sleigh .....	13,541	Jan. 23	23	274
Goucher, George E., Philadelphia, Pa. Fringe .....	13,894	May 8	23	1736
Goucher, George E., assignor to J. C. Graham, Philadelphia, Pa. Fringe .....	{ 13,892 13,893 }	May 8	23	1736
Goucher, George E., assignor to J. C. Graham, Philadelphia, Pa. Fringe .....	13,895	May 8	23	1736
Gould, Robert S., East Orange, N. J. Tubing for curtain-poles .....	13,580	Feb. 6	23	439
Graham, John C. (See Abbott, Theodore, assignor.)				
Graham, John C. (See Cresson, Clement, assignor.)				
Graham, John C. (See Goucher, George E., assignor.)				
Graham, John C. (See McDonald, Laurence J., assignor.)				
Graham, Walter S., <i>et al.</i> (See Cochran, Andrew, assignor.)				
Gray, Lawrence B., Boston, Mass. Inkstand .....	13,996	June 19	23	2320
Great Western Glass Works. (See Warner, Charles H., Jr., assignor.)				
Griswold, Lewis P., assignor to C. Parker Company, Meriden, Conn. Weight for extension-lamps ..	13,968	June 5	23	2123
Gulden, Charles, New York, N. Y. Bottle .....	13,868	Apr. 24	23	1532
Guthertz, Oscar, Limoges, France. Cuspidor .....	13,515	Jan. 9	23	95



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Gutherz, Oscar, Limoges, France. Top of a cuspidor	13,516	Jan. 9	23	95
Gutherz, Oscar, Limoges, France, assignor to L. Straus & Sons, New York, N. Y. Hollow, flat, and covered ware	14,213	Aug. 21	24	707
Haehnel, William, assignor to C. Palm and J. Fechteler, New York, N. Y. Ornamentation of sewing-machines	13,662	Feb. 27	23	743
Haehnel, William, assignor to C. Palm and J. Fechteler, New York, N. Y. Ornamentation of sewing-machines	13,876 } to } 13,879 }	May 1	23	1626
Haehnel, William, assignor to C. Palm, J. and C. Fechteler, New York, N. Y. Ornamentation of sewing-machines	14,334 } 14,335 }	Oct. 2	25	
Halliday, Arthur L., New York, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet.	13,997 } 14,019 }	June 19	23	2329
Halliday, Arthur L., New York, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet.	to } 14,022 }	July 3	24	1
Halliday, Arthur L., New York, N. Y., assignor to Bigelow Carpet Company, Worcester, Mass. Carpet.	14,116	July 24	24	305
Halliday, Arthur L., New York, N. Y., assignor to Bigelow Carpet Company, Worcester, Mass. Carpet.	14,141 } 14,292 }	July 31	24	393
Halliday, Arthur L., Yonkers, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet.	to } 14,294 }	Sept. 18	24	1093
Halliday, Arthur L., Yonkers, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet.	14,332 } 14,333 }	Oct. 2	25	1
Hanford, Robert G., Jr., Columbus, Ohio. Buckle	13,832	Apr. 3	23	1225
Hankinson, John H. (See Jackson and Hankinson.)				
Hard, Bradley A., et al. (See Sickenberger, Giovanni, assignor.)				
Hard, Bradley A., New York, N. Y. Writing-paper and cards	14,067	July 10	24	103
Hart, Hubert C., Unionville, Conn. Fork	14,441	Nov. 27	25	789
Hartford Carpet Company. (See Costain, Ernest A., assignor.)				
Hartford Carpet Company. (See Davis, Henry, assignor.)				
Hartford Carpet Company. (See Folsom, James L., assignor.)				
Hartford Carpet Company. (See Heinigke, Otto, assignor.)				
Hartford Carpet Company. (See Hunt, Henry, assignor.)				
Hartford Carpet Company. (See Jacobs, Winthrop L., assignor.)				
Hartford Carpet Company. (See Meyer, Julius S., assignor.)				
Hartford Carpet Company. (See Rapp, Grant, assignor.)				
Hartman, Josephus, Philadelphia, Pa. Biscuit-cracker	13,522	Jan. 16	23	195
Haskell, Henry C., New York, N. Y. Finger-ring	14,142	July 31	24	393
Hatch, George E., assignor to Meriden Flint Glass Company, Meriden, Conn. Cut-glass article	14,117	July 24	24	305
Hathaway, Keyes A. (See Berry and Hathaway.)				
Haviland & Co. (See Davis, Theodore R., assignor.)				
Hayes, George M., Philadelphia, Pa. Card	13,697	Mar. 6	23	834
Hayes, George M., Philadelphia, Pa. Card	13,869	Apr. 24	23	1532
Haynes, Tilly, Boston, Mass. Lavatory-basin	14,023 } 13,551 }	July 3	24	1
Heald, Alfred, assignor to H. McCallum, O. Crease, and A. J. Sloan, Philadelphia, Pa. Carpet	to } 13,585 }	Feb. 6	23	439
Heck, August. (See Reshower and Heck.)				
Heinigke, Otto, New Utrecht, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	13,663	Feb. 27	23	743
Heinigke, Otto, New Utrecht, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	13,811 } 14,214 }	Mar. 27	25	1126
Heinigke, Otto, New Utrecht, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	to } 14,215 }	Aug. 21	24	707
Heinigke, Otto, New Utrecht, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	14,344 } 14,347 }	Oct. 9	25	97
Heinigke, Otto, New Utrecht, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	to } 14,348 }	Oct. 16	25	195
Heintz, Lewis J., Buffalo, N. Y. Finger-ring	14,469	Dec. 11	25	983
Heinz, Henry J., Sharpsburg, Pa. Pickle-bottle	14,406	Nov. 13	25	604
Heisey, Augustus H., Pittsburg, Pa. Glassware	14,254	Sept. 4	24	903
Heister, Tobias S. (See Bascom and Heister.)	13,833	Apr. 3	23	1225
Heister, Tobias S. (See Bascom, Hodges, and Heister.)				
Hemming, E. Paul, New York, N. Y. Carpet	14,068	July 10	24	103
Hemming, R. Paul, assignor to John H., Joseph H., and E. Bromley, Philadelphia, Pa. Carpet	14,357 } 14,358 }	Oct. 23	25	293
Hemming, R. Paul, assignor to John H., Joseph H., and E. Bromley, Philadelphia, Pa. Rug	14,377	Oct. 30	25	398
Hepner, Arnold. (See Horwitz and Hepner.)				
Herriet, Julius, assignor to D. W. Bruce, New York, N. Y. Font of printing-type	13,870	Apr. 24	23	1532
Heyer, Charles E., assignor to A. M. and A. E. Barnhart and C. E. Spindler, Chicago, Ill. Font of printing-type	13,560	Jan. 30	23	347
Heyer, Charles E., Chicago, Ill., assignor to A. M. and A. E. Barnhart, and C. E. Spindler. Font of type ornaments	14,336 } 14,503 }	Oct. 2	25	1
Heyer, Charles E., assignor to A. M. and A. E. Barnhart, Chicago, Ill. Font of printing-type	to } 13,517 }	Dec. 25	25	1193
Hieronymus, Carl R., New York, N. Y. Fabric	13,518 } 13,518 }	Jan. 9	23	95
Hieronymus, Carl R., New York, N. Y. Fabric	13,542	Jan. 23	23	274
Hieronymus, Carl R., New York, N. Y. Fabric	13,949	May 29	23	2036
Hobbs, Brockunier & Co. (See Russell, William F., assignor.)				
Hodges, Cyrus A. (See Bascom and Hodges.)				
Hodges, Cyrus A. (See Bascom, Hodges, and Heister.)				
Hodges, Cyrus A. (See Bascom, Ritchie, and Hodges.)				
Holland, S. Henry, Brooklyn, N. Y. Alphabet	14,143	July 31	24	393
Hood, Bonbright & Co. (See Cochran, Andrew, assignor.)				
Hood, Freeman W., Boston, Mass. Charge-cylinder for a revolver	13,824	Mar. 27	23	1126
Hooper, George B., Newark, N. J. Side drawer case and drawer for a sewing-machine	14,216	Aug. 21	24	707
Hopkins & Dickinson Manufacturing Company. (See Lochner, John, assignor.)				
Hopkins, George M., Brooklyn, assignor to Economic Motor Company, New York, N. Y. Engine-frame	14,024 } 13,625 }	July 3	24	1
Horan, Henry, East Orange, N. J., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	to } 13,627 }	Feb. 20	23	633

*Alphabetical list of patentees of designs—Continued.*

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Horan, Henry, East Orange, N. J., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	13,825	Mar. 27	23	1126
Horan, Henry, East Orange, N. J., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	13,880 to 13,883	May 1	23	1626
Horan, Henry, East Orange, N. J., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	14,217 to 14,218	Aug. 21	24	707
Horan, Henry, East Orange, N. J., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	14,295 to 14,302	Sept. 18	24	1093
Horner Brothers. (See Meagher, Thomas E., assignor.)				
Horner Brothers. (See Onslow, Thomas, assignor.)				
Horner Brothers. (See Pugh, George W., assignor.)				
Horner Brothers. (See Smith, Stephen, assignor.)				
Horwitz, Julius H., and A. Hepner, New York, N. Y. Trimming	14,359	Oct. 23	25	293
Hotchkiss, Edward F., Thomaston, Conn. Wall-hook	13,698	Mar. 6	23	834
Howard & Scherrieble. (See Peet, William C., assignor.)				
Howard & Scherrieble. (See Reid, Hugh L., assignor.)				
Hoyt, William H., Stamford, Conn. Parlor ornament	14,337	Oct. 2	25	1
Hoyt, William H., Stamford, Conn. Fire-screen	14,338	Oct. 2	25	1
Huestis, Harvey, assignor to Hutchison & Huestis, Providence, R. I. Setting for jewelry	14,157	Aug. 7	24	499
Hull, Wolcott A., assignor of one-half to Ansonia Brass and Copper Company, New York, N. Y. Hanging-lamp	14,407 to 14,408	Nov. 13	25	604
Huppmann, Joseph, New York, N. Y. Cigarette show-card	14,322	Sept. 25	24	1180
Hutchison & Huestis. (See Huestis, Harvey, assignor.)				
Hunt, Henry, Greenville, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	13,664 to 13,665	Feb. 27	23	743
Hunt, Henry, Greenville, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	13,796	Mar. 20	23	1036
Hunt, Henry, Greenville, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	13,812	Mar. 27	23	1126
Hunt, Henry, Greenville, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	13,853	Apr. 10	23	1340
Hunt, Henry, Greenville, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	14,360	Oct. 23	25	293
Hunter & Son, William. (See Kerr, David B., assignor.)				
Hunter & Son, William. (See Kerr, James E., assignor.)				
Hunziker, Gaspär, Cloverdale, Cal. Wire fence	14,442	Nov. 27	25	789
Hyde, Daniel C., New York, N. Y. Stair and room corner-guard	13,797	Mar. 20	23	1036
Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan, Philadelphia, Pa. Font of printing-type	13,848	Apr. 10	23	1339
Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan, Philadelphia, Pa. Font of printing-type	13,859 to 13,871	Apr. 17	23	1450
Ihlenburg, Herman, Philadelphia, Pa., assignor to D. W. Bruce, New York, N. Y. Font of printing-type	13,871 to 13,873	Apr. 24	23	1532
Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan, Philadelphia, Pa. Font of printing-type	13,923	May 22	23	1930
Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan, Philadelphia, Pa. Font of printing-type	13,950	May 29	23	2036
Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan, Philadelphia, Pa. Font of type ornaments	13,951	May 29	23	2036
Irwin, William J., Springfield, Ohio. Bracket for grates	13,666	Feb. 27	23	743
Jackson, Austin F., assignor to Reed & Barton, Taunton, Mass. Handle for spoons	13,860	Apr. 17	23	1450
Jackson, Austin F., assignor to Reed & Barton, Taunton, Mass. Handle for spoons and forks	14,323	Sept. 25	24	1180
Jackson, William H. (See Osborne, Arthur, assignor.)				
Jackson, William H., and J. H. Hankinson, New York, N. Y. Fire-place back	14,378	Oct. 30	25	398
Jackson, William H., and J. H. Hankinson, New York, N. Y. Fire-place or grate	14,379	Oct. 30	25	398
Jackson, William H., and J. H. Hankinson, New York, N. Y. Fire-place back	14,462	Dec. 4	25	885
Jackson, William W., Philadelphia, Pa., assignor to Farmer Little & Co., New York, N. Y. Font of type	13,834	Apr. 3	23	1225
Jackson, William W., Philadelphia, Pa., assignor to Farmer, Little & Co., New York, N. Y. Font of printing-type	14,409	Nov. 13	25	604
Jackson, William W., assignor to MacKellar, Smiths & Jordan, Philadelphia, Pa. Font of printing-type	13,523 to 13,524	Jan. 16	23	195
Jackson, William W., assignor to MacKellar, Smiths & Jordan, Philadelphia, Pa. Font of printing-type	13,586	Feb. 6	23	439
Jackson, William W., assignor to MacKellar, Smiths & Jordan, Philadelphia, Pa. Font of printing-type	13,849	Apr. 10	23	1339
Jackson, William W., assignor to MacKellar, Smiths & Jordan, Philadelphia, Pa. Font of printing-type	14,255	Sept. 4	24	903
Jackson, William W., assignor to MacKellar, Smiths & Jordan, Philadelphia, Pa. Font of script printing-type	14,340	Oct. 2	25	1
Jackson, William W., assignor to MacKellar, Smiths & Jordan, Philadelphia, Pa. Font of printing-type	14,410	Nov. 13	25	604
Jacobs, Winthrop L., East Orange, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	13,667 to 13,672	Feb. 27	23	743
Jacobs, Winthrop L., East Orange, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	13,798 to 13,801	Mar. 20	23	1036
Jacobs, Winthrop L., East Orange, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	13,813	Mar. 27	23	1126
Jacobs, Winthrop L., East Orange, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	14,219 to 14,224	Aug. 21	24	707
Jacobs, Winthrop L., East Orange, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	14,345	Oct. 9	25	97
Jacobs, Winthrop L., East Orange, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	14,470 to 14,473	Dec. 11	25	983
Jacobs, Winthrop, East Orange, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	14,504 to 14,505	Dec. 25	25	1193
Jansen, Emil, Paterson, N. J., assignor to Brussels Tapestry Company, of New York. Handkerchief and scarf	14,339	Oct. 2	25	1
Jewett & Co., Sherman S. (See Bascom and Heister, assignors.)				
Johnson, Hans T., Chicago, Ill. Wall-pocket	14,094	July 17	24	207
Johnson, Seth W., New York, N. Y. Banner	14,256	Sept. 4	24	903



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Jones, Charles T., New York, N. Y. Glove-buttoner .....	14,158	Aug. 7	24	499
Justin, J. Gilbert, Syracuse, N. Y. Atomizer .....	13,975	June 12	23	2242
Kasschau, Jacob A. (See Kasschau, Jürgen and J. A.) .....				
Kasschau, Jürgen and J. A., New York, N. Y. Lamp and chandelier body .....	14,463	Dec. 4	25	885
Kasson, Amasa C., Milwaukee, Wis. Knife-sharpener .....	14,303	Sept. 18	24	1093
Kaucher, August, New York, N. Y. Square-piano case .....	14,118	July 24	24	305
Kayser, Charles, <i>et al.</i> (See Osthoff, Otto, assignor.) .....				
Kayser, William J., <i>et al.</i> (See Osthoff, Otto, assignor.) .....				
Kellett, William F., Chicago, Ill. Plaster center-piece .....	{ 14,006 } { 14,007 } { 14,257 }	June 26	23	2415
Kellett, William F., Chicago, Ill. Plaster center-piece .....	{ to } { 14,259 }	Sept. 4	24	903
Kellett, William F., Chicago, Ill. Plaster center-piece .....	{ 14,324 } { 14,325 }	Sept. 25	24	1180
Kelty & Co., G. L. (See Langer, Henry, assignor.) .....				
Kernan, Francis, Jr., assignor to R. Wheeler, Sou & Co., Utica, N. Y. Parlor-stove .....	14,008	June 26	23	2415
Kerr, David B., Philadelphia, Pa. Upholstery fabric .....	13,908	May 15	23	1836
Kerr, David B., assignor to W. Hunter & Son, Philadelphia, Pa. Two-ply upholstery .....	13,978	June 12	23	2242
Kerr, David B., assignor to N. Barlow, Philadelphia, Pa. Upholstery or damask .....	14,304	Sept. 18	24	1093
Kerr, James E., assignor to W. Hunter & Son, Philadelphia, Pa. Two-ply upholstery .....	13,979	June 12	23	2242
Kerr, William, Philadelphia, Pa., assignor to Van Deventer & Horne, New York, N. Y. Carpet .....	{ 13,802 } { to } { 13,804 }	Mar. 20	23	1036
Keustner, John, <i>et al.</i> (See Cochran, Andrew, assignor.) .....				
Kimball Company, W. W. (See Meissner, Robert F., assignor.) .....				
King, George F., Swampscot, Mass. Writing-pen .....	14,144	July 31	24	393
Kinsley, Myron H., Niagara Falls, N. Y. Spoon or fork handle .....	13,835	Apr. 3	23	1225
Kline, George, assignor to Crown Flint Glass Company, Ravenna, Ohio. Lamp-chimney .....	14,167	Aug. 14	24	605
Korn, Philip. (See Förster, Carl, assignor.) .....				
Krans & Co., L. (See Welton, Frank, assignor.) .....				
Kursheed Manufacturing Company. (See Bosshardt, Henry, assignor.) .....				
Laird, David W., San Francisco, Cal. Masonic jewel or emblem .....	14,025	July 3	24	1
Lambert, Peter W., Hoboken, N. J. Satchel .....	14,168	Aug. 14	24	605
Landenberger, Frederick, New York, N. Y. Pompon .....	14,326	Sept. 25	24	1180
Landsberg, Moses G., Chicago, Ill. Bottle .....	13,699	Mar. 6	23	834
Langer, Henry, Brooklyn, assignor to G. L. Kelty & Co., New York, N. Y. Curtain and upholstery fabric .....	{ 13,884 } { 13,885 }	May 1	23	1626
Lawson, Joseph W., Sterling, Nebr. Plow point or share .....	14,095	July 17	24	207
Leach, Winslow C., Conklin Forks, N. Y. Sleigh .....	14,145	July 31	24	394
Leader Sewing Machine Company. (See Osborn, John H., assignor.) .....				
Lederer, S. & B. (See Briggs, Warren W., assignor.) .....				
Lederer, Sigmund L., New York, N. Y. Ornamental chain-link .....	13,718	Mar. 13	23	942
Leighton, William, Jr., Wheeling, W. Va. Glassware .....	14,443	Nov. 27	25	789
Leonard, John, assignor to S. Wimpheimer, New York, N. Y. Fringe .....	14,494	Dec. 18	25	1081
Lester, Horace P. (See Chadwick and Lester.) .....				
Lewis, George A., Nantucket, Conn. Overshoe .....	14,341	Oct. 2	25	2
Lipper, Benjamin, Philadelphia, Pa. Fringe .....	13,976	June 12	23	2242
Little, Andrew, New York, N. Y. Font of printing-type .....	13,700	Mar. 6	23	834
Littell, James H., New York, N. Y. Calendar .....	14,159	Aug. 7	24	499
Livermore, Charles W., Providence, R. I. Pencil-case .....	13,519	Jan. 9	23	95
Lochner, John, assignor to Hopkins & Dickinson Manufacturing Company, New York, N. Y. Ornamentation of builders' hardware .....	13,511	Jan. 2	23	2
Lockwood, James F., Philadelphia, Pa. Soap-dish .....	14,495	Dec. 18	25	1081
Loeb, Joseph, Philadelphia, Pa. Fringe .....	{ 13,587 } { to } { 13,590 }	Feb. 6	23	439
Loeb, Joseph, Philadelphia, Pa. Fringe .....	13,701	Mar. 6	23	834
Lowell Manufacturing Company. (See Bennett, Ernest H., assignor.) .....				
Lowell Manufacturing Company. (See Christie, Frederick W. B., assignor.) .....				
Lowell Manufacturing Company. (See Crowe, Eugene A., assignor.) .....				
Lowell Manufacturing Company. (See Fisher, Edwin, assignor.) .....				
Lowell Manufacturing Company. (See Horan, Henry, assignor.) .....				
Lowell Manufacturing Company. (See Neil, John B., assignor.) .....				
Lowell Manufacturing Company. (See North, Howard, assignor.) .....				
Lowell Manufacturing Company. (See Poole, Edward, assignor.) .....				
Lowell Manufacturing Company. (See Sauer, Emil G., assignor.) .....				
Lowell Manufacturing Company. (See Swapp, Charles W., assignor.) .....				
Luey, Anthony, San Francisco, Cal. Cake or bar soap .....	14,444	Nov. 27	25	789
MacKellar, Smiths & Jordan. (See Ihlenburg, Herman, assignor.) .....				
MacKellar, Smiths & Jordan. (See Jackson, William W., assignor.) .....				
Macbeth, George A. (See Dietrich, Henry, assignor.) .....				
Macbeth, George A., Allegheny, Pa. Lamp-chimney .....	{ 14,445 } { 14,446 }	Nov. 27	25	789
Mackinney, Herbert G., Providence, R. I. Trimming for articles of jewelry .....	13,836	Apr. 3	23	1225
Mackinney, Herbert G., Providence, R. I. Trimming for articles of jewelry .....	13,861	Apr. 17	23	1450
Mackinney, Herbert G., Providence, R. I. Gem-setting .....	14,225	Aug. 21	24	707
Mackreth, Marmaduke B., assignor to W. D. Fisher & Co., Attleborough Falls, Mass. Chain-swivel .....	14,393	Nov. 6	25	506
Maddock, Thomas, New York, N. Y. Covered dish .....	13,977	June 12	23	2242
Magee, Charles, Brooklyn, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet .....	13,702	Mar. 6	23	834
Magowan, Frank A. (See Barlow and Alpaugh, assignors.) .....				
Manhattan Brass Company. (See White, James H., assignor.) .....				
Marcy, Frederick I. (See Phillips, Ansel P., assignor.) .....				
Marcy, Frederick I., Providence, R. I. Sleeve-button .....	14,241	Aug. 28	24	802
Marder, Luse & Co. (See Müller, Carl, assignor.) .....				
Mason, Charles E., Columbus, Ohio. Top plate for watches .....	14,427	Nov. 20	25	702
Mazzetti, Luigi F., New York, N. Y. Ice-cream mold .....	14,327	Sept. 25	24	1180
McCallum, Hugh, <i>et al.</i> (See Heald, Alfred, assignor.) .....				
McCallum, William, South Orange, N. J., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet .....	13,629	Feb. 20	23	633
McCallum, William, South Orange, N. J., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet .....	14,394	Nov. 6	25	506
McCallum, William, Yonkers, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet .....	14,267	Sept. 11	24	997
McCallum, William, Yonkers, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet .....	14,305	Sept. 18	24	1093

*Alphabetical list of patentees of designs—Continued.*

Name, residence, and design.	No.	Date.	Official Gazette.	
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McCallum, William, Yonkers, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet.	14,363	Oct. 23	25	293
McCallum, William, Yonkers, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet.	14,395	Nov. 6	25	506
McDonald, Andrew Y., Dubuque, Iowa. Hand-wheel	13,673	Feb. 27	23	743
McDonald, Laurence J., assignor to J. C. Graham, Philadelphia, Pa. Fringe	13,615	Feb. 13	23	543
McDowell, William L., Lower Merion, Pa. Stove	13,719	Mar. 13	23	942
McKesson & Robbins. (See Gabay, David A., assignor.)				
McNair, David, assignor to Roxbury Carpet Company, Boston, Mass. Carpet	13,591	Feb. 6	23	439
McNair, David, assignor to Roxbury Carpet Company, Boston, Mass. Carpet	13,630	Feb. 20	23	633
McNair, David, assignor to Roxbury Carpet Company, Boston, Mass. Carpet	14,268 to 14,270	Sept. 11	24	997
Meagher, Thomas E., assignor to Horner Brothers, Philadelphia, Pa. Carpet	13,628	Feb. 20	23	633
Meagher, Thomas E., assignor to Horner Brothers, Philadelphia, Pa. Carpet	13,631	Feb. 20	23	633
Meagher, Thomas E., assignor to Horner Brothers, Philadelphia, Pa. Carpet	14,119	July 24	24	305
Medlar, Alfred J., assignor to A. J. Medlar Company, (limited,) Philadelphia, Pa. Cracker or biscuit				
Medlar Company, A. J. (See Medlar, Alfred J., assignor.)	13,909	May 15	23	1836
Meissner, Robert F., assignor to W. W. Kimball Company, Chicago, Ill. Cabinet-organ case	14,069 to 14,070	July 10	24	103
Melick, Peter M., Newark, N. J. Necktie-fastener	13,886	May 1	23	1626
Melville, David G., Medford, Mass. Carpet	14,071	July 10	24	103
Melville, David G., Medford, assignor to Roxbury Carpet Company, Boston, Mass. Carpet	13,862 to 13,863	Apr. 17	23	1450
Melville, David G., Medford, assignor to Roxbury Carpet Company, Boston, Mass. Carpet	14,306	Sept. 18	24	1093
Melville, David G., Medford, assignor to Roxbury Carpet Company, Boston, Mass. Carpet	14,361 to 14,362	Oct. 23	25	293
Melvin, David N., Linoleumville, N. Y. Steam-engine frame	14,411	Nov. 13	25	604
Meriden Britannia Company. (See Smith, William M., assignor.)				
Meriden Flint Glass Company. (See Hatch, George E., assignor.)				
Meyer, Charles T. and V. E., Bergen, N. J., assignors to E. C. Sampson, New York, N. Y. Oil-cloth	13,527 to 13,537	Jan. 16	23	195
Meyer, Charles T. and V. E., Bergen, N. J., assignors to E. C. Sampson, New York, N. Y. Oil-cloth	13,720 to 13,726	Mar. 13	23	942
Meyer, Charles T. and V. E., Bergen, N. J., assignors to E. C. Sampson, New York, N. Y. Oil-cloth	13,910 to 13,916	May 15	23	1836
Meyer, Charles T. and V. E., Bergen, N. J., assignors to E. C. Sampson, New York, N. Y. Floor oil-cloth	14,096 to 14,099	July 17	24	207
Meyer, Charles T. and V. E., Bergen, N. J., assignors to E. C. Sampson, New York, N. Y. Floor oil-cloth	14,120 to 14,123	July 24	24	305
Meyer, Charles T. and V. E., Bergen, N. J., assignors to E. C. Sampson, New York, N. Y. Floor oil-cloth				
Meyer, Charles T. and V. E., Bergen, N. J., assignors to E. C. Sampson, New York, N. Y. Floor oil-cloth	14,227	Aug. 21	24	708
Meyer, Charles T. and V. E., Bergen, N. J., assignors to E. C. Sampson, New York, N. Y. Oil-cloth	14,396 to 14,401	Nov. 6	25	506
Meyer, Emil, Buffalo, N. Y. Bas-relief	13,924	May 22	23	1930
Meyer, Julius S., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	13,674 to 13,676	Feb. 27	23	743
Meyer, Julius S., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet				
Meyer, Julius S., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	14,474	Dec. 11	25	983
Meyer, Julius S., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	14,506 to 14,507	Dec. 25	25	1193
Meyer, Victor E. (See Meyer, Charles T. and V. E.)				
Miliken, Bailey T., Paducah, Ky. Bed-spring	14,242	Aug. 28	24	802
Mills, Charles K., New York, N. Y. Advertising-blank	13,520	Jan. 9	23	95
Mitchell, Herbert, assignor to Schofield, Mason & Co., Philadelphia, Pa. Carpet	14,307	Sept. 18	24	1093
Mix, Garry I., Yalesville, Conn. Handle of a spoon	14,349	Oct. 16	25	195
Moniot, Achille, assignor to Allen & Co., Philadelphia, Pa. Two-ply upholstery	14,125	July 24	24	305
Moniot, Achille, assignor to S. Allen & Co., Philadelphia, Pa. Upholstery fabric	14,228	Aug. 21	24	708
Morgan, Joseph S. (See Cooke, Schrieber, and Morgan.)				
Morris, Edward L., Boston, Mass. Toy fulminate-exploder	13,837	Apr. 3	23	1225
Moses, John, Trenton, N. J. Dish	14,328	Sept. 25	24	1180
Muldoon, Michael, Louisville, Ky. Monumental statuary	13,727	Mar. 13	23	942
Muller, Carl, assignor to Marder, Luse & Co., Chicago, Ill. Border for printing-type	13,850	Apr. 10	23	1340
Müller, Carl, assignor to Marder, Luse & Co., Chicago, Ill. Font of printing-type	14,346	Oct. 9	25	98
Murray, John, New York, N. Y. Inkstand	13,851	Apr. 10	23	1340
Nardini, Charles, San Francisco, Cal. Vase	14,226	Aug. 21	24	708
Nathan, Clarence S., New York, N. Y. Calendar	14,026 to 14,028	July 3	24	1
Neil, John, New York, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet	13,565	Jan. 30	23	347
Neil, John, New York, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet	13,998	June 19	23	2329
Neil, John B., New York, N. Y., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet				
Neil, John B., New York, N. Y., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	14,229	Aug. 21	24	708
Neil, John B., New York, N. Y., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet				
Newell Frank G., Rochester, N. Y. Mirror or picture frame	14,308	Sept. 18	24	1093
Nivois, Victor, New York, N. Y. Ornamentation of watch-cases	14,126	July 24	24	305
Noble, Howard C., New Britain, Conn. Boot-strap	13,984	June 19	23	2329
Noble, William J., New York, N. Y. Burial-casket	13,985	June 19	23	2329
Noble, William J., New York, N. Y. Coffin	13,703	Mar. 6	23	834
Noble, William J., New York, N. Y. Coffin	14,475	Dec. 11	25	983
North American Iron Works. (See Tweeddale, William, assignor.)				
North, Howard, Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	14,309	Sept. 18	24	1094
Nuffer, Earnest G., assignor to G. Brooks & Son, Philadelphia, Pa. Tapestry or damask	14,009	June 26	23	2415
O'Brien, Joseph L., New York, N. Y. Fringe	13,632	Feb. 20	23	633
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Child's cloak	14,364	Oct. 23	25	293
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Girl's costume	14,365	Oct. 23	25	293



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O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Child's costume	14,366	Oct. 23	25	293
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Girl's cloak	14,367	Oct. 23	25	293
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Girl's costume	14,368	Oct. 23	25	293
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's wrap	14,380	Oct. 30	25	398
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's walking-skirt	14,381	Oct. 30	25	398
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Walking-skirt	14,412	Nov. 13	25	604
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's costume	14,413	Nov. 13	25	604
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's wrap	14,414	Nov. 13	25	604
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's polonaise	{ 14,415 } { 14,416 }	Nov. 13	25	604
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's walking-skirt	14,428	Nov. 20	25	702
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's wrap	14,429	Nov. 20	25	702
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's coat	14,430	Nov. 20	25	702
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's skirt	14,431	Nov. 20	25	702
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's basque	14,432	Nov. 20	25	702
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's costume	14,447	Nov. 27	25	789
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Child's costume	14,448	Nov. 27	25	789
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's walking-skirt	14,449	Nov. 27	25	789
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's skirt	14,476	Dec. 11	25	983
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's long coat	14,477	Dec. 11	25	984
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Girl's costume	14,478	Dec. 11	25	984
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's wrap	14,497	Dec. 18	25	1081
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Child's costume	{ 14,498 } { 14,499 }	Dec. 18	25	1082
O'Hara, Catherine, assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's costume	14,508	Dec. 25	25	1193
Oliver, Robert S. Albany, N. Y. Oil-stove	14,100	July 17	24	207
Onslow, Thomas, assignor to Horner Brothers, Philadelphia, Pa. Carpet	{ 13,633 } { 13,634 }	Feb. 20	23	633
Onslow, Thomas, assignor to Horner Brothers, Philadelphia, Pa. Carpet	14,124	July 24	24	305
Osborn, John H., Springfield, Mass., assignor to Leader Sewing Machine Company, Cleveland, Ohio. Sewing-machine table	14,160	Aug. 7	24	499
Osborne, Arthur, Hyde Park, Mass., assignor to W. H. Jackson, New York, N. Y. Facing for a fire-place	14,382	Oct. 30	25	398
Osborne, Arthur, Hyde Park, Mass., assignor to W. H. Jackson, New York, N. Y. Facing for a fire-place casing	14,383	Oct. 30	25	398
Osborne, Arthur, Hyde Park, Mass., assignor to W. H. Jackson, New York, N. Y. Facing for a fire-place	14,384	Oct. 30	25	398
Osborne, Arthur, Hyde Park, Mass., assignor to W. H. Jackson, New York, N. Y. Fire-place casing	14,385	Oct. 30	25	398
Osborne, Arthur, Hyde Park, Mass., assignor to W. H. Jackson, New York, N. Y. Facing for a fire-place	14,402	Nov. 6	25	506
Osthoff, Otto, assignor of two-thirds to C. and W. J. Kayser, Milwaukee, Wis. Beer-mug	14,271	Sept. 11	24	997
Otto, Charles, Brooklyn, assignor to Dreyfus Brothers, New York, N. Y. Curtain-band	14,101	July 17	24	207
Oyster, George M., Washington, D. C. Butter-print	14,102	July 17	24	207
Pairpoint, Thomas J., New Bedford, Mass. Handle for spoons, &c.	14,072	July 10	24	103
Pairpoint, Thomas J., New Bedford, Mass. Handle for spoons or forks	14,127	July 24	24	305
Palm, Charles, <i>et al.</i> (See Haehnel, William, assignor.)				
Palmenberg, Joseph R., New York, N. Y. Hat and coat rack	14,310	Sept. 18	24	1094
Parker Company, Charles. (See Griswold, Lewis F., assignor.)				
Parker, Harriet A., assignor to Roxbury Carpet Company, Boston, Mass. Carpet	14,479	Dec. 11	25	984
Parsons, Samuel, <i>et al.</i> (See Sieckenberger, Giovanni, assignor.)				
Parton, Henry W., assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet	14,243	Aug. 28	24	802
Parton, Henry W., assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet	14,311	Sept. 18	24	1094
Patitz, Albert, assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Sconce-frame	14,244	Aug. 28	24	802
Patitz, Albert, assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Sconce-frame	14,272	Sept. 11	24	997
Patterson & Greenough. (See Savage, Joseph G., assignor.)				
Patterson, William J., Beaver, Pa. Vase	13,525	Jan. 16	23	195
Pect, William C., Jersey City, N. J., assignor to Howard & Scherrieble, Providence, R. I. Letters or alphabet	13,677	Feb. 27	23	743
Pegel, Julius, New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	{ 13,678 } { 13,679 }	Feb. 27	23	743
Pegel, Julius, New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	14,273	Sept. 11	24	997
Perkins, William C., assignor to Wire Goods Company, Worcester, Mass. Wire handle	14,038	July 3	24	2
Petit, Eugène, Paris, France, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet	{ 13,704 } { 13,709 }	Mar. 6	23	834
Petit, Eugène, Paris, France, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet	{ 14,073 } { 14,074 }	July 10	24	103
Petit, Eugène, Paris, France, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet	{ 14,103 } { 14,104 }	July 17	24	207
Petzold, Adolph, Philadelphia, Pa. Carpet	14,075	July 10	24	103

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Petzold, Adolph, Philadelphia, Pa. Carpet.....	14,088	July 10	24	104
Petzold, Adolph, assignor to John H., Joseph H., and E. Bromley, Philadelphia, Pa. Carpet.....	14,369	Oct. 23	25	293
Petzold, Adolph, assignor to John H., Joseph H., and E. Bromley, Philadelphia, Pa. Rug.....	14,386 14,387	Oct. 30	25	398
Phillips, Ansel P., assignor to F. I. Marey, Providence, R. I. Sleeve-button.....	14,260	Sept. 4	24	903
Phillips & Co., A. L. (See Engel, William, assignor.)				
Piggott, George W., New York, N. Y., assignor to A. Crow and A. Crow, Jr., Philadelphia, Pa. Carpet.....	14,274 14,275	Sept. 11	24	997
Pignot, George W., New York, N. Y., assignor to A. Crow and A. Crow, Jr., Philadelphia, Pa. Carpet.....	14,342	Oct. 2	25	2
Pignot, Paul, Paris, France, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet.....	13,563	Jan. 30	23	347
Pignot, Paul, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet.....	13,591 to 13,595	Feb. 6	23	440
Pignot, Paul, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet.....	13,680 13,986	Feb. 27	23	743
Pignot, Paul, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet.....	to 13,991 14,029	June 19	23	2329
Pignot, Paul, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet.....	to 14,037	July 3	24	2
Pignot, Paul, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet.....	14,044	July 3	24	2
Pignot, Paul, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet.....	14,105	July 17	24	207
Pirkel, John, Brooklyn, N. Y. Gate.....	13,635	Feb. 20	23	633
Pond, Chester H., assignor to Time Telegraph Company, New York, N. Y. Electrical conductor.....	14,451	Nov. 27	25	790
Pool, Joseph. (See Pool, Joshua and Joseph.)				
Pool, Joshua and J., Greensburg, Ind. Monument.....	13,543	Jan. 23	23	274
Poole, Edward, Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet.....	13,636 13,637	Feb. 20	23	633
Poole, Edward, Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet.....	13,826	Mar. 27	23	1126
Poole, Edward, Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet.....	13,887	May 1	23	1626
Poole, Edward, Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet.....	13,952 13,953	May 29	23	2036
Poole, Edward, Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet.....	14,312 to 14,316	Sept. 18	24	1094
Pope, Alfred A., Cleveland, Ohio. Harness-bit.....	13,549	Jan. 30	23	347
Pope, John L., Cleveland, Ohio. Whiffletree-plate.....	13,512	Jan. 2	23	2
Pope, John L., Cleveland, Ohio. Harness-bit.....	13,550 to 13,555	Jan. 30	23	347
Pope, John L., Cleveland, Ohio. Step-pad.....	13,638 13,639	Feb. 20	23	633
Pope, John L., Cleveland, Ohio. Seat-riser.....	14,329	Sept. 25	24	1180
Pottier & Stymus Manufacturing Company. (See Wheeler, Nathaniel, assignor.)				
Prindle, Florence L., Philadelphia, Pa. Fringe.....	13,805	Mar. 20	23	1036
Prindle, Gilbert H., Philadelphia, Pa. Upholstery-trimming.....	13,954	May 29	23	2036
Prindle, John A., Cleveland, Ohio. Paper-weight.....	14,146	July 31	24	394
Pugh, George W., assignor to Horner Brothers, Philadelphia, Pa. Carpet.....	14,128	July 24	24	305
Putnam, Salmon W., Fitchburg, Mass. Drilling-machine frame.....	14,276	Sept. 11	24	997
Quayle, John T., Providence, R. I. Breastpin.....	14,480	Dec. 11	25	984
Randall, William W., Marshfield, assignor to H. C. Barnes, Boston, Mass. Violin-box.....	14,419	Nov. 13	25	604
Ransom, Frances A., Palatka, Fla. Feather fan or screen.....	14,261	Sept. 4	24	903
Rapp, Grant, Jersey City, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet.....	14,509	Dec. 25	25	1193
Ratcliff, Frederick, New Bedford, Mass. Support for vases or other articles.....	13,980	June 12	23	2242
Read, Joseph A., Philadelphia, assignor to G. Combs, J. and J. H. Bawden, Freehold, N. J. Fire-place lining.....	14,039	July 3	24	2
Read, Joseph A., Philadelphia, Pa., assignor to G. Combs, J. and J. H. Bawden, Freehold, N. J. Fire-place front.....	14,076	July 10	24	103
Read, Joseph A., Philadelphia, Pa., assignor to G. Combs, J. and J. H. Bawden, Freehold, N. J. Fire-place frame.....	14,169	Aug. 14	24	605
Read, Joseph A., Philadelphia, Pa., assignor to G. Combs, J. and J. H. Bawden, Freehold, N. J. Fire-place fender.....	14,350	Oct. 16	25	196
Reed & Barton. (See Jackson, Austin F., assignor.)				
Reed, Charles S., assignor to himself and G. B. Blackwell, Huntingburg, Ind. Flower-pot.....	13,896	May 8	23	1736
Reed, John Q., assignor to Butterick Publishing Company, (limited,) New York, N. Y. Miss's kilt-plaited skirt with sash drapery.....	14,370	Oct. 23	25	293
Reed, John Q., assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's dress-basque.....	14,371	Oct. 23	25	293
Reed, John Q., assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's costume.....	14,420	Nov. 13	55	604
Reed, John Q., assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's polonaise.....	14,433	Nov. 20	25	702
Reed, John Q., assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's costume.....	14,452	Nov. 27	25	790
Reed, John Q., assignor to Butterick Publishing Company, (limited,) New York, N. Y. Boy's blouse.....	14,453	Nov. 27	25	790
Reed, John Q., assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's wrap.....	14,454	Nov. 27	25	790
Reed, John Q., assignor to Butterick Publishing Company, (limited,) New York, N. Y. Miss's costume.....	14,481	Dec. 11	25	984
Reed, John Q., assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's overskirt.....	14,510	Dec. 25	25	1193
Reed, John Q., assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's basque.....	14,511	Dec. 25	25	113
Reed, William S., Leominster, Mass. Toy money-box.....	13,969	June 5	23	2123
Reid, Hugh L., assignor to Howard & Scherrieble, Providence, R. I. Letters or alphabet.....	13,681	Feb. 27	23	744
Reitz, Joseph F., Evansville, Ind. Bureau.....	14,317	Sept. 18	24	1094
Remington, John O., Hingham, assignor to Burr, Brown & Co., Boston, Mass. Trimming.....	13,544 13,545	Jan. 23	23	274
Remington, John O., Hingham, assignor to Burr, Brown & Co., Boston, Mass. Curtain-band.....	13,904	May 15	23	1836
Reshower, Joseph, and A. Heck, New York, N. Y. Pencil.....	13,874	Mar. 27	23	1126
Reynolds, Stanley, Rochester, N. Y. Ornamentation of burial-caskets.....	14,496	Dec. 18	25	1109
Reynolds, Stanley, Rochester, N. Y. Ornamentation of burial-caskets.....	14,527	Dec. 25	25	1194



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Righter, Charles A., assignor to J. & G. D. Bromley, Philadelphia, Pa. Carpet .....	{ 13,682 to 13,688 14,277 }	Feb. 27	23	744
Righter, Charles A., assignor to J. and G. D. Bromley, Philadelphia, Pa. Carpet .....	{ 14,277 to 14,282 13,640 }	Sept. 11	24	998
Righter, Oscar, assignor to Dornan Bros. & Co., Philadelphia, Pa. Carpet .....	{ 13,644 to 14,283 }	Feb. 20	23	634
Righter, Oscar, assignor to Dornan Bros. & Co., Philadelphia, Pa. Carpet .....	{ 13,644 to 14,283 }	Sept. 11	24	998
Ringen, John, St. Louis, Mo. Laundry-stove .....	13,728	Mar. 13	23	942
Rinn, Philip H., assignor to California Jewelry Company, San Francisco, Cal. Badge or emblem .....	13,992	June 19	23	2329
Ritchel, Charles F., Bridgeport, Conn., assignor to Unexcelled Fireworks Company, New York, N. Y. Toy pistol .....	{ 13,815 13,816 }	Mar. 27	23	1126
Ritchie, Francis. (See Bascom and Ritchie.)				
Ritchie, Francis. (See Bascom, Ritchie, and Hodges.)				
Rogers & Bros., C. (See Sperry, Albert A., assignor.)				
Rogers, William, Hartford, assignor to Simpson, Hall, Miller & Co., Wallingford, Conn. Handle for spoons or forks .....	13,838	Apr. 3	23	1225
Rogers, William, Hartford, assignor to Simpson, Hall, Miller & Co., Wallingford, Conn. Handle for spoons or forks .....	14,245	Aug. 28	24	802
Rosenkranz, Adam, Allegheny, Pa. Steam-engine .....	13,616	Feb. 13	23	543
Rosenthal, Herman, New York, N. Y. Ruffling or collarette .....	13,617	Feb. 13	23	543
Rosenthal, Herman, New York, N. Y. Ruffling or collarette .....	14,040	July 3	24	2
Rosenthal, Herman, New York, N. Y. Ruffling or collarette .....	14,129	July 24	24	366
Rossman, Robert, New York, N. Y. Mantel-facing .....	13,839	Apr. 3	23	1225
Rost, Henry, Macomb, Ill. Moon-dial for clocks .....	14,421	Nov. 13	25	604
Roxbury Carpet Company. (See Fajon, Etienne, assignor.)				
Roxbury Carpet Company. (See Gadsby, Walter J., assignor.)				
Roxbury Carpet Company. (See McNair, David, assignor.)				
Roxbury Carpet Company. (See Melville, David G., assignor.)				
Roxbury Carpet Company. (See Parker, Harriet A., assignor.)				
Roxbury Carpet Company. (See Stearns, Thomas J., assignor.)				
Roy, Bozil S., Worcester, Mass. Card-grinding machine .....	13,888	May 1	23	1026
Rubly, James. (See Furi and Rubly.)				
Russell, William F., assignor to Hobbs, Brockunier & Co., Wheeling, W. Va. Glassware .....	13,645	Feb. 20	23	634
Sacks & Brother. (See Bassett, William R., assignor.)				
Sampson, Edward C. (See Meyer, Charles T. and V. E., assignors.)				
Sargent & Co. (See Sargent, Joseph B., assignor.)				
Sargent & Co. (See Wright, Charles L., assignor.)				
Sargent, Joseph B., assignor to Sargent & Co., New Haven, Conn. Ornamentation of hinges .....	13,546	Jan. 23	23	274
Sauer, Emil G., New York, N. Y., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet .....	13,646	Feb. 20	23	634
Sauer, Emil G., New York, N. Y., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet .....	{ 14,318 14,319 }	Sept. 18	24	1094
Savage, Joseph G., Brooklyn, assignor to Patterson & Greenough, New York, N. Y. Shawl .....	13,864	Apr. 17	23	1450
Schmidt, Christian A. (See Steinecke, Samuel, assignor.)				
Schmidt, Christian A., New York, N. Y. Fringe .....	13,710	Mar. 6	23	834
Schmidt, Christian A., New York, N. Y. Fringe .....	13,817	Mar. 27	23	1126
Schmidt, Christian A., New York, N. Y. Fringe .....	13,854	Apr. 10	23	1340
Schmidt, Christian A. (See Steinecke, Samuel, assignor.)				
Schofield, Mason & Co. (See Danby, Arthur, assignor.)				
Schofield, Mason & Co. (See Mitchell, Herbert, assignor.)				
Schrag, Philip, New York, assignor to E. Faber, Port Richmond, N. Y. Pen or pencil holder .....	13,618	Feb. 13	23	543
Schrieber, Charles W. (See Cooke, Schrieber, and Morgan.)				
Schumacher, William, Brooklyn, N. Y. Alto-rilievo .....	14,041	July 3	24	2
Searle, Thomas A., Quindnick, assignor to R. Barton, Providence, R. I. Sleeve-button back .....	14,106	July 17	24	267
Sherrill, Horace D., New York, N. Y. Finger-ring .....	13,240	Apr. 3	23	1226
Shiels, Sarah J., assignor to Butterick Publishing Company, (limited,) New York, N. Y. Lady's costume .....	14,512	Dec. 25	25	993
Shults & Buck. (See Shults, George J., assignor.)				
Shults, George J., assignor to Shults & Buck, Avoca, N. Y. Rocking-chair .....	14,230	Aug. 21	24	708
Shultz, Louis, New York, N. Y. Quilting .....	14,147	July 31	24	394
Sieckenberger, Giovanni, assignor of one-half to B. A. Hard and S. Parsons, New York, N. Y. Envelope .....	13,818	Mar. 27	23	1126
Sieckenberger, Giovanni, assignor of one-half to B. A. Hard and S. Parsons, New York, N. Y. Writing-paper .....	13,819	Mar. 27	23	1126
Silberman, Abbie L., New York, N. Y. Hand-bag or satchel .....	14,464	Dec. 4	25	1885
Simon, Abraham, New York, N. Y. Garment .....	13,925	May 22	23	1930
Simonds Manufacturing Company. (See Bascom and Heister, assignors.)				
Simpson, Hall, Miller & Co. (See Rogers, William, assignor.)				
Sloan, Andrew J., et al. (See Heald, Alfred, assignor.)				
Smith, Henry G., Providence, R. I. Ornamental chain .....	14,167	July 17	24	208
Smith, R. Hale, Springfield, Mass. Seal-press .....	13,897	May 8	23	1736
Smith & Sons Carpet Company, Alexander. (See Chambellan, Pierre C., assignor.)				
Smith & Sons Carpet Company, Alexander. (See Parton, Henry W., assignor.)				
Smith & Sons Carpet Company, Alexander. (See Petit, Eugène, assignor.)				
Smith & Sons Carpet Company, Alexander. (See Pignot, Paul, assignor.)				
Smith, Stephen, assignor to Horner Brothers, Philadelphia, Pa. Carpet .....	{ 14,130 14,131 }	July 24	24	306
Smith, William M., assignor to Meriden Britannia Company, Meriden, Conn. Coffin-handle socket .....	14,422	Nov. 13	25	604
Snyder, Peter A., Jersey City, N. J. Hasp-lock case .....	14,434	Nov. 20	25	702
Solomon, Jnda, et al. (See Fries, Gaspard W., assignor.)				
Solomon, Salomon, et al. (See Fries, Gaspard W., assignor.)				
Solomon, Simeon, et al. (See Fries, Gaspard W., assignor.)				
Sperry, Albert A., assignor to C. Rogers & Bros., Meriden, Conn. Spoon or fork handle .....	14,320	Sept. 18	24	1094
Spindler, Charles E., et al. (See Heyer, Charles E., assignor.)				
Spring, John, New York, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet .....	14,042	July 3	24	2
Stead & Muller. (See Ferguson, Joseph, assignor.)				
Stearns, Thomas J., Boston, Mass. Carpet .....	14,077	July 10	24	103
Stearns, Thomas J., assignor to Roxbury Carpet Company, Boston, Mass. Carpet .....	13,566	Jan. 30	23	347

*Alphabetical list of patentees of designs—Continued.*

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Stearns, Thomas J., assignor to Roxbury Carpet Company, Boston, Mass. Carpet .....	{ 13,647 } 13,648	Feb. 20	23	634
Stearns, Thomas J., assignor to Roxbury Carpet Company, Boston, Mass. Carpet .....	13,827	Mar. 27	23	1126
Stearns, Thomas J., assignor to Roxbury Carpet Company, Boston, Mass. Carpet .....	14,287	Sept. 18	24	998
Steinecke, Samuel, Brooklyn, assignor to C. A. Schmidt, New York, N. Y. Curtain-band .....	13,711	Mar. 6	23	834
Steinecke, Samuel, Brooklyn, assignor to C. A. Schmidt, New York, N. Y. Fringe .....	13,841	Apr. 3	23	1226
Stephens, Deloss H., Riverton, Conn. Desk-rule .....	14,043	July 3	24	2
Stewart, George W. (See Cox, Stephen J., assignor.)				
Stinard, William H., Syracuse, N. Y. Confection .....	14,010	June 26	23	2415
Stites, John S., Brooklyn, assignor to Elmore, Adams & Co., New York, N. Y. Bottle-stopper .....	14,330	Sept. 25	24	1180
St. John, James A., St. Louis, Mo. Type .....	{ 13,556 } 13,557	Jan. 30	23	347
St. John, James A., St. Louis, Mo. Type .....	13,729	Mar. 13	23	942
St. John, James A., St. Louis, Mo. Movable type .....	14,011	June 26	23	2415
Straus & Sons, L. (See Gutherz, Oscar, assignor.)				
Swapp, Charles W., Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet ..	{ 13,596 } to 13,602	Feb. 6	23	440
Swapp, Charles W., Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet ..	{ 13,649 } 13,650	Feb. 20	23	634
Swapp, Charles W., New York, N. Y., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet ..	{ 13,828 } 13,829	Mar. 27	23	1126
Swapp, Charles W., New York, N. Y., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet ..	{ 13,955 } to 13,964	May 29	23	2036
Swapp, Charles W., New York, N. Y., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet ..	{ 14,078 } to 14,087	July 10	24	104
Swapp, Charles W., New York, N. Y., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet ..	{ 14,231 } to 14,233	Aug. 21	24	708
Sweet & Clark Manufacturing Company. (See Sweet, Miles, assignor.)				
Sweet, John E., Syracuse, N. Y., and M. C. Bullock, Chicago, Ill. Upright steam-engine .....	13,842	Apr. 3	23	1226
Sweet, Miles, assignor to Sweet & Clark Manufacturing Company, Troy, N. Y. Curry-comb back-handle ..	14,108	July 17	24	208
Swett, Quimby & Perry. (See Bascom and Hodges, assignors.)				
Taylor, Thomas M., Mount Vernon, N. Y. Burial-casket .....	13,970	June 5	23	2123
Theuerner, Christopher J., Newark, N. J. Finger-ring .....	14,351	Oct. 16	25	196
Thomas, Wilber, Quincy, Ill. Fence-picket .....	13,926	May 22	23	1930
Thorp, Henry H., assignor to H. H. Thorp Manufacturing Company, Cleveland, Ohio. Printing-type ..	13,651	Feb. 20	23	634
Thorp, Henry H., assignor to H. H. Thorp Manufacturing Company, Cleveland, Ohio. Printing-type ornaments ..	13,993	June 19	23	2329
Thorp, Henry H., assignor to H. H. Thorp Manufacturing Company, Cleveland, Ohio. Printing-type ..	{ 14,148 } to 14,151	July 31	24	394
Thorp Manufacturing Company, H. H. (See Thorp, Henry H., assignor.)				
Tibbe, Henry, Washington, Mo. Smoking-pipe .....	13,999	June 19	23	2329
Time Telegraph Company. (See Pond, Chester H., assignor.)				
Timmes, John. (See Faller, Henry, assignor.)				
Toasperm, Herman, Jr., Brooklyn, N. Y. Calendar-card .....	14,465	Dec. 4	25	1885
Towle Manufacturing Company. (See Egge, Conrad, assignor.)				
Traitel, Benjamin D., New York, N. Y. Finger-ring .....	13,852	Apr. 10	23	1340
Traitel, Benjamin D., New York, N. Y. Finger-ring .....	14,247	Aug. 28	24	802
Triebel, Theodore, Glastonbury, Conn. Handle for spoons and forks .....	14,262	Sept. 4	24	903
Tuffley, Edward W., Brooklyn, N. Y. Jewelry .....	14,012	June 26	23	2415
Tully, Louise, assignor to Butterick Publishing Company, (limited), New York, N. Y. Girl's costume ..	14,457	Nov. 27	25	790
Tully, Louise, assignor to Butterick Publishing Company, (limited), New York, N. Y. Lady's basque ..	14,460	Nov. 27	25	790
Tully, Louise, assignor to Butterick Publishing Company, (limited), New York, N. Y. Lady's walking-skirt ..	14,500	Dec. 18	25	1082
Tully, Louise, assignor to Butterick Publishing Company, (limited), New York, N. Y. Miss's walking-skirt ..	14,514	Dec. 25	25	1194
Tully, Louise, assignor to Butterick Publishing Company, (limited), New York, N. Y. Miss's princess costume ..	14,515	Dec. 25	25	1194
Turner, George W., Boston, Mass. Musical-instrument case .....	13,603	Feb. 6	23	440
Turner, Mary, assignor to Butterick Publishing Company, (limited), New York, N. Y. Child's coat ..	14,455	Nov. 27	25	790
Turner, Mary, assignor to Butterick Publishing Company, (limited), New York, N. Y. Baby's creeping-apron ..	14,456	Nov. 27	25	790
Turner, Mary, assignor to Butterick Publishing Company, (limited), New York, N. Y. Girl's costume ..	14,458	Nov. 27	25	790
Turner, Mary, assignor to Butterick Publishing Company, (limited), New York, N. Y. Lady's double-breasted jacket ..	14,459	Nov. 27	25	790
Turner, Mary, assignor to Butterick Publishing Company, (limited), New York, N. Y. Lady's wrap ..	14,461	Nov. 27	25	790
Turner, Mary, assignor to Butterick Publishing Company, (limited), New York, N. Y. Lady's wattle wrapper ..	14,462	Dec. 11	25	984
Turner, Mary, assignor to Butterick Publishing Company, (limited), New York, N. Y. Girl's costume ..	14,513	Dec. 25	25	1194
Turner, Samuel H., Metropolis, Ill. Bed-spring .....	13,820	Mar. 27	23	1126
Tweeddale, William, Brooklyn, assignor to North American Iron Works, New York, N. Y. Vase ..	13,619	Feb. 13	23	543
Unexcelled Fireworks Company. (See Ritchel, Charles F., assignor.)				
Untermeyer, Henry, New York, N. Y. Chain .....	13,558	Jan. 30	23	347
Untermeyer, Henry, New York, N. Y. Jewelry .....	{ 13,730 } 13,731	Mar. 13	23	942
Untermeyer, Henry, New York, N. Y. Jewelry .....	13,874	Apr. 24	23	1532
Valentino, Lucy W., Boston, assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet ..	14,321	Sept. 18	24	1094
Van Deventer & Horno. (See Keir, William, assignor.)				
Van Eps, Henry R., Peoria, Ill. Flower-pot bracket .....	13,905	May 15	23	1836
Van Eps, Henry R., Peoria, Ill. Flower-stand .....	13,906	May 15	23	1836
Van Houton, John B., Newark, N. J. Ear-ring and pendant .....	{ 14,516 } to 14,520	Dec. 25	25	1194



*Alphabetical list of patentees of designs—Continued.*

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Vedder Pattern Works, Bascom, Galbraith & Co., N. S. (See Bascom, H. Clay, assignor.)				
Vedder Pattern Works, Bascom, Galbraith & Co., N. S. (See Bascom and Hodges, assignors.)				
Vedder Pattern Works, Bascom, Galbraith & Co., N. S. (See Bascom, Hodges, and Heister, assignors.)				
Vedder Pattern Works, Bascom, Galbraith & Co., N. S. (See Bascom and Ritchie, assignors.)				
Vedder Pattern Works, Bascom, Galbraith & Co., N. S. (See Bascom, Ritchie, and Hodges, assignors.)				
Vogt, Gustav, Limoges, France. Cuspidor.....	14,483	Dec. 11	25	984
Wadsworth, Joseph. (See Doherty and Wadsworth.)				
Wagner, Albert, New York, N. Y., assignor to J. Estey & Co., Brattleborough, Vt. Organ-case...	14,484	Dec. 11	25	984
Waldron, Charles F., Boston, Mass. Harness-trimming.....	13,559	Jan. 30	23	347
Walker, William E., <i>et al.</i> (See Wilbur, George E., assignor.)				
Wallace, Frank A., assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Spoon or fork handle.....	13,927	May 22	23	1930
Wallace & Sons Manufacturing Company, R. (See Wallace, Frank A., assignor.)				
Wallace & Son Manufacturing Company, R. (See Waterhouse, Frederick, assignor.)				
Wallach, Isidor, New York, N. Y. Satchel.....	13,994	June 19	23	2329
Warner, Charles H., Jr., assignor to Great Western Glass Works, St. Louis, Mo. Glass flask.....	13,526	Jan. 16	23	195
Warner, Hulbert H., Rochester, N. Y. Bottle.....	14,435	Nov. 20	25	702
Warren, Walter P., assignor to Fuller & Warren Company, Troy, N. Y. Stove.....	13,604	Feb. 6	23	440
Warren, William R., West Upton, Mass. Lady's hat.....	13,821	Mar. 27	23	1126
Waterhouse, Frederick, assignor to R. Wallace & Son Manufacturing Company, Wallingford, Conn. Spoon or fork handle.....	13,981	June 12	23	2242
Watkinson, George, New Haven, Conn. Ornamentation of overshoes.....	14,372	Oct. 23	25	294
Watson, George E., Bannack City, Mont. Ter. Sleigh.....	14,109	July 17	24	208
Watson, James, Jr. (See Crosby, George S., assignor.)				
Weldon, Frank, assignor to L. Kraus & Co., Birmingham, Conn. Corset.....	13,620	Feb. 13	23	544
Wentworth, David, assignor to Wentworth Spring and Axle Company, Gardiner, Me. Axle-nut.....	14,059	July 10	24	104
Wentworth Spring and Axle Company. (See Wentworth, David, assignor.)				
Wheeler, Nathaniel, Bridgeport, Conn. Railway-car.....	13,712	Mar. 6	23	834
Wheeler, Nathaniel, Bridgeport, Conn., assignor to Pottier & Stymus Manufacturing Company, New York, N. Y. Arm-chair.....	13,713	Mar. 6	23	834
Wheeler, Son & Co., Russell. (See Kernan, Francis, Jr., assignor.)				
Whitacre, Thomas W., Wellsville, Ohio. Irregular mallet.....	14,246	Aug. 28	24	802
Whitaker & Sons, William. (See Beaumont, Albert, assignor.)				
White, James H., assignor to Manhattan Brass Company, New York, N. Y. Fender.....	13,907	May 15	23	1836
White, James H., assignor to Manhattan Brass Company, New York, N. Y. Fender.....	14,170	Aug. 14	24	605
White, James H., assignor to Manhattan Brass Company, New York, N. Y. Fire-screen.....	14,171	Aug. 14	24	605
Whitlock, Daniel, Newark, N. J. Engine-frame.....	13,971	June 5	23	2123
Whitney, James H., Brooklyn, N. Y. Sewing-machine table.....	13,855	Apr. 10	23	1340
Whitney, James H., Brooklyn, N. Y. Fly-wheel for sewing-machines.....	14,436	Nov. 20	25	702
Whittall, Matthew J. (See Allen, Frank, assignor.)				
Widdifield, Elias E. and O. H., assignors of one-half to J. R. Carter, Toronto, Ontario, Canada. Mat.	14,133	July 24	24	306
Widdifield, Olive H. (See Widdifield, Elias E. and O. H.)				
Wilbur, George E., assignor to himself, W. E. Walker, and C. F. Baker, Taunton, Mass. Cooking-stove.....	13,928	May 22	23	1930
Wilkins, Daniel W., Boston, Mass. Banner lamp-shade stand.....	14,152	July 31	24	394
Willets, Daniel, Brooklyn, N. Y. Vegetable-dish.....	13,995	June 19	23	2329
Wilson, Frank B., New York, N. Y. Bottle-coaster.....	14,437	Nov. 20	25	702
Wimpfheimer, Sophie. (See Leonard, John, assignor.)				
Winchell, George D., Cincinnati, Ohio. Toilet-vessel.....	13,689	Feb. 27	23	744
Winchester, Theodore H., assignor to C. J. Cary, Baltimore, Md. Type.....	14,403	Nov. 6	25	506
Wire Goods Company. (See Perkins, William C., assignor.)				
Wood, Bishop & Co. (See Wood, Henry A., assignor.)				
Wood, Charles F., Summit, N. J. Letter for jewelry.....	14,248	Aug. 28	24	802
Wood, Charles F., Summit, N. J. Letter in jewelry.....	14,485	Dec. 11	25	984
Wood, Henry A., assignor to Wood, Bishop & Co., Bangor, Me. Stove.....	14,161	Aug. 7	24	499
Woodhead, Frank A., assignor to H. Barraclough, Philadelphia, Pa. Woven shawl.....	14,234	Aug. 21	24	708
Wright, Charles A., Philadelphia, Pa. Card.....	13,567	Jan. 30	23	347
Wright, Charles L., assignor to Sargent & Co., New Haven, Conn. Coffin-plate.....	14,013	June 26	23	2415





# ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

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Adams, Taylor & Co., Boston, Mass. Gin	10,030	Feb. 13	23	544
Agostini, Joseph, New York, N. Y. Lard	10,655	Oct. 23	25	294
Albertson, William R., Worcester, Mass. Burnishing ink or blacking for boots and shoes	10,332	June 5	23	2124
Albertson, William R., Worcester, Mass. Burnishing ink or blacking for boots and shoes	10,333	June 5	23	2124
Albertson, William R., Worcester, Mass. Burnishing ink or blacking for boots and shoes	10,334	June 5	23	2124
Albertson, William R., Worcester, Mass. Burnishing ink or blacking for the shanks and edges of boot or shoe soles	10,335	June 5	23	2124
Allen, Charles W., Chicago, Ill. Plug chewing-tobacco	10,421	July 17	24	208
Allen, Charles W., Chicago, Ill. Smoking and chewing tobacco	10,475	July 31	24	394
Allen & Hanburys, London, England. Medicinal specific for neuralgia	10,342	June 12	23	2242
Allen, Stephen W., and J. E. Dunning, Paterson, N. J. Cigars and tobacco	10,175	Apr. 10	23	1340
Am Ende, Charles G., Hoboken, N. J. Wound-dressings	10,145	Mar. 27	23	1126
Am Ende, Charles G., Hoboken, N. J. Chemical preservatives for animal and vegetable substances	10,607	Oct. 2	25	2
Am Ende, Charles G., Hoboken, N. J. Preservative for animal and vegetable substances	10,647	Oct. 23	25	294
American Chemical Company, Syracuse, N. Y. Wood-alcohol	10,117	Mar. 13	23	942
American Eagle Tobacco Company, Detroit, Mich. Cut smoking and chewing tobaccos	10,778	Dec. 18	25	1082
American Eagle Tobacco Company, Detroit, Mich. Cut smoking and chewing tobaccos and cigars	10,779	Dec. 18	25	1082
American Eagle Tobacco Company, Detroit, Mich. Cut smoking and chewing tobaccos and cigars	10,780	Dec. 18	25	1082
American Eagle Tobacco Company, Detroit, Mich. Cut smoking-tobacco and cigars and cigarettes	10,803	Dec. 25	25	1194
American Zylonite Company, New York, N. Y. Zylonite Ivory	10,564	Sept. 4	24	903
Ames & Sons, Oliver, North Easton, Mass. Spades, shovels, and scoops	10,620	Oct. 9	25	98
Amos & Sons, Jacob, Syracuse and Baldwinsville, N. Y. Flour	10,080	Mar. 6	23	834
Amos & Sons, Jacob, Syracuse and Baldwinsville, N. Y. Flour	10,081	Mar. 6	23	834
Amos & Sons, Jacob, Syracuse and Baldwinsville, N. Y. Flour	10,082	Mar. 6	23	834
Amos & Sons, Jacob, Syracuse and Baldwinsville, N. Y. Flour	10,083	Mar. 6	23	834
Amos & Sons, Jacob, Syracuse and Baldwinsville, N. Y. Flour	10,084	Mar. 6	23	834
Amos & Sons, Jacob, Syracuse and Baldwinsville, N. Y. Flour	10,133	Mar. 27	23	1126
Amoskeag Manufacturing Company, Manchester, N. H. Cotton piece-goods	10,185	Apr. 17	23	1450
Amthor, Robert, Baltimore, Md. Remedy for diphtheria	10,804	Dec. 25	25	1194
Anderson, Robert W., London, county of Middlesex, England. Extract of meat	10,571	Sept. 4	24	904
Andrae, Peter A., Brooklyn, N. Y. Medical compound for diseases of the skin	10,067	Feb. 27	23	744
Andrae, Auguste V., Blaye, France. Liquors and cordials	10,675	Oct. 30	25	398
Angell, Jonathan W., San Francisco, Cal. Liver-pills	10,015	Feb. 6	23	440
Ansar, Harford & Co., London, county of Middlesex, England. Cod-liver oil	9,983	Jan. 30	23	348
Ansonia Brass and Copper Company, Ansonia, Conn., and New York, N. Y. Refined copper ingots, plates, cakes, or bars	10,180	Apr. 10	23	1340
Ansonia Brass and Copper Company, Ansonia, Conn., and New York, N. Y. Refined copper ingots, plates, cakes, or bars	10,181	Apr. 10	23	1340
Ansonia Brass and Copper Company, Ansonia, Conn., and New York, N. Y. Insulated electric conductors	10,720	Nov. 20	25	702
Appleton Company, Lowell, Mass. Cotton drillings and other cotton goods	10,153	Apr. 10	23	1340
Appleton Company, Lowell, Mass. Cotton sheetings, shirtings, and other cotton goods	10,156	Apr. 10	23	1340
Arguimbau, Daniel V., Brooklyn, N. Y. Licorice-paste	10,109	Mar. 13	23	942
Arguimbau, Daniel V., Brooklyn, N. Y. Licorice-paste in sticks	10,110	Mar. 13	23	942
Arguimbau, Daniel V., Brooklyn, N. Y. Licorice-paste	10,111	Mar. 13	23	942
Arnold & Heidelberger, Ch., Rheims, France. Champagne-wine	10,447	July 17	24	208
Ascheuer, Friederick, New York, N. Y. Razors	10,665	Oct. 23	25	294
Ausable Horse Nail Company, New York, N. Y. Horseshoe-nails	10,676	Oct. 30	25	398
Austin, Nichols & Co., New York, N. Y. Cigars	10,685	Oct. 30	25	398
Ayer Company, J. C., Lowell, Mass. Certain medical preparations	10,556	Aug. 28	24	802
Ayer Company, J. C., Lowell, Mass. Pills	10,557	Aug. 28	24	802
Ayer Company, J. C., Lowell, Mass. Vegetable Sicilian hair-renewer	10,558	Aug. 28	24	802
Ayer Company, J. C., Lowell, Mass. Proprietary medicines for malarial diseases	10,691	Nov. 6	25	506
Ayer Company, J. C., Lowell, Mass. Preparation for the hair	10,692	Nov. 6	25	506
Ayer Company, J. C., Lowell, Mass. Proprietary medicines for affections of the lungs and throat	10,693	Nov. 6	25	506
Ayer Company, J. C., Lowell, Mass. Proprietary medicines containing sarsaparilla	10,694	Nov. 6	25	506
Ayer Company, J. C., Lowell, Mass. Proprietary medicines in the form of pills	10,698	Nov. 6	25	506
Babcock, Linn B., St. Louis, Mo. Smoking, plug, and fine-cut tobacco	10,816	Dec. 25	25	1194
Babcock Printing Press Manufacturing Company, New London, Conn. Printing-presses	10,205	Apr. 24	23	1532
Bagnall & Loud, Boston, Mass. Tackle or pulley blocks	10,648	Oct. 23	25	294
Baker & Co., Thomas, New York, N. Y. Boiler-cleaning compound	9,984	Jan. 30	23	348
Baker, George J., Hornsey, county of Middlesex, England. Certain electric medical appliances	10,413	July 10	24	104
Baker, George W., Aberdeen, Md. Canned goods	10,752	Dec. 4	25	885
Baker, James M., Saltville, Ind. Certain medical compound	10,707	Nov. 13	25	604
Bances, Juan A. (See Morris, Henry M., assignor.)				
Barber, Amzi L., Washington, D. C. Asphalt pavements	10,545	Aug. 28	24	802
Barbour & Hamilton, Washington, D. C. Flour	10,364	June 26	23	2415
Barbour & Hamilton, Washington, D. C. Flour	10,565	Sept. 4	24	903
Barnes, Cora F., Brooklyn, N. Y. Remedy for catarrh	10,406	July 10	24	104
Barnes, Cora F., Brooklyn, N. Y. Liniment	10,407	July 10	24	104
Barnes, Cora F., Brooklyn, N. Y. Certain vegetable preparation to promote digestion in infants and children	10,414	July 10	24	104
Barnett, James P., Brooklyn, N. Y. Remedies containing cresylic or carbolic acid for diseases of animals	10,343	June 12	23	2242
Barr & Co., Thomas T., New York, N. Y. Formosa oolong teas	10,369	June 26	23	2416
Bartlett, Henry A., Philadelphia, Pa. Stove-polish	10,216	Apr. 24	23	1532
Beadleston & Woerz, New York, N. Y. Ale, porter, and lager-beer	9,938	Jan. 2	23	2
Beck, Gustav L., Milwaukee, Wis. Medicinal preparations	10,260	May 8	23	1736
Bellak, James, Philadelphia, Pa. Reed-organs	9,967	Jan. 16	23	196

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Bellak, James, Philadelphia, Pa. Reed-organs	10,061	Feb. 20	23	634
Bellak, James, Philadelphia, Pa. Reed-organs	10,062	Feb. 20	23	634
Belmont & Son, S., Kansas City, Mo. Cigars, cigarettes, smoking and chewing tobacco, and snuff	10,318	May 29	23	2036
Benjamin & Son, O. C., Orange, N. J. Cosmetic	10,336	June 5	23	2124
Benk Manufacturing Company, New York, N. Y. Washing-powder	10,252	May 8	23	1736
Berbenich, Henry, New York, N. Y. Medicine for neuralgia, rheumatism, gout, and kindred diseases	10,699	Nov. 6	25	506
Berger, Frederick F., Carlyle, Ill. Proprietary medicines	10,478	Aug. 7	24	499
Berger, Jules, Marseilles, France. Certain table-liquors	10,445	July 17	24	208
Berry Bros., Liberty, Va. Plug-tobacco	10,524	Aug. 21	24	708
Berry Bros., Liberty, Va. Chewing and smoking tobacco	10,677	Oct. 30	25	398
Best Brewing Company, Phillip, Milwaukee, Wis. Bottled beer	10,258	May 8	23	1736
Bewley & Draper, (limited,) Dublin, Ireland. Ginger-ale	10,304	May 29	23	3036
Bewley & Draper, (limited,) Dublin, Ireland. Ginger-ale	10,305	May 29	23	3036
Bewley & Draper, (limited,) Dublin, Ireland. Ginger-ale	10,306	May 29	23	3036
Bible, George W., Philadelphia, Pa. Medicine for nervous and other diseases	10,319	May 29	23	3036
Billington, J. W., Bryan, Tex. Liniment	10,146	Mar. 27	23	1126
Birdseye & Co., I. W., Bridgeport, Conn. Corsets	10,186	Apr. 17	23	1450
Birdseye & Co., I. W., Bridgeport, Conn. Corsets	10,187	Apr. 17	23	1450
Bittel, Tepel & Eilers, New York, N. Y. Calf-skins, calf-kids, and goat-kid skins	10,263	May 15	23	1836
Blanchet Frères et Kléber, Rives, France. Writing-paper	10,415	July 10	24	104
Blanchet Frères et Kléber, Rives, France. Writing-paper	10,416	July 10	24	104
Bliven & Carrington, New York, N. Y. Lubricating-oils	10,103	Mar. 13	23	942
Bliven & Carrington, New York, N. Y. Lubricating compound	10,223	Mar. 1	23	1626
Bloch Brothers, Wheeling, W. Va. Cigars, cigarettes, and chewing and smoking tobacco	10,595	Sept. 25	24	1189
Bogardus, H. A. & H. D., Chicago, Ill. Buckwheat-flour	10,287	May 22	23	1930
Bohlen & Co., Henry, Philadelphia, Pa. Gin	9,920	Jan. 2	23	2
Bollinger, J., Ay-Champagne, France. Champagne-wine	10,678	Oct. 30	25	398
Bouché, Fils, Mareuil-Sur-Ay, France. Champagne-wines	10,581	Sept. 18	24	1094
Bouché, Fils, Mareuil-Sur-Ay, France. Champagne-wines	10,582	Sept. 18	24	1094
Bouché, Fils, Mareuil-Sur-Ay, France. Champagne-wines	10,630	Oct. 16	25	196
Bow, George D., Chicago, Ill. Plug chewing-tobacco and smoking-tobacco	10,134	Mar. 27	23	1126
Bowers, James, Newark, N. J. Corsets	10,744	Nov. 27	25	790
Boyd, Jonathan, Providence, R. I. Tonic bitters	10,450	July 24	24	306
Boyle, James W., New York, N. Y. Oysters	10,708	Nov. 13	25	604
Brainard, David, New York, N. Y. Whole winter-wheat	10,753	Dec. 4	25	885
Brearley, William H., Detroit, Mich. Remedy for external and internal use	10,165	Apr. 10	23	1340
Brecht, Gustavus V., St. Louis, Mo. Cutlery	10,344	June 12	23	2242
Breinig, Revere M., Brooklyn, N. Y. Oils, pigments, varnishes, driers, primers, and the like	10,353	June 19	23	2320
Breinig, Revere M., Brooklyn, N. Y. Oil-finish	10,402	July 10	24	104
Brigdwater Wood Finishing Company, New York, N. Y. Lithogen and silicate paints, and preparations composed more or less of ground silex, as coverings for metals and wood	10,123	Mar. 20	23	1036
Brinckerhoff, Turner & Co., New York, N. Y. Cotton duck	10,016	Feb. 6	23	440
Brinckerhoff, Turner & Co., New York, N. Y. Cotton duck	10,017	Feb. 6	23	440
Brinckerhoff, Turner & Co., New York, N. Y. Cotton duck	10,018	Feb. 6	23	440
Brinckerhoff, Turner & Co., New York, N. Y. Cotton piece-goods	10,019	Feb. 6	23	440
Brooks Oil Company, Cleveland, Ohio. Lubricating-oils	10,013	Feb. 6	23	440
Brown, Andrew, Buffalo, N. Y. Lumber in logs, boards, and staves	10,417	July 10	24	104
Brown & Brothers, Waterbury, Conn. Alloys of copper in the form of sheets, tubing, hollow ware, and cartridge-shells	10,264	May 15	23	1836
Brown, Eugene L. (See Lincoln and Brown.)				
Bruno & Son, C., New York, N. Y. Wind and reed instruments, violins, and guitars	9,993	Jan. 30	23	348
Buchanan & Lyall, New York, N. Y. Manufactured and unmanufactured tobacco	9,929	Jan. 2	23	2
Bucknall & Sons, Henry, London, county of Middlesex, England. Cork-wood	10,559	Aug. 28	24	802
Buffalo Alcholen Company, Buffalo, N. Y. Refined wood-alcohol	10,130	Mar. 20	23	1036
Burke, Walker & Co., Chicago, Ill. Certain dry-goods	10,469	July 31	24	394
Burkhard, William R., St. Paul, Minn. Sporting-powder	10,787	Dec. 18	25	1082
Burnham & Co., Charles, Philadelphia, Pa. Boxed cans for oils, varnishes, spirits of turpentine, and other liquids	10,745	Nov. 27	25	790
Burnside, George L., Bellows Falls, Vt. Curative plaster	10,709	Nov. 13	25	604
Burnside, George L., Bellows Falls, Vt. Cosmetic	10,740	Nov. 27	25	790
Burrongs, Wellcome & Co., Snow Hill, London, England. Drugs and chemicals	9,934	Jan. 9	23	95
Burrongs, Wellcome & Co., Snow Hill, London, England. Drugs and chemicals	9,935	Jan. 9	23	95
Bush, Alfred S., Kingston, N. Y. Baking-powder and yeast	10,383	July 3	24	2
Bush & Co., T. G., Mobile, Ala. Flour	10,398	July 3	24	2
Butcher, C. F., Sheffield, England. Files, edge-tools, razors, and cutlery	10,596	Sept. 25	24	1180
Butcher, C. F., Sheffield, England. Files, edge-tools, razors, and cutlery	10,597	Sept. 25	24	1180
Butcher, Charles F., Sheffield, England. Files	10,422	July 17	24	208
Butcher, Charles F., Sheffield, England. Razors	10,423	July 17	24	208
Calm, Charles E., New York, N. Y. Chemical salts for preserving and curing animal and vegetable food	10,288	May 22	23	1930
Canfield Company, I. A., Middletown, Conn. Dress-shields	10,253	May 8	23	1736
Canfield, Henry Y., New York, N. Y. Condensed or concentrated milk	10,746	Nov. 27	25	790
Cannon & Co., B., Lincoln, England. Salted sheep-skins	10,278	May 22	23	1930
Cannon & Co., B., Lincoln, England. Glue	10,279	May 22	23	1930
Cannon & Sons, E., Dublin, Ireland. Glue	10,289	May 22	23	1930
Cardeza, Gilliams & Co., Philadelphia, Pa. Rye and other whisky	10,529	Aug. 21	24	708
Carson, Robert, Philadelphia, Pa. Ingrain carpets	10,192	Apr. 17	23	1450
Carter, Dinsmore & Co., Boston, Mass. Writing-ink	10,099	Mar. 13	23	942
Carter, Dinsmore & Co., Boston, Mass., and New York, N. Y. Writing-fluid	10,098	Mar. 13	23	942
Carter, Dinsmore & Co., Boston, Mass., and New York, N. Y. Mucilage	10,100	Mar. 13	23	942
Carter, Dinsmore & Co., Boston, Mass., and New York, N. Y. Writing-ink	10,101	Mar. 13	23	942
Carter, Dinsmore & Co., Boston, Mass., and New York, N. Y. Mucilage	10,102	Mar. 13	23	942
Carter, Rice & Co. Corporation, Boston, Mass. Writing-paper	10,800	Dec. 25	25	1194
Catherwood & Co., Philadelphia, Pa. Tea	9,994	Jan. 30	23	348
Catherwood & Co., John H., Philadelphia, Pa. Teas	10,031	Feb. 13	23	544
Catherwood & Co., John H., Philadelphia, Pa. Teas	10,032	Feb. 13	23	544
Celluloid Manufacturing Company, New York, N. Y. Plastic material composed in part of pyroxyline	9,971	Jan. 23	23	274
Chamberlain, Roe & Co., New York, N. Y. Lard	10,656	Oct. 23	25	294
Chamberlain, Roe & Co., New York, N. Y. Lard	10,657	Oct. 23	25	294
Chamberlain, Dewstoe & Co., Dubuque, Iowa. Cigars and smoking and chewing tobacco	10,679	Oct. 30	25	398
Chandon & Co., Epernay, France. Sparkling wines	9,995	Jan. 30	23	348
Chase & Buddong, Aurora, Ill. Salves and plasters	10,499	Aug. 14	24	605



## Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
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Cheever, John H., New York, N. Y. India-rubber compound used for steam-packing and like purposes	10,345	June 12	23	2242
Chemical Ozone Manufacturing Company, Boston, Mass. Concentrated ozone-water	9,968	Jan. 16	23	186
Chester Oil Company, Philadelphia, Pa. Refined petroleum-oil	10,236	May 1	23	1626
Clark & Bro., M. H., Clarksville, Tenn. Leaf-tobacco	10,546	Aug. 23	24	892
Clark, George E., Cleveland, Ohio. Sugar-coated pop-corn	10,735	Nov. 20	25	702
Clark Thread Company, Newark, N. J. Packages of thread	10,023	Feb. 6	23	440
Clansen & Son Brewing Company, H., New York, N. Y. Malt liquors	10,370	June 26	23	2416
Clausen & Son Brewing Company, H., New York, N. Y. Beer, ale, stout, and porter	10,576	Sept. 11	24	998
Clostre, Henry, Paris, France. Phenol	9,996	Jan. 30	23	348
Coats & Evans, Binghamton, N. Y. Paper pails	10,608	Oct. 2	25	2
Coffin, Altemus & Co., Philadelphia, Pa., New York, N. Y., Boston, Mass., and Baltimore, Md. Cotton prints	9,978	Jan. 23	23	274
Cole & Co., H. C., Chester, Ill. Wheat-flour	10,598	Sept. 25	24	1180
Cole & Co., H. C., Chester, Ill. Wheat-flour	10,599	Sept. 25	24	1180
Cole & Co., H. C., Chester, Ill. Wheat-flour	10,600	Sept. 25	24	1180
Coleman, Sol., Memphis, Tenn. Chewing-gum	10,649	Oct. 23	25	294
Colgan & Co., E. C., Louisville, Ky. Medicinal substance	10,206	Apr. 24	23	1532
Colgate & Co., New York, N. Y. Laundry-soap	10,014	Feb. 6	23	440
Collins Company, Collinsville, Conn. Plows and analogous implements	9,953	Jan. 16	23	195
Collins Company, Collinsville, Conn. Certain earth-working tools	9,954	Jan. 16	23	195
Collins Company, Collinsville, Conn. Certain earth-working tools	9,955	Jan. 16	23	195
Collins Company, Collinsville, Conn. Certain earth-working tools	9,956	Jan. 16	23	195
Collins Company, Collinsville, Conn. Plows and analogous implements	9,957	Jan. 16	23	196
Collins Company, Collinsville, Conn. Certain edge-tools	9,958	Jan. 16	23	196
Collins Company, Collinsville, Conn. Certain agricultural implements	10,006	Jan. 30	23	348
Colwell, Charles B., Jackson, Mich. Medicinal preparation for external and internal use	10,302	May 22	23	1930
Common Sense Fertilizer Company, Portland, Me., and Boston, Mass. Fertilizers	10,621	Oct. 9	25	98
Compagnie Laferme, Dresden, Saxony, Germany. Cigarettes and smoking-tobacco	10,182	Apr. 10	23	1340
Consolidated Bottling Company, Bradford, Pa. Bottled beer, ale, porter, and all carbonated drinks	10,265	May 15	23	1836
Converse, Edmund C., Pittsburg, Pa. Metal tubing	10,759	Dec. 4	25	886
Converse, Edmund C., Pittsburg, Pa. Metal tubing	10,781	Dec. 18	25	1082
Cook & Bernheimer, New York, N. Y. Medicinal preparation known as wheat, lime, and rye	10,640	Oct. 16	25	196
Cooke & Eddy, Providence, R. I. Sleeve-buttons, collar-buttons, and studs	10,418	July 10	24	104
Coombs, Crosby & Eddy, New York, N. Y. Illuminating-oil	9,970	Jan. 23	23	274
Copp, Frederick E., Loudon, N. H. Liniment	10,519	Aug. 14	24	606
Corbitt, Martha C., Montgomery, Ala. Liniment	10,609	Oct. 2	25	2
Cotter, John, Baltimore, Md. Whisky	9,997	Jan. 30	23	348
Counselman & Co., L. W., Baltimore, Md. Canned oysters	10,723	Nov. 20	25	702
Craig Kidney Cure Co., Rochester, N. Y. Proprietary medicines	10,188	Apr. 17	23	1450
Crauc & Bro., Z., Jr., Dalton, Mass. Writing-paper and envelopes of all kinds	10,650	Oct. 23	25	294
Crane, Willard G., Cambridge, Ill. White bar-soap	10,610	Oct. 2	25	2
Crosby & Son, Henry B., Paterson, N. J. Wheat-flour	10,112	Mar. 13	23	942
Cumberlege, Alexander B., No. 8 Newman Street, Oxford Street, county of Middlesex, England. Water-proof polish-black	10,583	Sept. 18	24	1094
Cushing Process Company, Boston, Mass. Rum, brandy, whisky, gin, and foreign and domestic wines	10,551	Aug. 28	24	802
Danziger, Hirsch S., New York, N. Y. Moth and insect exterminator	10,033	Feb. 13	23	544
David, Jean B., St. Etienne, France. Velvets	10,479	Aug. 7	24	499
David, Jean B., St. Etienne, France. Velvets	10,480	Aug. 7	24	500
Davidson Bros., New York, N. Y. Ornamental chains	10,384	July 3	24	2
Davis, Bro. & Co., Trenton, N. J. Laundry-soap	10,207	Apr. 24	23	1532
Davis, F. A., Crum Lynne, Pa. Books, letter-headings, envelopes, paper-wrappers, advertising-circulars, pamphlets, &c	9,998	Jan. 30	23	348
David, Joseph, Providence, R. I. Elastic-bulb syringes	10,034	Feb. 13	23	544
De Castro & Co., D. assignors to S. O. Ryder, New York, N. Y. Flour	9,999	Jan. 30	23	348
De Kuyper & Son, John, Rotterdam, Holland. Gin	10,490	Aug. 7	24	500
De Penzot Frères, Les Fils, Valentigney, Doubs, France. Certain edge-tools	10,375	June 26	23	2416
Déclat Manufacturing Company, New York, N. Y. Medical and chemical preparations for the treatment and cure of human diseases	10,337	June 5	23	2124
Déclat Manufacturing Company, New York, N. Y. Surgical instruments and appliances	10,424	July 17	24	208
Denny & Sons, Henry, Chicago, Ill. Ham, bacon, and lard	9,979	Jan. 23	23	274
Denny & Sons, Henry, Chicago, Ill. Ham, bacon, and lard	10,290	May 22	23	1930
Denny & Sons, Henry, Chicago, Ill. Ham, bacon, and lard	10,601	Sept. 25	24	1180
Dentz & Geldermann, Ay, France. Champagne-wine	10,266	May 15	23	1836
Dentz & Geldermann, Ay, France. Champagne-wine	10,267	May 15	23	1836
Dick, George A., Southwark, county of Surrey, England. Alloy of metal	10,602	Sept. 25	24	1180
Dodge, Emmett B., Cleveland Ohio. Remedy for external and internal pain	9,972	Jan. 23	23	274
Dollins-Mieg & Co., Mühlhausen, Alsace-Lorraine, Germany. Cotton yarns and braids	10,631	Oct. 16	25	196
Dolge, Alfred, New York, N. Y. Felt slippers, boots, and shoes	10,365	June 26	23	2416
Dorgeval, Polydore, Paterson, N. J. Silk piece-goods	10,068	Feb. 27	23	744
Downes, Henry, New York, N. Y. Sparkling beverages	10,280	May 22	23	1930
Doyle & Co., Henry, San Francisco, Cal. Cotton twine, cod-lines, and carpet-warps	10,632	Oct. 16	25	196
Doyle & Co., Henry, San Francisco, Cal. Cotton twines, cod-lines, and carpet-warps	10,633	Oct. 16	25	196
Draper, Francis S., Attleborough, Mass. Pins, rings, chains, bracelets, brooches, drops, &c	10,770	Dec. 11	25	984
Dreber Watch Case Manufacturing Company, Cincinnati, Ohio, Newport, Ky., Chicago, Ill., and New York, N. Y. Rolled-gold-plate watch-cases	10,377	June 26	23	2416
Duffield & Moll, Philadelphia, Pa. Cholera medicine	10,584	Sept. 18	24	1094
Dunham, William E., Fall River, Mass. Silver-polish	10,634	Oct. 16	25	196
Dunn Leonard F., Community and Niagara Falls, N. Y. Knives, forks, and spoons	10,765	Dec. 4	25	886
Dunning, John E. (See Allen and Dunning.)				
Dusbane, John A., Baltimore, Md. Wrapping-paper	9,985	Jan. 30	23	348
Dwight & Co., John, New York, N. Y. Baking-soda, saleratus, and baking-powder	9,921	Jan. 2	23	2
Dwight & Co., John, New York, N. Y. Baking-soda, saleratus, and baking-powder	10,118	Mar. 20	23	1036
Eagle Cotton Gin Company, Bridgewater, Mass. Cotton-gins	10,801	Dec. 25	25	1194
Ebel, Josef, New York, N. Y. Stomachic	10,090	Mar. 6	23	834
Edge, Malkin & Co., Burslem, county of Stafford, England. Earthenware, iron-stone china, black luster, and fancy-colored stoneware	10,710	Nov. 13	25	604
Egerton & Co., Samuel E., Baltimore, Md. Baking-powder	10,505	Aug. 14	24	606
Electric Lustré Starch Co., New York, N. Y. Starch	10,371	June 26	23	2416
Elnain & Co., Frankfort-on-the-Main, Germany. Pills	10,451	July 24	24	306
Elyria Shear Company, Elyria, Ohio. Shears and scissors	10,494	Aug. 7	24	500
Elyria Shear Company, Elyria, Ohio. Shears and scissors	10,495	Aug. 7	24	500
Emerson, James E., Beaver Falls, Pa. Saws having insertible teeth	10,795	Dec. 18	25	1082

*Alphabetical list of registrants of trade-marks—Continued.*

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Entenza, Manuel, Waldo, Fla. Cigars	10,491	Aug. 7	24	500
Erwin, Gayden & Yonque, Winona, Miss. Cure for the opium habit	10,250	May 1	23	1626
Espey, John E., Bloomington, Ill. Toilet preparation	10,024	Feb. 6	23	440
Esterbrook Steel Pen Manufacturing Company, Camden, N. J. Metallic pens	10,157	Apr. 10	23	1340
Esterbrook Steel Pen Manufacturing Company, Camden, N. J. Metallic pens	10,158	Apr. 10	23	1340
Esterbrook Steel Pen Manufacturing Company, Camden, N. J. Metallic pens	10,159	Apr. 10	23	1340
Esterbrook Steel Pen Manufacturing Company, Camden, N. J. Metallic pens	10,160	Apr. 10	23	1340
Esterbrook Steel Pen Manufacturing Company, Camden, N. J. Metallic pens	10,161	Apr. 10	23	1340
Esterbrook Steel Pen Manufacturing Company, Camden, N. J. Metallic pens	10,603	Sept. 25	24	1180
Esterbrook Steel Pen Manufacturing Company, Camden, N. J. Metallic pens	10,604	Sept. 25	24	1180
Evans, Henry S., Montreal, Quebec, Canada. Sedative preparation or compound	10,261	May 22	23	1930
Evans, Henry S., Montreal, Quebec, Canada. Certain articles for nursery use	10,393	July 3	24	2
Evans, Henry S., Montreal, Quebec, Canada. Certain surgical instruments and appliances	10,394	July 3	24	2
Evans, Henry S., Montreal, Quebec, Canada. Certain articles for toilet use	10,425	July 17	24	208
Exstein & Co., Hiram, Buffalo, N. Y. Overalls, shirts, underwear, pants, suspenders, and collars	10,268	May 15	23	1836
Exstein & Co., Hiram, Buffalo, N. Y. Overalls, shirts, underwear, pants, suspenders, and collars	10,269	May 15	23	1836
Fahys & Co., Joseph, New York, N. Y. Watches	10,372	June 26	23	2416
Fairbank & Co., N. K., Chicago, Ill. Refined lard	10,162	Apr. 10	23	1340
Fairbank & Co., N. K., Chicago, Ill. Refined lard	10,163	Apr. 10	23	1340
Falkenau, Oppenheimer & Co., New York, N. Y. Diamond-settings	10,721	Nov. 20	25	702
Ferré, Jules, Paris, France. Medicine for the treatment of the diseases of the genital organs	10,741	Nov. 27	25	790
Ferré, Jules, Paris, France. Medical capsule	10,742	Nov. 27	25	790
Ferré, Jules, Paris, France. Medical preparations for the cure of the diseases of the genital organs	10,743	Nov. 27	25	790
Fickett & Beal, Boston, Mass. Laundry-blues	10,002	Jan. 30	23	348
Fiechter Manufacturing Company, Louis B., Minneapolis, Minn. Roller-mills, centrifugal reels, and bolting-cloths	10,611	Oct. 2	25	2
Fillmann & Co., Chicago, Ill. Ornamental moldings	10,408	July 10	24	104
Fingerhut, Richard, New York, N. Y. Dentifrice	10,063	Feb. 20	23	634
Fish Bros. & Co., Racine, Wis. Farm and spring wagons, phaetons, buggies, sleighs, and like vehicles	10,612	Oct. 2	25	2
Fitzsimmons & Kreider, Jacksonville, Ill. Flour	10,506	Aug. 14	24	606
Fones Brothers, Little Rock, Ark. Cutlery and edge-tools	10,771	Dec. 11	25	984
Foot, J. Howard, New York, N. Y. Musical instruments	10,552	Aug. 28	24	802
Foot, Truman S., New Haven, Conn. Bitters	10,452	July 24	24	306
Forbes & Co., J. E., Ottawa, Kans. Stoves	10,328	June 5	23	2124
Fortenbaugh, Albert, Baltimore, Md. Shoe-blackening	10,085	Mar. 6	23	834
Foster & Sons, M. B., London, England. Ales, stouts, and cider	10,164	Apr. 10	23	1340
Francis Brothers, Urbichsville, Ohio. Cathartic medicine	10,261	May 8	23	1736
Franco-Californian Packing Company, San Francisco, Cal. Canned fruits, vegetables, and other articles of food	10,658	Oct. 23	25	294
Frankenberg, Henry E., Brooklyn, N. Y. Knitting and embroidery thread and yarn	10,124	Mar. 20	23	1036
Franklin, Stephen D., Philadelphia, Pa. Compound for cleaning fabrics	10,613	Oct. 2	25	2
Fraser, Farley & Varnum, Yokohama, Japan. Teas	10,724	Nov. 20	25	702
French Spiral Spring Company, (limited,) Pittsburg, Pa. Spiral car-springs	10,585	Sept. 18	24	1094
Fulton Gravity Scale Company, Cincinnati, Ohio. Scales	10,035	Feb. 13	23	544
Gaff, Fleischmann & Co., New York, N. Y. Compressed yeast	10,000	Jan. 30	23	348
Gaff, Fleischmann & Co., New York, N. Y. Compressed yeast	10,001	Jan. 30	23	348
Gail & Ax, G. W., Baltimore, Md. Smoking and smoking and chewing tobacco	10,817	Dec. 25	25	1194
Galt & Co., William M., Washington, D. C. Patent-process flour	10,313	May 29	23	2036
Galt & Co., William M., Washington, D. C. Patent-process flour	10,314	May 29	23	2036
Ganbrill Sons & Co., Baltimore, Md. Cotton duck and twines	10,037	Feb. 13	23	544
Gandy, Maurice, Liverpool, county of Lancaster, England. Cotton belting	10,303	May 22	23	1930
Gandy, Maurice, Liverpool, England, and Baltimore, Md. Non-elastic cotton belts or bands	10,481	Aug. 7	24	500
Garcia, Bro. & Co., F., New York, N. Y. Cigars	10,025	Feb. 6	23	440
Garcia, Bro. & Co., F., New York, N. Y. Leaf-tobacco	10,026	Mar. 6	23	834
Gargan, Henri L., New York, N. Y. Silk piece-goods	10,056	Feb. 20	23	634
Garr Bros., Louisville, Ky. All kinds of chewing and smoking tobacco	10,453	July 24	24	306
Garrison, C. G., Prairie Grove, Ark. Certain proprietary medicines	10,538	Aug. 21	24	708
Gaylord, Samuel M., Philadelphia, Pa. Liniment	10,125	Mar. 20	23	1036
Gibbs, John S., Baltimore, Md. Canned oysters, fruits, and vegetables	10,446	July 17	24	208
Gilbert & Co., Givet, Ardennes, France. Lead-pencils	10,782	Dec. 18	25	1082
Gilbert & Co., Givet, Ardennes, France. Lead-pencils	10,783	Dec. 18	25	1082
Gilbert & Co., B. S., York, Pa. Baking-powder	10,224	May 1	23	1626
Gillott & Sons, Joseph, Birmingham, England. Steel pens	10,426	July 17	24	208
Gillott & Sons, Joseph, Birmingham, England. Steel pens	10,427	July 17	24	208
Gillott & Sons, Joseph, Birmingham, England. Steel pens	10,428	July 17	24	208
Gillott & Sons, Joseph, Birmingham, England. Steel pens	10,429	July 17	24	208
Gilmore, Edward S., Newton, Mass. Wheat-flour	10,036	Feb. 13	23	544
Glen Cove Manufacturing Company, Glen Cove, N. Y. Glucose	10,373	June 26	23	2416
Glen Cove Manufacturing Company, Glen Cove, N. Y. Glucose	10,374	June 26	23	2416
Glen Cove Manufacturing Company, Glen Cove, N. Y. Glucose	10,482	Aug. 7	24	500
Glen Cove Manufacturing Company, Glen Cove, N. Y. Glucose	10,483	Aug. 7	24	500
Globe Tobacco Company, Detroit, Mich. Chewing and smoking tobacco, cigars, and cigarettes	10,338	June 5	23	2124
Globe Tobacco Company, Detroit, Mich. Smoking and chewing tobacco, cigars, and cigarettes	10,659	Oct. 23	25	294
Goodall, Backhouse & Co., Leeds, county of York, England. Baking-powder	10,173	Apr. 10	23	1340
Goodall, Backhouse & Co., Leeds, county of York, England. Sauce	10,174	Apr. 10	23	1340
Goodwin & Co., New York, N. Y. Chewing and smoking tobacco, cigars, and cigarettes	10,200	Apr. 17	23	1450
Goodwin & Co., New York, N. Y. Smoking-tobacco, cigars, and cigarettes	10,201	Apr. 17	23	1450
Goodwin & Co., New York, N. Y. Cheroots, cigars, cigarettes, and smoking and chewing tobacco	10,622	Oct. 9	25	98
Goodwin & Co., New York, N. Y. Cheroots, cigars, cigarettes, and smoking and chewing tobacco	10,623	Oct. 16	25	196
Goodwin & Co., Brooklyn, N. Y. Cigarettes, cigars, and smoking and chewing tobacco	10,202	Dec. 25	25	1194
Gordon, Alexander, Detroit, Mich. Cigars	10,147	Mar. 27	23	1126
Gordon, Alexander, Detroit, Mich. Cigars	10,492	Aug. 7	24	500
Correll, John G., Ossian, Ind. Burning-fluids	10,680	Oct. 30	25	398
Goumas & Co., P., Paris, France. Certain musical instruments	10,366	June 26	23	2416
Graham & Co., James S., Rochester, N. Y. Re-saws, molding-machines, planers, &c	10,547	Aug. 28	24	802
Graham, Robert K., Montreal, Quebec, Canada. Certain proprietary medicines	10,641	Oct. 16	25	196
Granular Metal Company, Boston, Mass. Pigs of Babbitt metal	10,614	Oct. 2	25	2
Gray, Dawes & Co., London, England. Dates	10,355	June 19	23	2330
Greene, George E., New York, N. Y. Packages of canned meat	10,087	Mar. 6	23	834
Grimm & Co., Chas., New York, N. Y. Candies and sugar toys	10,270	May 15	23	1836
Groom Shovel Company, St. Louis, Mo. Shovels, scoops, and spades	10,516	Aug. 14	24	606
Guggenheim's Sons, M., New York, N. Y., and St. Gall, Switzerland. Hamburg edgings, Swiss embroideries, and like fabrics	10,367	June 26	23	2416



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Name, residence, and title.	No.	Date.	Official Gazette.	
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Hackett, George W. (See Prentice and Hackett.)				
Hadley Company, Boston, Mass. Shoe-thread	10,470	July 31	24	394
Hale Brothers, Sheffield, county of York, England. Cutlery and edge-tools of every kind	10,560	Aug. 28	24	802
Haley, Christina J. (See Minor and Haley.)				
Hall Brothers, Baltimore, Md. Canned oysters, fruits, and vegetables	9,936	Jan. 9	23	96
Hall & Co., Jos. S., New York, N. Y. Medical remedy for the diseases of women	10,307	May 29	23	2036
Hall & Co., Jos. S., New York, N. Y. Remedy for dyspepsia	10,308	May 29	23	2036
Halliday & Co., A., New York, N. Y. Whisky	10,020	Feb. 6	23	440
Hamann, Adolf, Dresden, Saxony, Germany. Porcelain-ware	10,282	May 22	23	1930
Hamilton, Robert, Covington, Ky. Fine-cut, plug, and smoking tobacco	10,454	July 24	24	306
Hamilton, Robert, Covington, Ky. Fine-cut chewing, plug, and smoking tobacco, cigars, and cigarettes	10,464	July 24	24	306
Hamlin's Wizard Oil Company, Chicago, Ill. Liniment	10,141	Mar. 27	23	1126
Hanes & Co., P. H., Winston, N. C. Chewing-tobacco	10,371	May 15	23	1836
Hanes & Co., P. H., Winston, N. C. Chewing-tobacco	10,272	May 15	23	1836
Hann & Co., New York, N. Y. Composition for removing and preventing incrustation in steam-boilers	10,237	May 1	23	1626
Harder, Minard, Cobleskill, N. Y. Horse-powers	10,225	May 1	23	1626
Harder, Minard, Cobleskill, N. Y. Thrashers and separators	10,226	May 1	23	1626
Harper, Thomas H., Redditch, county of Worcester, England. Needles	10,166	Apr. 10	23	1340
Harris' Sons, Joel H., Quincy, Ill. Plug-tobacco	10,666	Oct. 23	25	294
Harris' Sons, Joel H., Quincy, Ill. Plug-tobacco	10,667	Oct. 23	25	294
Harris' Sons, Joel H., Quincy, Ill. Plug-tobacco	10,668	Oct. 23	25	294
Harris' Sons, Joel H., Quincy, Ill. Plug-tobacco	10,669	Oct. 23	25	294
Harris' Sons, Joel H., Quincy, Ill. Plug-tobacco	10,670	Oct. 23	25	294
Harris' Sons, Joel H., Quincy, Ill. Plug-tobacco	10,784	Dec. 18	25	1082
Harrison, Bartleet & Co., Richard, Redditch, county of Worcester, England. Fish-hooks	10,135	Mar. 27	23	1126
Harrison, Bartleet & Co., Richard, Redditch, county of Worcester, England. Fish-hooks and fishing-tackle	10,189	Apr. 17	23	1450
Harrison Brothers & Co., Philadelphia, Pa. Concentrated alum	10,466	July 24	24	306
Hartford Woven Wire Mattress Company, Hartford, Conn. Woven-wire fabrics for beds, chairs, settees, &c.	10,217	Apr. 24	23	1532
Hartman, Josephus, Philadelphia, Pa. Biscuit-crackers	10,623	Oct. 9	25	98
Hartshorn, Eugene H., Boston, Mass. Preparation for cleaning and polishing jewelry, &c.	10,329	June 5	23	2124
Haviland & Co., New York, N. Y. Porcelain, earthenware, and glassware	10,525	Aug. 21	24	707
Haviland & Co., New York, N. Y. Porcelain, earthenware, and glassware	10,526	Aug. 21	24	707
Haviland & Co., New York, N. Y. Porcelain, earthenware, and glassware	10,527	Aug. 21	24	708
Haviland & Co., New York, N. Y. Porcelain, earthenware, and glassware	10,528	Aug. 21	24	708
Hawkes, Albert K., Austin, Tex. Spectacles and eyeglasses	10,805	Dec. 25	25	1194
Hawley & Hoops, New York, N. Y. Wooden toy globes	10,142	Mar. 27	23	1126
Hawthorn, Aldus F. and G. W., Lancaster, Pa. Roofing-paint	10,136	Mar. 27	23	1126
Hawthorn, George W. (See Hawthorn, Aldus F. and G. W.)				
Hayford, James W. (See Myers, Hayford, and Yingling.)				
Hazeltine, Ezra T., Warren, Pa. Remedy for consumption	10,471	July 31	24	394
Hecker and Soehnle, Gottlieb, Chemnitz, Germany. Hosiery	10,354	June 19	23	2330
Hedges, Ira M., and G. H. Smith, Haverstraw, N. Y. Bricks	10,769	Dec. 4	25	886
Heidsieck & Co., Rheims, France. Champagne-wine	10,075	Feb. 27	23	744
Heinz, F. & J., Pittsburg, Pa. Pickles, vinegar, sauces, catsups, prepared horse-radish, prepared mustard, preserves, jellies, marmalades, jams, and fruit-butters	10,119	Mar. 20	23	1036
Hennessey & Co., James, Cognac, France. Brandy	10,038	Feb. 13	23	544
Hess & Co., J. H., Charleston, Mo. Oil liniment	10,766	Dec. 4	25	886
Hetfield & Ducker, Brooklyn, N. Y. Biscuits, crackers, jumbles, snaps, cakes, wafers, and kindred articles	9,986	Jan. 30	23	348
Hetfield & Ducker, Brooklyn, N. Y. Crackers, biscuits, jumbles, snaps, cakes, wafers, and kindred articles	10,346	June 12	23	2242
Higgins, Charles A., Flemington, N. J. Certain proprietary medicines	10,681	Oct. 30	25	398
Higgins, Joseph C. (See Kilmer and Higgins.)				
Hiller, Frederick, Jr., San Francisco, Cal. Specific for the respiratory organs	10,209	Apr. 24	23	1532
Hines' Preserving Company, Chicago, Ill. Food-preservative	10,208	Apr. 24	23	1532
Hirschl & Bendheim, St. Louis, Mo. Cigars, cigarettes, and chewing and smoking tobacco	10,378	June 26	23	2416
Hirschl & Bendheim, St. Louis, Mo. Cigars, cigarettes, and smoking and chewing tobacco	10,700	Nov. 6	25	506
Hitt, Daniel C. (See Hitt, James B. and D. C.)				
Hitt, James B. and D. C., Urbana, Ohio. Cigars, plug, fine-cut, and smoking tobacco	10,517	Aug. 14	24	606
Hoffman, Edward J., Sioux City, and W. H. Ransom, Missouri Valley, Iowa. Compound for preventing the incrustation of steam-boilers	10,227	May 1	23	1626
Hoffman & Son, Emanuel, New York, N. Y. Manufactured and unmanufactured tobacco	10,202	Apr. 17	23	1450
Hogg, Thomas P., Paris, France. Cod-liver oil	10,228	May 1	23	1626
Hollender, Frederick, New York, N. Y. Lager-beer	10,176	Apr. 10	23	1340
Hollender, Frederick, New York, N. Y. Lager-beer	10,177	Apr. 10	23	1340
Hollender, Frederick, New York, N. Y. Lager-beer	10,178	Apr. 10	23	1340
Hollender, Frederick, New York, N. Y. Natural mineral waters	10,179	Apr. 10	23	1340
Holmes, Clay W., Elmira, N. Y. Toilet preparation	10,069	Feb. 27	23	744
Holzner, Herman, Newark, N. J. Cigars, cigarettes, and smoking and chewing tobacco	9,930	Jan. 2	23	2
Homer, Charles F., New York, N. Y. Silk and velvet ribbons	10,420	July 10	24	104
Hooper & Son, William J., Baltimore, Md. Seine-twine	10,339	June 5	23	2124
Hoopes, I. E. & L. S., Lancaster, Pa. Fertilizer	9,959	Jan. 16	23	196
Hoopes, I. E. & L. S., Lancaster, Pa. Fertilizer	9,960	Jan. 16	23	196
Hopkins and Milnor, Baltimore, Md. Hydrocarbon fluid	10,254	May 8	23	1736
Hopkins, Russell & Co., New York, N. Y. Oils to prevent rust, tarnish, or verdigris	10,070	Feb. 27	23	744
Horuthal & Deiches, Baltimore, Md. Manufactured chewing-tobacco	10,399	July 3	24	2
Hovey, Alphonso A., Detroit, Mich. Starch	10,320	May 29	23	2036
Hovey, Alphonso A., Detroit, Mich. Starch	10,321	May 29	23	2036
Hubbell, Lucretia B., Norwich, Conn. Proprietary medicine	9,962	Jan. 16	23	196
Huhbs, Edwin F., Philadelphia, Pa. Specific cure for piles	10,448	July 17	24	208
Humiston Food Preserving Company, Hartford, Conn., and Boston and Salem, Mass. Food-preservatives	10,203	Apr. 17	23	1450
Humiston Food Preserving Company, Hartford, Conn., and Boston and Salem, Mass. Food-preservatives	10,204	Apr. 17	23	1450
Humiston Food Preserving Company, Hartford, Conn., and Boston and Salem, Mass. Food-preservatives	10,291	May 22	23	1930
Humiston Food Preserving Company, Hartford, Conn., and Boston and Salem, Mass. Food-preservatives	10,292	May 22	23	1930
Humiston Food Preserving Company, Hartford, Conn., and Boston and Salem, Mass. Food-preservatives	10,293	May 22	23	1930

*Alphabetical list of registrants of trade-marks—Continued.*

Name, residence, and title.	No.	Date.	Official Gazette.	
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Humiston Food Preserving Company, Hartford, Conn., and Boston and Salem, Mass. Food-preservatives	10,294	May 22	23	1930
Humiston Food Preserving Company, Hartford, Conn., and Boston and Salem, Mass. Food-preservatives	10,295	May 22	23	1930
Humiston Food Preserving Company, Hartford, Conn., and Boston and Salem, Mass. Food-preservatives	10,296	May 22	23	1930
Humiston Food Preserving Company, Hartford, Conn., and Boston and Salem, Mass. Food-preservatives	10,297	May 22	23	1930
Humiston Food Preserving Company, Hartford, Conn., and Boston and Salem, Mass. Food-preservatives	10,298	May 22	23	1930
Huppmann, Joseph, New York, N. Y. Cigarettes	10,299	May 22	23	1930
Hurlburt, Charles T., New York, N. Y. Homeopathic medicinal preparations	10,660	Oct. 23	25	294
Huston, Robert, Philadelphia, Pa. Ingrain carpets	10,725	Nov. 20	25	702
Iglehart & O'Donnell, Baltimore, Md. Whisky	10,725	Sept. 18	24	1094
Imbs & Co., J. F., St. Louis, Mo. Flour	10,094	Mar. 6	23	834
Imperioli, Sarah J., Brooklyn, N. Y. Anti-rheumatic mixture	10,255	May 8	23	1736
Imperial Guano Company, Norfolk, Va. Fertilizers	10,472	July 31	24	394
Ingham, Harvey A., Waltham, Vt. Proprietary medicines	10,057	Feb. 20	23	634
Ingham, Harvey A., Vergennes, Vt. Proprietary medicines	10,196	Apr. 17	23	1450
Iowa Farming Tool Company, Fort Madison, Iowa. Hoes	10,210	Apr. 24	23	1532
Irrmann, Michael, Chicago, Ill. Havana cigars	10,726	Nov. 20	25	702
Jackson Company, Nashua, N. H. Cotton sheetings and shirtings	10,682	Oct. 30	25	398
Jackson Company, Nashua, N. H. Cotton sheetings and shirtings	10,256	May 8	23	1736
Jacobson, Jacob C., New York, N. Y. Beer	10,257	May 8	23	1736
Jacoby & Co., S., New York, N. Y. Cigars, cigarettes, and smoking-tobacco	10,347	June 12	23	2242
Jacoby & Co., S., New York, N. Y. Cigars, cigarettes, smoking and chewing tobacco	10,262	May 8	23	1736
Jacquemin Frères, J. B., London, England. Certain optical goods	10,493	Aug. 7	24	500
Jannoponlo, Demetrius, St. Louis, Mo. Water-proof clothing	10,430	July 17	24	208
Jaques, Atwood & Co., Chicago, Ill. Baking-powder	9,940	Jan. 9	23	96
Jarvis & Hooper, Detroit, Mich. Fertilizers	10,615	Oct. 2	25	2
Jayne & Son, Dr. D., Philadelphia, Pa. Medicinal preparations	10,307	Aug. 14	24	606
Jennings & Sons, A. G., Brooklyn and New York, N. Y. Lace goods	10,553	Aug. 28	24	802
Jennings & Sons, A. G., Brooklyn and New York, N. Y. Nets and lace goods	10,238	May 1	23	1626
Jennings & Sons, A. G., Brooklyn and New York, N. Y. Nets and lace goods	10,239	May 1	23	1626
Jennings & Sons, A. G., Brooklyn and New York, N. Y. Hair-nets and other reticulated fabrics	10,240	May 1	23	1626
Jennings & Sons, A. G., Brooklyn and New York, N. Y. Hair-nets and other reticulated fabrics	10,241	May 1	23	1626
Jennings & Sons, A. G., Brooklyn and New York, N. Y. Hair-nets and other reticulated fabrics	10,395	July 3	24	2
Jennings & Sons, A. G., Brooklyn and New York, N. Y. Hair-nets and other reticulated fabrics	10,506	Sept. 4	24	904
Jennings & Sons, A. G., Brooklyn and New York, N. Y. Hair-nets and other reticulated fabrics	10,567	Sept. 4	24	904
Jennings & Sons, A. G., Brooklyn and New York, N. Y. Hair-nets and other reticulated fabrics	10,568	Sept. 4	24	904
Jennings & Sons, A. G., Brooklyn and New York, N. Y. Hair-nets and other reticulated fabrics	10,727	Nov. 20	25	702
Johns, Thompson & Co., Cincinnati, Ohio. Lubricants or oils for journal-bearings	9,939	Jan. 9	23	96
Johns, Thompson Company, Cincinnati, Ohio. Lubricating-oil	10,797	Dec. 18	25	1082
Johnson Bros. & Leeper, Cincinnati, Ohio. Axes	10,131	Mar. 20	23	1036
Johnson, William R., Jr., and C. H. Wray, Lynchburg, Va. Cigars, cigarettes, smoking and chewing tobacco, and snuff	10,431	July 17	24	208
Jones, John A., Chicago, Ill. Ground or powdered spices	10,624	Oct. 9	25	98
Jones, Joshua R., Philadelphia, Pa. Books, pamphlets, catalogues, and miscellaneous publications	10,021	Feb. 6	23	440
Joseph & Anderson, Montgomery, Ala. Flour	10,455	July 24	24	306
Joseph & Anderson, Montgomery, Ala. Flour	10,456	July 24	24	306
Kaercher, Albert J., Allegheny, Pa. Healing-balm for chapped hands	10,796	Dec. 18	25	1082
Kaerross, Edward H., Philadelphia, Pa. Remedy for kidney and urogenital diseases	10,350	June 19	23	2330
Kaerross, Edward H., Philadelphia, Pa. Proprietary medicines	10,526	Aug. 14	24	606
Kay Brothers, Stockport, county of Chester, England. Cement for mending broken articles	10,211	Apr. 24	23	1532
Keating, Thomas, London, England. Lozenges	9,987	Jan. 30	23	348
Keep, George C., Brooklyn, N. Y. Balm-drops	10,229	May 1	23	1626
Kelley & Lysle, Leavenworth, Kans. Wheat-flour	10,484	Aug. 7	24	500
Kelley & Lysle, Leavenworth, Kans. Wheat-flour	10,521	Aug. 14	24	606
Kelley, Theodore Y., London, England. Blacking	10,076	Feb. 27	23	744
Kelly, Francis E., Wilmington, Del. Whisky	10,244	May 1	23	1626
Kompster, Daniel E., Boston, Mass. Spring-balance shade-rollers	9,969	Jan. 16	23	196
Kendall & Co., B. J., Enosburg Falls, Vt. Hair restorer and invigorator	10,569	Sept. 4	24	904
Kendall Manufacturing Company, Providence, R. I. Soap-powder	10,212	Apr. 24	23	1532
Kenny, Cornelius D., Baltimore, Md. Mixed teas	10,485	Aug. 7	24	500
Kensley, George L., New Brighton, Pa. Long-legged and ankle boots	10,728	Nov. 20	25	702
Kenyon & Powles, Mount Union, Iowa. Remedy for rheumatism and other diseases and injuries	10,642	Oct. 16	25	196
Kerr & Son, W. J. W., Corsicana, Tex. Chill, fever, and ague medicines	10,754	Dec. 4	25	886
Kibbe, Elbert S., and C. P. Robinson, Hartford, Conn. Certain cured meats	9,951	Jan. 9	23	96
Kilmer, Frederic B., and J. C. Higgins, New Brunswick, N. J. Laxative	10,309	May 20	23	2036
Kipling, Edward E., New York, N. Y. Artificial stones or brilliants	10,385	July 3	24	2
Kipling, Edward E., New York, N. Y. Artificial stones or brilliants	10,386	July 3	24	2
King, Richard, Detroit, Mich. Remedy for dyspepsia and indigestion	10,073	Feb. 27	23	744
Kirk & Co., James S., Chicago, Ill. Soaps, perfumery, toilet preparations, and glycerine	10,616	Oct. 2	25	2
Kirk & Co., James S., Chicago, Ill. Toilet-soap	10,695	Nov. 6	25	506
Kirk & Co., James S., Chicago, Ill. Certain toilet preparations and articles	10,701	Nov. 6	25	506
Kirkpatrick & Co., A., Philadelphia, Pa. Medicine for the prevention and cure of chills and fever and malarial diseases	10,500	Aug. 14	24	605
Krug & Co., Rheims, France. Champagne-wine	10,508	Aug. 14	24	606
Krug & Co., Rheims, France. Champagne-wine	10,509	Aug. 14	24	606
Lacerte, Narcisse, Levis, Quebec, Canada. Diphtheria remedy	10,587	Sept. 18	24	1094
Lacroix, Leonide, Fils, Angoulême, (Charente,) France. Cigarette-paper	10,095	Mar. 13	23	942
Lalancé & Grosjean Manufacturing Company, New York, N. Y. Enameled sheet-metal utensils and articles	10,322	May 29	23	2036
Lang, Bernheimer & Co., Philadelphia, Pa. Whisky	10,310	May 29	23	2036
Langdon Manufacturing Company, Manchester, N. H. Cotton piece-goods	10,137	Mar. 27	23	1126
Lasson, William, Berlin, Germany, and London, England. Hair-elixir	10,617	Oct. 2	25	2
Larus & Bro., Richmond, Va. Plug-tobacco	10,039	Feb. 13	23	544
Lau, Jacob H., New York, N. Y. Blasting-caps for exploding dynamite	10,028	Oct. 16	25	196
Lautz Brothers & Co., Buffalo, N. Y. Laundry and toilet soap	10,218	Apr. 24	23	1532
Lautz Bros. & Co., Buffalo, N. Y. Laundry and toilet soap	10,273	May 15	23	1836
Lawrence, Joseph J., St. Louis, Mo. Composition of tobacco	10,193	Apr. 17	23	1450
Lawrence, Joseph J., St. Louis, Mo. Special brand of coffee	10,729	Nov. 20	25	702
Lawton Brothers, New York, N. Y. Wheat-flour	10,058	Feb. 20	23	634



*Alphabetical list of registrants of trade-marks—Continued.*

Name, residence, and title.	No.	Date.	Official Gazette.	
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Lazell, Marsh & Gardiner, New York, N. Y. Perfumery, toilet-powder, and cosmetics .....	10,702	Nov. 6	25	500
Leaman, W. & A., New York, N. Y. Flour .....	10,184	Apr. 10	23	1340
Legrand, Alexandre, Fécamp, France. Cordial .....	9,941	Jan. 9	23	96
Legrand, Alexandre, Fécamp, France. Cordial .....	9,942	Jan. 9	23	96
Legrand, Alexandre, Fécamp, France. Cordial .....	10,409	July 10	24	104
Legrand, Alexandre, Fécamp, France. Cordial .....	10,410	July 10	24	104
Legrand, Alexandre, Fécamp, France. Cordial .....	10,411	July 10	24	104
Legrand, Alexandre, Fécamp, France. Cordial .....	10,412	July 10	24	104
Legrand, Alexandre, Fécamp, France. Cordial .....	10,749	Nov. 27	25	790
Legrand, Alexandre, Fécamp, France. Cordial .....	10,750	Nov. 27	25	790
Legrand, Alexandre, Fécamp, France. Cordial .....	10,751	Nov. 27	25	790
Leib Lubricating Company, Buffalo, N. Y. Lubricants .....	10,113	Mar. 13	23	942
Leib Lubricating Company, Buffalo, N. Y. Lubricating-oils .....	10,114	Mar. 13	23	942
Leidersdorf & Co., B., Milwaukee, Wis. Smoking-tobacco .....	10,003	Jan. 30	23	348
Leidersdorf & Co., B., Milwaukee, Wis. Fine-cut and plug chewing-tobaccos, smoking-tobaccos, cigars, and cigarettes .....	10,005	Jan. 30	23	348
Leland, Smith & Co., Toledo, Ohio. Chewing-tobacco and cigars .....	10,731	Nov. 20	25	702
Lenk & Co., P., New York, N. Y. Champagne-wines .....	10,220	Apr. 24	23	1532
Levering & Co., E., Baltimore, Md. Roasted coffee .....	9,974	Jan. 23	23	274
Levinstein, Campbell & Co., I., New York, N. Y., and Manchester, England. Red coloring-matter .....	10,357	June 19	23	2330
Levy, Diamant, Oppenheimer & Co., San Francisco, Cal. Leather boots .....	10,120	Mar. 26	23	1036
Lewis, Bedell & Co., Newark, N. J. Varnishes .....	10,138	Mar. 27	23	1126
Libby & Co., James L., New York, N. Y. Shirts .....	10,150	Mar. 27	23	1126
Lighte & Brother, New York, N. Y. Mineral water and natural spring waters .....	10,486	Aug. 7	24	500
Lighte & Co., Jersey City, N. J. Beer, ale, porter, and all carbonated beverages .....	10,703	Nov. 6	25	506
Lincoln, Charles J., and E. L. Brown, Little Rock, Ark. Tonic .....	10,323	May 29	23	2036
Lipps, Christopher, Baltimore, Md. Laundry and toilet soap .....	10,403	July 10	24	104
Livingston, Bernard L., Baltimore, Md. Cigarettes .....	10,523	Aug. 14	24	606
Lockwood, John L., New York, N. Y. Mineral waters .....	10,432	July 17	24	208
Loeflund & Co., Stuttgart, Germany. Malt extract .....	10,219	Apr. 24	23	1532
Löhr, Heinrich, Düsseldorf, Prussia, Germany. Natural mineral waters .....	10,168	Apr. 10	23	1340
Lomax, John A., Chicago, Ill. Gentle sparkling liquid used as a beverage .....	10,311	May 29	23	2036
Loomis, John D., Suffield, Conn. Cigars .....	10,510	Aug. 14	24	606
Loos, August, New York, N. Y. American isinglass .....	10,730	Nov. 20	25	702
Lond, Herbert, Boston, Mass. Pulley-blocks .....	10,683	Oct. 30	25	398
Louisville Leaf Tobacco Company, Louisville, Ky. Sheep-dip .....	10,026	Feb. 6	23	440
Loveland, Henry D., Lamar, Pa. Axes .....	10,358	June 19	23	2330
Lowe & Co., Charles, Manchester, county of Lancaster, England. Drugs and chemicals .....	10,104	Mar. 13	23	942
Lozano, Pendas & Co., New York, N. Y. Cigars .....	9,937	Jan. 9	23	96
Lozano, Pendas & Co., New York, N. Y. Cigars .....	10,457	July 24	24	306
Lustro Company, New York, N. Y. Preparation for cleaning, dressing, and polishing ladies' shoes .....	9,963	Jan. 16	23	196
Lustro Company, New York, N. Y. Certain preparation for cleaning and polishing stoves .....	10,064	Feb. 20	23	634
Lutner, Herman, Cincinnati, Ohio. Cigars .....	10,530	Aug. 21	24	708
Luyties Brothers, New York, N. Y. Natural mineral waters .....	10,487	Aug. 7	24	500
Luyties Brothers, New York, N. Y. Wines .....	10,539	Aug. 21	24	708
Lyon & Co., A. M., Richmond, Va. Plug, twist, and smoking tobacco .....	10,629	Oct. 16	25	196
Macalaster, O. P., Lynn, Mass. Remedy for toothache .....	10,091	Mar. 6	23	84
Macbeth & Co., George A., Pittsburg, Pa. Lamp-chimneys and lantern-globes .....	10,652	Oct. 23	25	294
Macbeth & Co., George A., Pittsburg, Pa. Lamp-chimneys .....	10,653	Oct. 23	25	294
Manneck, Charles H. and E. A. J., Brooklyn, N. Y. Machine-glué .....	10,722	Nov. 20	25	702
Manneck, Emile A. J. (See Manneck, Charles H. and E. A. J.) .....				
Marcy, Frederick I., Providence, R. I. Sleeve-buttons .....	10,121	Mar. 20	23	1036
Mark, Henry J., St. Louis, Mo. Steam-boiler-scale solvents .....	10,242	May 1	23	1636
Marsh & Co., G. E., Lynn, Mass. Soap in bars or cakes .....	10,625	Oct. 9	25	98
Marsh & Co., E. G., Lynn, Mass. Soap in bars or cakes .....	10,626	Oct. 9	25	98
Marsh & Co., G. E., Lynn, Mass. Soap in cakes or bars .....	10,711	Nov. 13	25	604
Marshall, Edwin L., Cleveland, Ohio. Tooth-picks .....	10,548	Aug. 28	24	802
Marx, Louis, New York, N. Y. Cigars .....	10,143	Mar. 27	23	1126
Marx, Louis, New York, N. Y. Cigars .....	10,760	Dec. 4	25	886
Marx, Louis, New York, N. Y. Cigars .....	10,761	Dec. 4	25	886
Matthes, Carl, Gross Salze, Prussia, Germany. Artificial mineral waters .....	10,798	Dec. 18	25	1082
May Brothers, New York, N. Y. Cigarette-paper .....	10,198	Apr. 17	23	1450
Mayer Brothers & Co., New York, N. Y. Cherry-juice .....	10,077	Feb. 27	23	744
Mayer Brothers & Co., New York, N. Y. Refined petroleum .....	10,577	Sept. 11	24	998
Mayer & Co., Robert, New York, N. Y. Lithographic inks .....	9,988	Jan. 30	23	348
McBride & Co., Atlanta, Ga. Water-filters .....	10,312	May 29	23	2036
McCormick Harvesting Machine Company, Chicago, Ill. Single-wheel reapers .....	10,704	Nov. 6	25	506
Megroz, Portier, Grose & Co., New York, N. Y. Velveteen .....	10,379	June 26	23	2416
Megroz, Portier, Grose & Co., New York, N. Y. Woolen dress-goods for women and children .....	10,380	June 26	23	2416
Megroz, Portier, Grose & Co., New York, N. Y. Woolen dress-goods .....	10,540	Aug. 21	24	708
Meinke, Alfred M., Brooklyn, N. Y. Paints and dyes .....	10,009	Jan. 30	23	348
Meinhard, Herman, New York, N. Y. Bitters .....	10,624	Oct. 30	25	398
Meissner, Ackermann & Co., New York, N. Y. Refined petroleum .....	10,387	July 3	24	2
Mellier, A. A., St. Louis, Mo. Specific for neuralgia and rheumatism .....	10,433	July 17	24	208
Mellin, Gustav, Retreat, Queen's Road, Peckham, county of Surrey, England. Prepared food for invalids and infants .....	10,806	Dec. 25	25	1194
Mellor, Taylor & Co., Burslem, county of Stafford, England. Stone-china .....	10,573	Sept. 4	24	904
Menacho, Puig & Co., New York, N. Y. Packages of lard .....	10,040	Feb. 13	23	544
Menacho, Puig & Co., New York, N. Y. Packages of lard .....	10,041	Feb. 13	23	544
Menacho, Puig & Co., New York, N. Y. Packages of lard .....	10,065	Feb. 20	23	634
Mendenhall, John C., Evansville, Ind. Certain proprietary fluid medicines .....	10,651	Oct. 23	25	294
Menier, Paris, France. Chocolate .....	10,340	June 5	23	2124
Menier, Paris, France. Chocolate .....	10,785	Dec. 18	25	1082
Merino Shoe Company, Boston, Mass. Felted-wool boots, shoes, slippers, and gaiters .....	10,618	Oct. 2	25	2
Mesler & Co., P. P., Dayton, Ohio. Horse-liniment .....	10,139	Mar. 27	23	1120
Mettee, Albert R., Baltimore, Md. Medicine for the cure of pulmonary and throat diseases .....	9,980	Jan. 23	23	274
Mennier & Co., A., Suresnes, France. Dyes for tissues .....	9,981	Jan. 23	23	274
Meyer Brothers & Co., St. Louis, Mo. Whisky .....	10,245	May 1	23	1620
Meyer & Bro., William, Lake Charles, La. Shingles .....	10,396	July 3	24	2
Michigan Stove Company, Detroit, Mich. Stoves, ranges, and heaters generally .....	10,007	Jan. 30	23	348
Michigan Stove Company, Detroit, Mich. Stoves, ranges, and heaters generally .....	10,008	Jan. 30	23	348
Milburn, Washington C., Washington, D. C. Beverage containing acid phosphates .....	10,458	July 24	24	306
Miller & Co., Henry T., Richmond, Va. Shirts, collars, cuffs, and underwear .....	10,434	July 17	24	208

*Alphabetical list of registrants of trade-marks—Continued.*

Name, residence, and title.	No.	Date.	Official Gazette.	
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Miller & Co., I. & I., Bermondsey, county of Surrey, England, and of Millerton, Upton, and Mortimore, Canada. Vegetable tanning extracts	9,944	Jan. 9	23	96
Miller & Co., John, Boston, Mass. Gin, rum, brandy, whisky, and foreign and domestic wines	10,488	Aug. 7	24	500
Miller, Leopold, New York, N. Y. Cigars, cigarettes, and all manufactured tobacco	10,194	Apr. 17	23	1450
Miller, Thomas L., Pearsall, Tex. Liniment to be used externally for the destruction of all kinds of parasites on stock and poultry and for healing the wounds caused by the same	10,476	July 31	24	394
Milward, Margaret F., Chicago, Ill. Playing-cards	10,712	Nov. 13	25	604
Minaldi & Co., A., New York, N. Y. Lemons and oranges	9,923	Jan. 2	23	2
Minor, Lyman D., and C. J. Haley, New York, N. Y. Garters	10,388	July 3	24	2
Mintons, Stoke-upon-Trent, county of Stafford, England. Pottery of every description	10,588	Sept. 18	24	1094
Mommer, Ewald, New York, N. Y. Velvet ribbons	10,747	Nov. 27	25	790
Morris, Henry M., Brooklyn, N. Y., assignor to J. A. Bances, Havana, Cuba. Cigars, cigarettes, and smoking-tobacco	10,554	Aug. 28	24	802
Morse Twist Drill and Machine Company, New Bedford, Mass. Cutting and drilling tools	10,389	July 3	24	2
Mort, Liddell & Co., Widnes, county of Lancaster, England. Caustic soda and soda-ash	10,167	Apr. 10	23	1340
Morton, Thomas, New York, N. Y. Sash-balances	10,246	May 1	23	1626
Mound City Paint & Color Company, St. Louis, Mo. Paints and oils	10,243	May 1	23	1626
Mount Vernon Company, Baltimore, Md. Certain woven cotton goods	10,522	Aug. 14	24	606
Mulford, Cary & Conklin, New York, N. Y. Cement for rubber goods and boots and shoes	10,737	Nov. 27	25	790
Müller, Peter, New York, N. Y. Substitute for hops	10,199	Apr. 17	23	1450
Mumm & Co., G. H., Rheims, France. Champagne-wine	10,513	Aug. 14	24	606
Myers, Benjamin F., J. W. Hayford, and G. S. Yingling, Tiffin, Ohio. Water-proof stove-polish	10,772	Dec. 11	25	984
Napheys & Son, George P., Philadelphia, Pa. Lard	10,078	Feb. 27	23	744
Nashua Manufacturing Company, Nashua, N. H. Cotton goods	10,169	Apr. 10	23	1340
National Herbal Cure Company, St. Louis, Mo. Certain proprietary medicines	10,549	Aug. 28	24	802
National Lager Beer Bottling Company, Cincinnati, Ohio. Lager-beer	10,531	Aug. 21	24	708
Nelson, William J., Bridgewater, Nova Scotia, Canada. Liniment	10,215	Apr. 24	23	1532
Neustaedter & Co., P., New York, N. Y. Pills	9,973	Jan. 23	23	274
New York and Rosendale Cement Company, New York, N. Y. Hydraulic cement	10,578	Sept. 11	24	998
New York Boat Oar Company, New York, N. Y. Oars, sweeps, sculls, and handspikes	10,467	July 24	24	306
New York Condensed Milk Company, New York, N. Y. Condensed milk	10,511	Aug. 14	24	606
New York Condensed Milk Company, New York, N. Y. Condensed milk	10,512	Aug. 14	24	606
New York Consolidated Card Company, New York, N. Y. Playing-cards	10,501	Aug. 14	24	605
New York Consolidated Card Company, New York, N. Y. Playing-cards	10,502	Aug. 14	24	606
Nichols & Co., D. P., Boston, Mass. Cabs	10,459	July 24	24	306
Noilly Prat & Co., Marseilles, France. Vermouth	10,766	Dec. 18	25	1082
North & Co., F. O., Boston, Mass. Blind-awnings	10,183	Apr. 10	23	1340
North & Judd Manufacturing Company, New Britain, Conn. Saddlery-hardware	10,762	Dec. 4	25	886
Norton Door Check and Spring Company, Boston, Mass. Pneumatic door-checks	10,589	Sept. 18	24	1094
Oberteuffer, Abegg & Daeniker, New York, N. Y. Taffeta ribbons with satin edges	10,713	Nov. 13	25	604
Oberteuffer, Abegg & Daeniker, New York, N. Y. Taffeta ribbons	10,738	Nov. 27	25	790
Olds & Co., Indianapolis, Ind. Toilet and laundry soap	10,763	Dec. 4	25	886
Osborn & Co., Samuel, Sheffield, county of York, England. Bar, plate, and various other kinds of steel	10,460	July 24	24	306
Osborne & Co., C. S., Newark, N. J. Saddle and harness tools	9,976	Jan. 23	23	274
Pace, Thomas N., and R. F. Sizer, Richmond, Va. All kinds and classes of manufactured tobacco	10,071	Feb. 27	23	744
Pace Tobacco Co., J. B., Richmond, Va. Plug, twist, and smoking tobacco	10,788	Dec. 18	25	1082
Pacific Vinegar Works, San Francisco, Cal. Certain vinegar made of wine	10,435	July 17	24	208
Page Belting Company, Concord, N. H. Certain kinds and articles of leather	10,348	June 12	23	2242
Palen, Gilbert E. (See Starkey and Palen.)				
Parent, Anatole P., Paris, France. Buttons	10,213	Apr. 24	23	1532
Parent, Anatole P., Paris, France. Buttons	10,214	Apr. 24	23	1532
Parent, Anatole P., Paris, France. Buttons	10,300	May 52	23	1930
Parisette, Louis, New York, N. Y. Bottled wines	10,330	June 5	23	2124
Parmenter Crayon Company, Waltham, Mass. Chalk-crayons	10,154	Apr. 3	23	1226
Passavant & Co., New York, N. Y. Silks, velvets, ribbons, and dress-goods	10,331	June 5	23	2124
Passavant & Co., New York, N. Y., and Frankfort, Germany. Velvets, satins, and silk goods	10,148	Mar. 27	23	1126
Patapasco Guano Company, Baltimore, Md. Fertilizers	10,230	May 1	23	1626
Patapasco Guano Company, Baltimore, Md. Fertilizers	10,231	May 1	23	1626
Patterson & Co., R. A., Richmond, Va. Plug-tobacco	10,096	Mar. 13	23	942
Peabody & Co., Henry W., Boston, Mass. Tools or implements for agricultural and mechanical purposes	9,989	Jan. 30	23	348
Peabody & Co., Henry W., Boston, Mass. Tools and implements for agricultural and mechanical purposes	10,661	Oct. 23	25	294
Pegram, Benjamin R., Jr., New York, N. Y. Flour	10,042	Feb. 13	23	544
Pegram, Benjamin R., Jr., New York, N. Y. Flour	10,043	Feb. 13	23	544
Pegram, Benjamin R., Jr., New York, N. Y. Flour	10,044	Feb. 13	23	544
Pegram, Benjamin R., Jr., New York, N. Y. Flour	10,045	Feb. 13	23	544
Pegram, Benjamin R., Jr., New York, N. Y. Flour	10,046	Feb. 13	23	544
Pegram, Benjamin R., Jr., New York, N. Y. Flour	10,047	Feb. 13	23	544
Pelzer Manufacturing Company, Pelzer, S. C. Cotton and woolen clothes	10,561	Aug. 28	24	802
Peninsular Stove Company, Detroit, Mich. Heating and cooking stoves and furnaces	10,059	Feb. 20	23	634
Perez, J. W., Mobile, Ala. Cigars	10,477	July 31	24	394
Perkins, Hazen H., Kewanee, Ill. Wagon end-gates	10,140	Mar. 27	23	1126
Pfau, J. Louis, Jr., Quincy, Ill. Soft-center steel	10,170	Apr. 10	23	1340
Pfingst, Doerhoefer & Co., Louisville, Ky. Tobacco	10,028	Feb. 6	23	440
Pierce, Henry L., Boston, Mass. Chocolate, bromo, and cocoa	10,639	Oct. 16	25	196
Piesse & Lubin, London, England. Perfumery and perfumed articles for the toilet	10,807	Dec. 25	25	1194
Pingree & Smith, Detroit, Mich. Women's and children's boots, shoes, and slippers	10,773	Dec. 11	25	984
Pingree & Smith, Detroit, Mich. Women's and children's boots, shoes, and slippers	10,718	Dec. 25	25	1194
Pitts, William M., Thomson, Ga. Medicinal preparation for external and internal pain	10,088	Mar. 6	23	834
Plume & Atwood Manufacturing Company, Waterbury, Conn. Pins	10,436	July 17	24	208
Plume & Atwood Manufacturing Company, Waterbury, Conn. Pins	10,437	July 17	24	208
Plumly & Son, George W., Philadelphia, Pa. Paper boxes	10,654	Oct. 23	25	294
Pray, Mary E., New York, N. Y. Certain articles and preparations for treating and improving the finger-nails, feet, and complexion	10,326	June 5	23	2124
Prentice, William J., Allegheny City, and G. W. Hackett, Pittsburg, Pa. Cement, plaster, lime, coloring for mortars, and kaolin	10,274	May 15	23	1836
Price, C. H. & J., Salem, Mass. Ferrated hygienic wine	10,732	Nov. 20	25	702
Price, William B., Baltimore, Md. Calcimine	10,686	Oct. 30	25	398
Prot & Co., Felix, Paris, France. Perfumery and toilet articles	10,419	July 10	24	104
Prud'homme, R., Ottawa, Ontario, Canada. Pomades	10,349	June 12	23	2242
Quinn, Andrew K., Newport, Ill. Cod-liver-oil cream	9,922	Jan. 2	23	2
Quinlan, John, Denver, Colo. Liniment for man and beast	10,590	Sept. 18	24	1094



*Alphabetical list of registrants of trade-marks—Continued.*

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Railton, William H., Chicago, Ill. Table-saucers	10,716	Nov. 13	25	604
Ransom, Frank A., Duncleu, N. J. Dyes	10,283	May 22	23	1930
Ransom, William H. (See Hoffman and Ransom.)				
Rathbone, Clarence, Albany, N. Y. Cooking-stoves, ranges, furnaces, and heaters	10,764	Dec. 4	25	886
Raynaud, A. Levallois-Perret, France. Perfumery, creams, dentifrice, hair-oils, and analogous articles used in toilet preparations	10,352	June 12	23	2242
Reach & Co., A. J., Philadelphia, Pa. Base-balls	10,663	Oct. 23	25	294
Reach & Co., A. J., Philadelphia, Pa. Base-ball bats	10,663	Oct. 23	25	294
Red C Oil Manufacturing Company, Baltimore, Md. Burning-oil	9,952	Jan. 9	23	96
Reessing, Herman, New York, N. Y. Various preparations and compounds of fish	10,284	May 22	23	1930
Register & Sons, J., Baltimore, Md. Gage-cocks	10,251	May 1	23	1626
Reich, Lorenz, New York, N. Y. Hungarian wines	10,316	May 29	23	2036
Reich, Lorenz, New York, N. Y. Hungarian wines and brandies	10,317	May 29	23	2036
Reid, Murdoch & Fischer, Chicago, Ill. Canned fruits and vegetables	10,359	June 19	23	2330
Reid, Murdoch & Fischer, Chicago, Ill. Canned fruits and vegetables	10,465	July 24	24	306
Reitlinger & Co., A. H., New York, N. Y. Kid-leather	10,550	Aug. 28	24	802
Remington, Robert K., Fall River, Mass. Lubricating material	10,438	July 17	24	208
Republic Iron Works, (limited,) Pittsburg, Pa. Sheet metal	10,767	Dec. 4	25	886
Republic Iron Works, (limited,) Pittsburg, Pa. Sheet iron and steel	10,700	Dec. 18	25	1082
Révil, Pére & Fils, F., Lyons, France. Parasols and umbrellas	10,376	June 26	23	2416
Richtinger & Co., Augustus, Havana, Cuba. Cigars	10,791	Dec. 18	25	1082
Ridcounr, Baker & Co., Kansas City, Mo. Baking-powders	10,197	Apr. 17	23	1450
Robbins & Ellicott, Buffalo, N. Y. Cigars	10,808	Dec. 25	25	1194
Roberson, Harry F., Albany, N. Y. Remedy for catarrh, cold in the head and throat	10,360	June 19	23	2330
Robinson, Charles P. (See Kibbe and Robinson.)				
Roderer & Co., Théophile, Rheims, France. Champagne-wine	10,532	Aug. 21	24	708
Roderer & Co., Théophile, Rheims, France. Champagne-wine	10,533	Aug. 21	24	708
Roderer & Co., Théophile, Rheims, France. Champagne-wine	10,534	Aug. 21	24	708
Root, Leonard S., New York, N. Y. Laundry-blue	9,961	Jan. 16	23	196
Rose & Co., L., London, England. Various preparations of lime-juice	9,965	Jan. 16	23	196
Rosenstein & Co., Louis, New York, N. Y. Certain mixture for bird-food	10,439	July 17	24	208
Rosenzi, Enrico, Bridgeton, N. J. Molded articles to resemble glass, such as tiles, plaques, hearths, table-tops, &c	10,381	June 26	23	2416
Ross, Turner & Co., Boston, Mass. Thread, twine, and cord	10,361	June 19	23	2330
Rothschild Brothers & Co., New York, N. Y. Boot and shoe blacking	10,574	Sept. 4	24	904
Rouyer, Guillet & Co., Saintes, France. Brandy	10,585	Aug. 28	24	802
Rowe, H. E., Bueyrus, Ohio. Fire and water proof paint	10,461	July 24	24	306
Rumford Chemical Works, Providence, R. I. Baking-powder	10,535	Aug. 21	24	708
Rumford Chemical Works, Providence, R. I. Self-raising bread preparation	10,536	Aug. 21	24	708
Runkel Brothers, New York, N. Y. Chocolate and cocoa	10,285	May 22	23	1930
Ruppert, Jacob, New York, N. Y. Lager-beer	10,004	Jan. 30	23	348
Russell and Company, Massillon, Ohio. Agricultural machinery	10,579	Sept. 11	24	998
Ryder, S. Oscar. (See De Castro & Co., D. assignors.)				
Ryder, S. Oscar, New York, N. Y. Wheat-flour	9,964	Jan. 16	23	196
Sachs, Pruden & Co., Dayton, Ohio. Ginger-ale	10,092	Mar. 6	23	834
Sachs, Pruden & Co., Dayton, Ohio. Ginger-ale	10,093	Mar. 6	23	834
Sachs, Pruden & Co., Dayton, Ohio. Ginger-ale	10,190	Apr. 17	23	1450
Saint Louis Paint Manufacturing Company, St. Louis, Mo. Paints, wood-fillers, clays, ochers, &c	10,048	Feb. 13	23	544
Sanderson, A., Havana, Cuba. Cigarettes and cut tobacco	10,636	Oct. 16	25	196
Sanderson & Co., Havana, Cuba. Cigarettes and cut tobacco	10,627	Oct. 9	25	98
Sanderson & Co., Havana, Cuba. Cigarettes and cut tobacco	10,664	Oct. 23	25	294
Sanford & Sons, S. T. W., New York, N. Y. Proprietary medicines	10,368	June 26	23	2416
Sauer, John, Evansville, Ind. Cigars	10,049	Feb. 13	23	544
Sawyer, Howard M., West Medford, Mass. Water-proof jackets, pants, and coats	10,105	Mar. 13	23	942
Scalles, Hamilton, Winston, N. C. Plug chewing and smoking tobacco	10,440	July 17	24	208
Schiomel & Co., J. O., Philadelphia, Pa. Canned provisions	10,151	Mar. 27	23	1126
Schofield, Mason & Co., Philadelphia, Pa. Body-brussels and Wilton carpets and rugs	10,400	July 3	24	2
Schover & Co., E. A., Chicago, Ill. Teas	10,010	Jan. 30	23	348
Schub, Paul G., Cairo, Ill. Liniment	10,514	Aug. 14	24	606
Schultz & Co., Zanesville, Ohio. Laundry and toilet soap	9,990	Jan. 30	23	348
Schultz & Co., Zanesville, Ohio. Laundry and toilet soap	10,324	May 29	23	2036
Schwartz & Co., George S., Louisville, Ky. Plug and smoking tobacco	10,382	June 26	23	2416
Schweer, H. F., Cape Girardeau, Mo. Remedy for epilepsy	10,755	Dec. 4	25	886
Schwob, Adolphe, New York, N. Y. Watches	10,301	May 22	23	1930
Schwob, Adolphe, New York, N. Y. Watches	10,562	Sept. 18	24	1084
Schwob, Adolphe, New York, N. Y. Watches	10,593	Sept. 18	24	1084
Schwob, Adolphe, New York, N. Y. Watches	10,594	Sept. 18	24	1084
Scoggins, Samuel R., Baltimore, Md. Medicines for the cure of coughs, colds, and diseases of the throat and lungs	9,982	Jan. 23	23	274
Scott Bros., Binghamton, N. Y. Havana cigars	10,404	July 10	24	104
Seabury, Frederick W., Providence, R. I. Articles used in the manufacture of artificial teeth	10,605	Sept. 25	24	1180
Sears & Co., Henry, Chicago, Ill. Razors	9,946	Jan. 9	23	96
Seeley & Co., I. B., Philadelphia, Pa. Hernial truss	9,924	Jan. 2	23	2
Seligman, Sarah, New York, N. Y. Whalebone	10,097	Mar. 13	23	942
Sellers & Co., R. E., Pittsburg, Pa. Proprietary medicine	10,643	Oct. 16	25	196
Senter, George F., New York, N. Y. Certain composition of petroleum and mustard-seed oil for medicinal and other uses	10,563	Aug. 28	24	802
Shae & Christie, Manchester, England, and New York, N. Y. Velveten	9,991	Jan. 30	23	348
Shae & Fithian, New York, N. Y. Velvets, velvetens, velvetas, plushes, and similar goods	10,122	Mar. 20	23	1036
Shae & Fithian, New York, N. Y. Dress silk goods	10,247	May 1	23	1626
Shae & Fithian, New York, N. Y. Black and colored silks	10,736	Nov. 20	25	702
Shattuck, Jane A., Utica, N. Y. Hair-restoratives	9,966	Jan. 16	23	196
Shaver, I. Calvin, Caldwell, N. J. Wild cherry, rock, and rye	10,171	Apr. 10	23	1340
Shirley, Frederick S., New Bedford, Mass. Table-ware and fancy articles of glass	10,011	Jan. 30	23	348
Shuman & Co., A., Boston, Mass. Boys' clothing	10,637	Oct. 16	25	196
Shuman & Co., A., Boston, Mass. Boys' clothing	10,638	Oct. 16	25	196
Sicre, Alban, Paris, France. Medical tea	10,106	Mar. 13	23	942
Siegel Brothers, Durham, N. C. Cigars, cigarettes, and smoking and chewing tobacco	10,673	Oct. 23	25	294
Siewerd & Bro., F. H., Baltimore, Md. Hermetically-sealed vegetables, fruits, oysters, fish, meats, &c	10,195	Apr. 17	23	1450
Simmon, Karl, St. Paul, Minn. Vermin-destroyer	9,926	Jan. 2	23	2
Simmonds, George, San Francisco, Cal. Compounded extracts of tropical fruits	10,799	Dec. 18	25	1082
Simmons & Co., C. F., St. Louis, Mo. Remedy for chills, neuralgia, &c	10,562	Aug. 28	24	802
Simonds Manufacturing Company, Fitchburg, Mass. Saws	10,050	Feb. 13	23	544

*Alphabetical list of registrants of trade-marks—Continued.*

Name, residence, and title.	No.	Date.	Official Gazette.	
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Simouson, Albert, New York, N. Y. Medicated toilet compound .....	10,774	Dec. 11	25	984
Sizer, Robert F. (See Pace and Sizer.) .....				
Skinner & Son, William, New York, N. Y. Silk and mohair braids and silk threads .....	10,405	July 10	24	104
Slate, Dwight, Hartford, Conn. Drilling-machines .....	9,938	Jan. 9	23	96
Slanson & Co., A., New York, N. Y. Lozenges .....	10,809	Dec. 25	25	1194
Slanson & Co., A., New York, N. Y. Lozenges .....	10,810	Dec. 25	25	1194
Slanson & Co., A., New York, N. Y. Lozenges .....	10,811	Dec. 25	25	1194
Slanson & Co., A., New York, N. Y. Lozenges .....	10,811	Dec. 25	25	1194
Slanson & Co., A., New York, N. Y. Lozenges .....	10,820	Dec. 25	25	1194
Slanson & Co., A., New York, N. Y. Confectionery .....	10,821	Dec. 25	25	1194
Smith & Co., C. B., Jr., Binghamton, N. Y. Cigars .....	10,496	Aug. 7	24	500
Smith Company, J. Barton, Philadelphia, Pa. Buck-saws .....	9,933	Jan. 9	23	95
Smith, George H. (See Hedges and Smith.) .....				
Smith, Hanway & Co., Baltimore, Md. Baking-powder .....	10,572	Sept. 4	24	904
Smith & Son, James, Astwood Bank, county of Worcester, England. Sewing-needles .....	9,931	Jan. 2	23	2
Smith & Son, James, Astwood Bank, county of Worcester, England. Sewing-needles .....	10,066	Feb. 20	23	634
Snyder, Henry, Jr., Brooklyn, N. Y. Whisky .....	10,777	Dec. 11	25	984
Société Générale de Produits Alimentaires, Paris, France. Butter .....	10,812	Dec. 25	25	1194
Société Générale de Produits Alimentaires, Paris, France. Butter .....	10,813	Dec. 25	25	1194
Solomon & Bros., Gustav, New York, N. Y. Havana leaf-tobacco .....	10,591	Sept. 18	24	1094
Soubiran & Co., Paris, France. Pomatum, scented liquids, powders, hair-oils, and cosmetics .....	10,341	June 5	23	2124
Southern Calendar Clock Company, St. Louis, Mo. Clocks .....	10,497	Aug. 7	24	500
Spaulding & Merrick, Chicago, Ill., and Louisville, Ky. Snuff, cigars, cigarettes, fine-cut chewing-tobacco, and plug and smoking tobacco .....	10,441	July 17	24	208
Spaulding & Merrick, Chicago, Ill., and Louisville, Ky. Snuff, cigars, cigarettes, fine-cut chewing-tobacco, and plug and smoking tobacco .....	10,442	July 17	24	208
Spaulding & Merrick, Chicago, Ill., and Louisville, Ky. All manufactured tobacco .....	10,462	July 24	24	306
Spear, Giles H., Milwaukee, Wis. Fine-cut and plug chewing-tobacco, smoking-tobacco, cigars, and cigarettes .....	10,259	May 8	23	1736
Sproat's Syrup of Tar Co., Taunton, Mass. Cough-mixture .....	10,644	Oct. 16	25	196
Squire, Alfred, Cincinnati, Ohio. Cornets .....	10,489	Aug. 7	24	500
Stanard & Co., E. O., St. Louis, Mo. Wheat-flour .....	9,947	Jan. 9	23	96
Stanard & Co., E. O., St. Louis, Mo. Wheat-flour .....	10,397	July 3	24	2
Stanard & Co., E. O., St. Louis, Mo. Wheat-flour .....	10,443	July 17	24	208
Starkey, George R., and G. E. Palen, Philadelphia, Pa. Compound oxygen and inhaler .....	10,449	July 17	24	208
Stearne, Edmund G., Philadelphia, Pa. Smoking-tobacco, chewing-tobacco, and cigarettes .....	10,172	Apr. 10	23	1340
Stearns & Co., Frederick, Detroit, Mich. Remedy for private diseases .....	10,756	Dec. 4	25	886
Stearns & Co., John N., New York, N. Y. Sashes, scarfs, and trimmings .....	10,232	May 1	23	1636
Steeck, George, New York, N. Y. Diminutive upright pianos .....	10,674	Oct. 23	25	294
Stern & Co., B., Niedermendig and Cologne, Germany. Mineral water .....	10,696	Nov. 6	25	506
Stevens, Frederick S., Bridgeport, Conn. Cough-medicine .....	10,327	June 5	23	2124
Stevens, Henry R., Boston, Mass. Medical compound for the cure of pain and inflammation .....	10,221	Apr. 24	23	1532
Stevens, Henry R., Boston, Mass. Medical compound for the cure of pain and inflammation .....	10,222	Apr. 24	23	1532
Stevens, Henry R., Boston, Mass. Medicinal compound for the cure of scrofula and the like diseases .....	10,468	July 24	24	306
Stevenson, J. F., Allegheny, Pa. Preparation for softening and beautifying the hands and face .....	10,022	Feb. 6	23	440
St. Louis Bolt and Iron Company, St. Louis, Mo. Railway-rails and railway-fastenings .....	10,079	Mar. 6	23	834
Stoddard Lock Company, New York, N. Y. Domestic filters .....	10,149	Mar. 27	23	1126
Stone, Yelverton P., Baltimore, Md. Cigars .....	10,792	Dec. 18	25	1082
Straight Line Engine Company, Syracuse, N. Y. Steam-engines .....	10,248	May 1	23	1626
Strasburger & Co., Louis, New York, N. Y. Watches .....	10,315	May 29	23	2036
Strasser & Co., M., Albany, N. Y. Cigars, cigarettes, and snuff .....	9,948	Jan. 9	23	96
Suez, (The Firm of.) Paris, France. Dentifrices .....	10,473	July 31	24	394
Suez, (The Firm of.) Paris, France. Dentifrices .....	10,474	July 31	24	394
Summit City Soap Company, Fort Wayne, Ind. Hard soap .....	10,276	May 15	23	1836
Sweet, B. F. & H. L., Fond du Lac, Wis. Sleds and sleighs .....	9,992	Jan. 30	23	348
Swift Specific Company, Atlanta, Ga. Internal remedies .....	10,144	Mar. 27	23	1126
Taylor Manufacturing Company, St. Louis, Mo. Cigars .....	10,705	Nov. 6	25	506
Taylor, Walter A., Atlanta, Ga. Internal remedies .....	10,503	Aug. 14	24	606
Tellado, Giberger & Co., New York, N. Y. Flour .....	10,714	Nov. 13	25	604
Tellado, Giberger & Co., New York, N. Y. Flour .....	10,715	Nov. 13	25	604
Tetlow & Bro., Henry, Philadelphia, Pa. Perfumery .....	10,107	Mar. 13	23	942
Tetzner & Sohn, C. A., Schweizerthal, Germany. Cotton and half-woolen yarns .....	10,401	July 3	24	2
Thompson, Mary E., New York, N. Y. Hair-waves .....	10,768	Dec. 4	25	886
Thomson, Richard S., Buffalo, N. Y. Tooth-powder .....	10,619	Oct. 2	25	2
Thorn Wire Hedge Company, Chicago, Ill. Barbed-wire fencing .....	10,233	May 1	23	1626
Tibbe, Son & Co., H., Washington, Mo. Corn-cob pipes .....	9,975	Jan. 23	23	274
Tibbits, John B., Hoosac, N. Y. Dynamo and magneto electric machines .....	10,275	May 15	23	1836
Tilden & Co., New York, N. Y. Medicinal preparation .....	10,504	Aug. 14	24	606
Tillmann & Bendel, San Francisco, Cal. Preserved fruits, jellies, jams, and canned vegetables .....	10,390	July 3	24	2
Tillmann & Bendel, San Francisco, Cal. Canned or preserved oysters and fish .....	10,391	July 3	24	2
Tillmann & Bendel, San Francisco, Cal. Petroleum or kerosene oil .....	10,392	July 3	24	2
Time Telegraph Company, New York, N. Y. Mechanism used as electrical time-indicators .....	9,977	Jan. 23	23	274
Tinsley Tobacco Manufacturing Company, Addison, Louisiana, Mo. Tobacco .....	10,249	May 1	23	1626
Tinsley Tobacco Manufacturing Company, Addison, Louisiana, Mo. Manufactured tobacco .....	10,277	May 22	23	1930
Tinsley Tobacco Manufacturing Company, Addison, Louisiana, Mo. Tobacco .....	10,570	Sept. 4	24	904
Tobin, J. J. & W. H., Austin, Tex. Remedy for diseases of the liver .....	10,350	June 12	23	2242
Tomb, Harry. (See Wheeler, Tomb, and Yingling.) .....				
Tompkins, Samuel E., Newark, N. J. Certain medicinal preparation for horses, cattle, and other animals .....	10,128	Mar. 20	23	1036
Tonk & Bro., William, New York, N. Y. Harmonicas .....	10,541	Aug. 21	24	708
Topliff, Cyrus L., New York, N. Y. Medicine for constipation .....	10,793	Dec. 18	25	1082
Towle, Carle & Co., Chicago, Ill. Cigars, cigarettes, and smoking-tobacco .....	10,060	Feb. 20	23	634
Twitchell, Champlin & Co., Portland, Me. Specific for neuralgia, headache, and the like diseases .....	10,444	July 17	24	208
Underwood, William J., Belmont, Mass. Deviled entremets .....	10,051	Feb. 13	23	544
Unexcelled Fireworks Company, New York, N. Y. Fire-works .....	10,814	Dec. 25	25	1194
Union Metallic Cartridge Company, Bridgeport, Conn. Pistol or gun caps and cartridges, primers, shells, and wads .....	10,717	Nov. 13	25	604
Union Metallic Cartridge Company, Bridgeport, Conn. Pistol and gun caps and cartridges, primers, shells, and wads .....	10,733	Nov. 20	25	702
Union Metallic Cartridge Company, Bridgeport, Conn. Pistol and gun caps and cartridges, primers, shells, and wads .....	10,748	Nov. 27	25	790
Union Tubing Company, New York, N. Y. Tubing (of rubber or gas-tight composition) .....	10,115	Mar. 13	23	942
Van Gundy, Constant & Co., Burrton, Kans. Flour .....	10,718	Nov. 13	25	604
Van Keuren, J. A. & L. N., Bridgeport, Conn. Water-proof preservative blacking .....	10,074	Feb. 27	23	744



*Alphabetical list of registrants of trade-marks—Continued.*

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Vaughn, Thomas L., Winston, N. C. Plug chewing and smoking tobacco .....	10,697	Nov. 6	25	506
Venable & Co., Samuel W., Petersburg, Va. Plug-tobacco .....	10,575	Sept. 4	24	904
Verhage, Henry, Cincinnati, Ohio. Canned and pickled meats .....	10,129	Mar. 20	23	1036
Vogeler Company, Charles A., Baltimore, Md. Liniment for internal and external use .....	10,116	Mar. 13	23	942
Vogeler Company, Charles A., Baltimore, Md. Medicine for external and internal use .....	10,325	June 5	23	2123
Vogeler Company, Charles A., Baltimore, Md. Liniment for external and internal use .....	10,719	Nov. 13	25	604
Vrau & Co., Ph., Lille, France. Linen thread .....	10,515	Aug. 14	24	606
Vulcan Tändsticksfabriks Aktiebolaget, Gothenburg, Sweden, and New York, N. Y. Safety-matches .....	10,351	June 12	23	2242
Wakeman & Co., C. E., Pontiac, Mich. Filled knit woolen goods .....	10,362	June 19	23	2330
Walters & Co., Edwin, Baltimore, Md. Rye whisky .....	9,932	Jan. 2	23	2
Wardell, Gunster & Baker, Denver, Colo. Butter .....	10,132	Mar. 20	23	1036
Warner, Hulbert H., Rochester, N. Y. Certain proprietary medicine .....	10,645	Oct. 16	25	196
Warner, Hulbert H., Rochester, N. Y. Bitters .....	10,687	Oct. 30	25	398
Warner, Hulbert H., Rochester, N. Y. Tonic bitters .....	10,688	Oct. 30	25	398
Warner, Hulbert H., Rochester, N. Y. Tonic bitters .....	10,689	Oct. 30	25	398
Washoe Manufacturing Company, Newark, N. J. Picks and other adz-eye tools .....	10,775	Dec. 11	25	984
Watson, Calvin H., New York, N. Y. Manufactured or artificial butter .....	10,757	Dec. 4	25	886
Watson & Co., L. S., Leicester, Mass. Cards for carding cotton .....	9,925	Jan. 2	23	2
Way, Pennock M., Thurlow, Pa. Certain proprietary medicines .....	10,690	Oct. 30	25	398
Weber, C. W. B., Brooklyn, N. Y. Starch .....	10,493	Aug. 7	24	500
Wedgwood & Sons, Josiah, Etruria, Stoke-upon-Trent, England. Pottery of all kinds .....	10,537	Aug. 21	24	708
Weideman, Holmes & Co., Cleveland, Ohio. Kelley's Island grape-brandy .....	10,052	Feb. 13	23	544
Weidlich, Franz O., Brunnödra-Klingenthal, Saxony, Germany. Accordions .....	10,234	May 1	23	1626
Wells, Richardson & Co., Burlington, Vt. Dyes .....	10,072	Feb. 27	23	744
West India Manufacturing Company, New York, N. Y. Perfumery and toilet preparations .....	10,053	Feb. 13	23	544
West India Manufacturing Company, New York, N. Y. Perfumery and toilet preparations .....	10,054	Feb. 13	23	544
West India Manufacturing Company, New York, N. Y. Perfumery and toilet preparations .....	10,055	Feb. 13	23	544
West India Manufacturing Company, New York, N. Y. Perfumery and toilet articles .....	10,126	Mar. 20	23	1036
West India Manufacturing Company, New York, N. Y. Perfumery and toilet articles .....	10,127	Mar. 20	23	1036
West India Manufacturing Company, New York, N. Y. Cologne water, essential oils, extracts, essences, tonics, and articles of this class .....	10,463	July 24	24	306
Wheeler, Henry H., H. Tomb, and G. S. Yingling, Tiffin, Ohio. Solidified soap .....	10,706	Nov. 6	25	506
Wiederer, Peter, New York, N. Y. Mirrors .....	10,089	Mar. 6	23	834
Wilkins & Co., H., Baltimore, Md. Smoking-tobacco, chewing-tobacco, snuff, and cigarettes .....	10,734	Nov. 20	25	702
Wilkins & Co., H., Baltimore, Md. Smoking and chewing tobacco, snuff, and cigarettes .....	10,739	Nov. 27	25	700
Williams & Co., C. E., Stockton, Cal. Sheep-medicine .....	10,646	Oct. 16	25	196
Williams & Co., Thomas C., Richmond, Va. Manufactured tobacco and cigars .....	10,758	Dec. 4	25	886
Williams & Diamond, Flushing, N. Y. Drop-forgings and articles made therefrom .....	10,235	May 1	23	1626
Williams, John R., Stockton, Cal. Certain medical preparations for horses .....	10,518	Aug. 14	24	606
Williams, John R., Stockton, Cal. Cough-sirup .....	10,606	Sept. 25	24	1150
Williamsburgh Brewing Company, (limited,) Brooklyn, N. Y. Lager-beer .....	10,012	Jan. 30	23	348
Wilson Chemical Company, Kingston, Ontario, Canada. Bleaching and dyeing compounds .....	10,363	June 19	23	2330
Wilson & Son, Win., Philadelphia, Pa. Sterling-silver wares .....	9,949	Jan. 9	23	96
Wilson & Son, Win., Philadelphia, Pa. Electro-plated wares .....	9,950	Jan. 9	23	96
Wilson, Walter G., Philadelphia, Pa. Biscuits .....	10,027	Feb. 6	23	440
Wilson, Walter G., Philadelphia, Pa. Biscuits .....	10,152	Mar. 27	23	1126
Wilson, Walter G., Philadelphia, Pa. Biscuits .....	10,153	Mar. 27	23	1126
Wilson, Walter G., Philadelphia, Pa. Biscuits .....	10,671	Oct. 23	25	294
Winchell Manufacturing Company, George D., Cincinnati, Ohio. Certain articles of tinware .....	10,815	Dec. 25	25	1194
Winfree & Loyd, Lynchburg, Va. Plug-tobacco .....	10,542	Aug. 21	24	708
Winfree & Loyd, Lynchburg, Va. Chewing-tobacco .....	10,543	Aug. 21	24	708
Winfree & Loyd, Lynchburg, Va. Plug-tobacco .....	10,544	Aug. 21	24	708
Winger, Samuel, Sturgis, Mich. Hard soap .....	10,672	Oct. 23	25	294
Wiweke, Julius, Albany, N. Y. Grease-extractors .....	10,794	Dec. 18	25	1082
Woelfel & Linke, Allegheny, Pa. Harness-leather .....	9,927	Jan. 2	23	2
Wolf & Reissing, New York, N. Y. Mustard .....	10,108	Mar. 13	23	942
Woodcock, William H., New York, N. Y. Medical and chemical preparations .....	10,580	Sept. 11	24	998
World's Dispensary Medical Association, Buffalo, N. Y. Certain medical compounds .....	10,191	Apr. 17	23	1450
World's Medicine Company of Buffalo, New York, Buffalo, N. Y. Remedies in both dry and liquid form for the cure of internal and external diseases .....	10,286	May 22	23	1930
Wray, Charles H. (See Johnson and Wray.)				
Yale, Charles A., Wellsborough, Pa. Cigars .....	10,029	Feb. 6	23	440
Yingling, George S. (See Myers, Hayford, and Yingling.)				
Yingling, George S. (See Wheeler, Tomb, and Yingling.)				
Zeller & Co., Richmond, Ind. Butter-crackers .....	10,776	Dec. 11	25	984





# ALPHABETICAL LIST OF REGISTRANTS OF LABELS.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Volume.	Page.
Abner, Christian, Washington, D. C. "The New P. O. D." (for Cigars) .....	3,112	Apr. 10	23	1340
Abstrom & Thomson, New York, N. Y. "The Lion Brand" (for Evaporated Milk) .....	3,136	Apr. 10	23	1340
Aitken, Daniel B., Philadelphia, Pa. "Fasceleen" (for a Toilet Lotion) .....	3,763	Dec. 18	25	1082
Alabastine Company, New York, N. Y. "The only Durable Wall Finish Alabastine" .....	2,909	Jan. 16	23	196
Allard & Burt, Enosburg Falls, Vt. "Allard's Black Oil," (for a "Remedy for Man or Beast") .....	3,326	July 3	24	2
Allen, C. S., New York, N. Y. "American Dyspeptera" .....	3,085	Mar. 20	23	1036
Allen, William A., Jersey City, N. J. "W. A. Allen's Improved Bundle Kindling Wood" .....	3,745	Dec. 11	25	984
Allen, William A., Jersey City, N. J. "W. A. Allen's Improved Bundle Kindling Wood" .....	3,746	Dec. 11	25	984
American Compressed Yeast Company, New York, N. Y. "The American" (For Compressed Yeast) .....	2,906	Jan. 9	23	96
American Oak Leather Company, Cincinnati, Ohio. "Nonporous," (for Leather Belting) .....	2,885	Jan. 2	23	2
American Pharmaceutical Manufacturing Company, Philadelphia, Pa. "Solution Ferrous Malate" .....	2,938	Jan. 30	23	348
Anderson, William J. (See Kupper and Anderson.)				
Angle, Charles M., Richmond, Va. "Try Angle Cigar" .....	3,556	Oct. 2	25	2
Arlington Mills, Boston, Mass. "Arlington Mills" (for Woolen or Worsted Dress Goods) .....	3,458	Aug. 21	24	708
Arnold Medical Corporation, Dr. Seth, Woonsocket, R. I. "Dr. Seth Arnold's Cough Killer" .....	2,982	Feb. 13	23	544
Arnold & Weaver, Providence, R. I. "Germania Tube Ointment" .....	3,744	Dec. 11	25	984
Ashloy, J. J., Brooklyn, N. Y. "Ashley's Tonic and Constipation Cure" .....	3,086	Mar. 20	23	1036
Atlee, William Y. (See Merchant & Co., S. L., assignor.)				
Ausman & Witherstine, Herkimer, N. Y. "Victor Syrup," (for a Medical Remedy) .....	3,425	Aug. 14	24	606
Ausman & Witherstine, Herkimer, N. Y. "Victor Ointment" .....	3,426	Aug. 14	24	606
Austin & Sons, Thomas, Brooklyn, N. Y. "Brighton Sauce," (for Table Sauce) .....	3,601	Oct. 23	25	294
Austin, William W., Lowell, Mass. "Chemical Parlor Combination," ("For Burning Fluid") .....	2,949	Feb. 6	23	440
Axt, Ferdinand, Washington, D. C. "Dr. Ferd. Axt's infallible Abolition Tooth Ache Cure" .....	3,055	Mar. 13	23	942
Bailey, Harry, Philadelphia, Pa. "The Seven Long-Haired Sutherland Sisters' Hair Restorer" .....	3,184	May 8	23	1736
Baker, James M. (See Gwinn and Baker.)				
Bard, Joseph, Chicago, Ill. "Medicinal Temperance Drink" .....	3,557	Oct. 2	25	2
Barker & Co., J. H., New York, N. Y. "The Black Ground, Rock Candy, Label" .....	3,427	Aug. 14	24	606
Barnett, James P., Brooklyn, N. Y. "Lowe's Cresylic Stock Remedy," (for Diseases of Animals) .....	2,927	Jan. 23	23	274
Barnett, James P., Brooklyn, N. Y. "Lowe's Jack Rabbit Sheep Dip" .....	3,087	Mar. 20	23	1036
Basford, James L., Boston, Mass. "The Little Sampson," (for a Medicine) .....	3,467	Aug. 28	24	802
Basford, James L., Boston, Mass. "Consumption, Basford's Aquarian Balm" (for a Medical Preparation) .....	3,703	Nov. 27	25	790
Bassett, Milton H., New Britain, Conn. "Bassett's Lock Marker" .....	3,704	Nov. 27	25	790
Bavler, Charles A., York, Pa. "New York Cigar Factory" .....	3,521	Sept. 18	24	1094
Bebler, Julius B., Springfield, Mass. "Garfield Malaria Antidote" .....	3,479	Sept. 4	24	904
Bechtel, William H., Brooklyn, N. Y. "Linimento Excelsior De Bechtel" .....	3,652	Nov. 6	25	506
Bedford, Augustus, and W. M. Rawson, Roxbury, Mass. "Digestine" (for a Medicine) .....	3,779	Dec. 25	25	1194
Beitman Bros., Kansas City, Mo. "B B B B" (for Cigars) .....	3,170	May 1	23	1626
Beitman Bros., Kansas City, Mo. "Famous" (for Cigars) .....	3,558	Oct. 2	25	2
Bell, Elizabeth H., Philadelphia, Pa. "The Great American Compound Oil of Gaultheria" (for a Medical Compound) .....	3,764	Dec. 18	25	1082
Bennison, Charles E. (See Bingham and Bennison.)				
Berman, Joseph, Cleveland, Ohio. "J. Berman's Anointine" .....	3,088	Mar. 20	23	1036
Best, Alcuin H., Savannah, Ga. "Best's New Process Amalgam," (For Dental Amalgam) .....	2,988	Feb. 20	23	634
Best Brewing Company, Philip, Milwaukee, Wis. "Select" (For Beer) .....	3,079	Mar. 13	23	942
Bewley & Draper, (limited), Dublin, Ireland. "Bewley & Draper Dublin Ginger Ale" .....	3,099	Mar. 27	23	1126
Bidaman, Israel, Buffalo, N. Y. "Pillules for the People" .....	3,185	May 8	23	1736
Bilhuber, Ernst F., Brooklyn, N. Y. "Ebijos" (For Hardware) .....	2,989	Feb. 20	23	634
Bingham, Eugene P., and C. E. Bennison, Boston, Mass. "Purity, The New Disinfectant" .....	2,895	Jan. 9	23	96
Bishop, Henry, Baltimore, Md. "Bishop's Bird Dainties" (for Food for Birds) .....	3,250	June 5	23	2124
Bitting, Lewis W., Philadelphia, Pa. "Patrolman" (for Collars and Cuffs) .....	3,347	July 10	24	104
Blaker, G. C., Flemington, N. J. "Blaker's Rheumatic Relief" .....	2,918	Jan. 16	23	196
Bloom, Isidore. (See Haynes, Miller, and Bloom.)				
Bloom, M. E. (See Haynes, Miller, and Bloom.)				
Boullee, Joshua C., New York, N. Y. "The Electric Corn Cure" .....	3,311	June 26	23	2416
Bowker, Horace L., Boston, Mass. "Bowker's Government Standard Solution For testing Vinegar, Acetic Acid, &c." .....	3,056	Mar. 13	23	942
Bragdon, R. H., New York, N. Y. "Lustra Painting & Embroidering," (For Colors for Painting) .....	2,896	Jan. 9	23	96
Breakwell, Jane and S. J., Highwood, Ill. "Mrs. Breakwell's Sugar-Coated Anti-Bilious Tonic Pills" .....	2,966	Feb. 13	23	544
Breakwell, Samuel J. (See Breakwell, Jane and S. J.)				
Breitenbach, M. J., New York, N. Y. "20 Grain Mixture Injection" .....	3,585	Oct. 16	25	196
Breitwieser & Bros., H., Buffalo, N. Y. "Nickle Plate," (for Smoking Tobacco) .....	3,221	May 22	23	1930
Brill, W. H., Binghamton, N. Y. "Brill's Spermatine Sewing Machine Oil" .....	2,950	Feb. 6	23	440
Brinkman, Edward E., San Francisco, Cal. "The Ladies' Friend" (for a Medical Compound) .....	3,295	June 19	23	2330
Britton & Co., J. T., Long Branch, N. J. "Britton's Cholera Cure" .....	3,569	Oct. 9	25	98
Brooks & Co., E. J., New York, N. Y. "Brooks' Waterproof Stamping and Writing Ink" .....	3,277	June 12	23	2242
Brown, George S., Providence, R. I. "Special Absorbent Toweling" .....	2,919	Jan. 16	23	196
Brown, N. K., Burlington, Vt. "N. K. Brown's Iron and Quinine Bitters" .....	2,967	Feb. 13	23	544
Brown, Thompson & Co., Louisville, Ky. "Beech Fork" (for Whisky) .....	3,171	May 1	23	1626
Brown, Thompson & Co., Louisville, Ky. "Fox Mountain," (for Whisky) .....	3,172	May 1	23	1626
Brown, Thompson & Co., Louisville, Ky. "Old Forrester Bourbon" .....	3,173	May 1	23	1626
Browne, Clarence E., Boston, Mass. "Dresoline," (for Leather Dressing) .....	3,113	Apr. 10	23	1340
Browne, Clarence E., Boston, Mass. "Cutamollio," (for the skin) .....	3,114	Apr. 10	23	1340
Buchanan, Charles A., and R. J. Lindsay, Amsterdam, N. Y. "Brown's Champion Oil Leather Cleaner and Dresser" .....	3,397	July 31	24	394
Bucklen, Herbert E., Chicago, Ill. "Dr. Scheeler's Great German Cure for Consumption, Coughs, Colds, etc." .....	2,886	Jan. 2	23	2
Bucks, George N., Mattoon, Ill. "Self-Fastening" (for Tags) .....	3,765	Dec. 18	25	1082
Burchard, Melvin. (See Vincent and Burchard.)				
Burnside, George L., Bellows Falls, Vt. "Kean's Kidney and Back Plaster" .....	3,278	June 12	23	2242

*Alphabetical list of registrants of labels—Continued.*

Name, residence, and title.	No.	Date.	Official Gazette.	
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Burnside, George L., Bellows Falls, Vt. "Allen's Oriental Balm." (for a Cosmetic) .....	3,415	Aug. 7	24	500
Burroughs, Silas M., Medina, N. Y. "Hazeline" (for a Medical Preparation) .....	3,570	Oct. 9	25	98
Burroughs, Silas M., Medina, N. Y. "Eucalyptin," (for a Medicinal Preparation) .....	3,571	Oct. 9	25	98
Burroughs, Silas M., Medina, N. Y. "Eucalyptia" (for a Medicinal Preparation) .....	3,572	Oct. 9	25	98
Burroughs, Silas M., Medina, N. Y. "Essence Eucalypti" (for a Medicinal Preparation) .....	3,573	Oct. 9	25	98
Bury, Edward B., Washington, D. C. "Comp. Hydrastis Vaginal Pastiles" .....	3,651	Nov. 6	25	506
Buxton, Heins & Co., New York, N. Y. "American Sweet Oil" .....	3,159	Apr. 24	23	1532
Callahan, John, Lynn, Mass. "Alaska Catarrh Compound" .....	3,100	Mar. 27	23	1126
Campbell & Co., Coal Valley, Pa. "Eureka Salve" .....	3,251	June 5	23	2124
Campbell & Co., Coal Valley, Pa. "Sanative Salve" .....	3,252	June 5	23	2124
Cape Ann Oil Clothing Company, Baltimore, Md. "Cape Ann Whale Brand" (for Oil Clothing) ..	3,115	Apr. 10	23	1340
Carey & Co., New York, N. Y. "Pildoras del Doctor Carey" .....	3,780	Dec. 25	25	1194
Carr, Thomas H., Montgomery, Ala. "Montgomery Crackers" .....	3,574	Oct. 9	25	98
Carslake, William H., Philadelphia, Pa. "German Complexion or Skin Soap" .....	3,526	Sept. 18	24	1094
Case & Co., Horace G., Raynham, Mass. "Liquid Court Plaster" .....	3,057	Mar. 13	23	942
Cassady, Robert, Unionville, N. J. "Fern Bitters. The great Dyspepsia and Liver Remedy" ..	2,897	Jan. 9	23	96
Cassebeer, Henry A., Jr., New York, N. Y. "Cassebeer's Cocoa-Calisaya" .....	2,968	Feb. 13	23	544
Cassidy & Co., New York, N. Y. "Mandarin Chop" (for Tea) .....	3,186	May 8	23	1736
Cathers, Herman B., Philadelphia, Pa. "Ready Rising" (for Wheat, Corn, and Buckwheat Flour) ..	3,559	Oct. 2	25	2
Chadwick, Charles N., Brooklyn, N. Y. "The Pivot Corset" .....	3,327	July 3	24	2
Chagnon & Co., T., Brooklyn, N. Y. "The Golden Drops of Borneo." (For Chronic Coughs and Consumption) .....	2,898	Jan. 9	23	96
Chamberlain & Co., Des Moines, Iowa. "St. Patrick's Pills" .....	3,116	Apr. 10	23	1340
Chapman, Green & Co., Chicago, Ill. "Nitrogenized Iron" .....	3,160	Apr. 24	23	1532
Chapman, Green & Co., Chicago, Ill. "Metho-Glycerole of Bismuth and Hydrastia." (for a Medicine) .....	3,442	Aug. 14	24	606
Chapman, Smith & Co., Chicago, Ill. "Chicago Yeast Powder" .....	3,006	Feb. 27	23	744
Chandler, George W., Birmingham, Ohio. "Dr. E. E. Beeman's Worm Destroyer" .....	3,028	Mar. 6	23	834
Cheatam, Clement A., Dawson, Ga. "Excelsior Family Medicine" .....	3,781	Dec. 25	25	1194
Cheggwidden, Thomas C., New York, N. Y. "Cheggwidden's Right-Royal Mustard" .....	2,969	Feb. 13	23	544
Chown, Richard, Lima, Pa. "Chown's Sure Relief Liniment" .....	3,144	Apr. 17	23	1450
Clark & Brother, George A., New York, N. Y. "Clark's O. N. T. Spool Cotton" .....	3,174	May 1	23	1626
Clark, Melvin, Stockton, Cal. "Clark's Ague Cure" .....	3,117	Apr. 10	23	1340
Clark Thread Company, Newark, N. J. "Black O. N. T." (For Thread) .....	2,951	Feb. 6	23	440
Clark Thread Company, Newark, N. J. "White O. N. T." (For Thread) .....	2,952	Feb. 6	23	440
Clark Thread Company, Newark, N. J. "Jet Black O. N. T." (for Thread) .....	3,203	May 15	23	1836
Clark Thread Company, Newark, N. J. "Fast Black O. N. T." (for Thread) .....	3,204	May 15	23	1836
Clark, W. W., Chicago, Ill. "Dr. W. W. Clark's Oil of Arnica" .....	3,586	Oct. 16	25	196
Clausen & Son Brewing Company, H., New York, N. Y. "East India Pale Ale" .....	3,253	June 5	23	2124
Clausen & Son Brewing Company, H., New York, N. Y. "Extra American Stout" .....	3,254	June 5	23	2124
Clausen & Son Brewing Company, Henry, New York, N. Y. "Champaign Lager Beer" .....	3,312	June 26	23	2416
Clayton & Webb, Atlanta, Ga. "Mohawk Belle." (For Whisky) .....	3,089	Mar. 20	23	1036
Clymer & Co., C. W., Philadelphia, Pa. "Clymer's Celebrated Northern Horse and Cattle Powder" ..	3,255	June 5	23	2124
Coan, Henry, St. Louis, Mo. "The Chief" (for Cigars) .....	3,101	Mar. 27	23	1126
Coffin, Altemus & Co., Philadelphia, Pa. "Madison Staple Styles." (for Dry Goods) .....	3,766	Dec. 18	25	1082
Coffin, Altemus & Co., Philadelphia, Pa. "Madison Dress Styles" (for Dry Goods) .....	3,767	Dec. 18	25	1082
Cohen, Nathan H., Urbana, Ill. "Corn Belt." (for Cigars) .....	3,723	Dec. 4	25	886
Cole & Bro., Samuel H., Baltimore, Md. "Combination Brand" (For Corn and Tomatoes) .....	2,970	Feb. 13	23	544
Collins, Caroline L., Boston, Mass. "Madam Caroline's White Pine Beautifier for the Complexion" ..	3,420	Sept. 4	24	904
Conant, George A., Littleton, Mass. "Bluine" (for Bluing) .....	3,447	Aug. 21	24	708
Condie, James, New York, N. Y. "Compound Balsamic Glycerine" .....	2,923	Jan. 23	23	274
Cook & Bernheimer, New York, N. Y. "Rye and Lime" .....	3,058	Mar. 13	23	942
Cook & Bernheimer, New York, N. Y. "Rye, Lime and Wheat" .....	3,059	Mar. 13	23	942
Cook & Bernheimer, New York, N. Y. "Wheat, Rye and Lime" .....	3,060	Mar. 13	23	942
Cook & Bernheimer, New York, N. Y. "Lime, Rye and Wheat" .....	3,061	Mar. 13	23	942
Cook & Bernheimer, New York, N. Y. "Lime and Wheat" .....	3,062	Mar. 13	23	942
Cook & Bernheimer, New York, N. Y. "Wheat and Lime" .....	3,063	Mar. 13	23	942
Cook & Bernheimer, New York, N. Y. "Rye, Wheat and Lime" .....	3,064	Mar. 13	23	942
Cook & Bernheimer, New York, N. Y. "Rye and Wheat" .....	3,065	Mar. 13	23	942
Cook & Bernheimer, New York, N. Y. "Lime and Rye" .....	3,066	Mar. 13	23	942
Cook & Bernheimer, New York, N. Y. "Wheat and Rye" .....	3,067	Mar. 13	23	942
Cook & Bernheimer, New York, N. Y. "Wheat, Lime and Rye" .....	3,068	Mar. 13	23	942
Cook & Bernheimer, New York, N. Y. "Lime, Wheat and Rye" .....	3,069	Mar. 13	23	942
Cook & Bernheimer, New York, N. Y. "Sunsmile" (For a Medicinal Preparation) .....	3,090	Mar. 20	23	1036
Cook & Bernheimer, New York, N. Y. "American Cocktail." (for Beverages) .....	3,279	June 12	23	2242
Cook & Bernheimer, New York, N. Y. "Chamomile, Rock and Rye" (for a Medicinal Preparation) .....	3,602	Oct. 23	25	294
Cook & Bernheimer, New York, N. Y. "Rock, Rye and Chamomile" (for a Medicinal Preparation) .....	3,603	Oct. 23	25	294
Cook & Bernheimer, New York, N. Y. "Rye and Chamomile" (for a Medicinal Preparation) .....	3,604	Oct. 23	25	294
Cook & Bernheimer, New York, N. Y. "Rye, Rock and Chamomile" (for a Medicinal Preparation) .....	3,605	Oct. 23	25	294
Cook & Bernheimer, New York, N. Y. "Rye, Chamomile and Rock" (for a Medicinal Preparation) .....	3,606	Oct. 23	25	294
Cook & Bernheimer, New York, N. Y. "Rock and Chamomile" (for a Medicinal Preparation) .....	3,607	Oct. 23	25	294
Cook & Bernheimer, New York, N. Y. "Rock, Chamomile and Rye" (for a Medicinal Preparation) .....	3,608	Oct. 23	25	294
Cook & Bernheimer, New York, N. Y. "Chamomile and Rock" (for a Medicinal Preparation) .....	3,609	Oct. 23	25	294
Cook & Bernheimer, New York, N. Y. "Chamomile Rock and Rye" (for a Medicinal Preparation) .....	3,610	Oct. 23	25	294
Cook & Bernheimer, New York, N. Y. "Chamomile and Rye" (for a Medicinal Preparation) .....	3,611	Oct. 23	25	294
Cook & Bernheimer, New York, N. Y. "Chamomile, Rye and Rock" (for a Medicinal Preparation) .....	3,612	Oct. 23	25	294
Cook & Co., E. N., Buffalo, N. Y. "Golden Grain Whiskey" .....	3,387	July 24	24	306
Cook, Edward F., Stamford, Conn. "Manhattan Blood Gnan" .....	3,007	Feb. 27	23	744
Cooper, Madison, Evans Mills, N. Y. "American Stilton" (for Cheese) .....	3,540	Sept. 25	24	1180
Cooper, Solomon M., Philadelphia, Pa. "Gingermint" (for Medicine) .....	3,451	Sept. 4	24	904
Cooper, Solomon M., Philadelphia, Pa. "German Cough Remedy" .....	3,482	Sept. 4	24	904
Cooper's Local Assembly, No. 1742, Knights of Labor, Rochester, N. Y. "Union Made Package," (for use on Barrels, Kegs & all kinds of Cooperage) .....	2,920	Jan. 16	23	196
Corey, Medad S., Hamlet, N. Y. "The Eureka Pile Ointment" .....	3,575	Oct. 9	25	98
Corle Cracker and Confectionery Company, Kansas City, Mo. "Corle Cracker and Confectionery Co., Kansas City" .....	3,724	Dec. 4	25	886
Cornwall & Brother, Louisville, Ky. "Old Soap" .....	3,118	Apr. 10	23	1340
Corwin, T. L., Marathon, N. Y. "Jersey Butter Color" .....	3,175	May 1	23	1626
Countant, Gilbert, Poughkeepsie, N. Y. "Countant's Ague Cure" .....	3,373	July 17	24	208
Cronin, Cornelius J., Glens Falls, N. Y. "Cronin's Egyptian Magnetic Strengthening Plaster" ..	3,705	Nov. 27	25	790
Curtice, Grovenor A., Hopkinton, N. H. "The Merchant's Stock Label." (For Woven Fibrous Goods) .....	2,900	Jan. 9	23	96
Danhof, John J., Grand Haven, Mich. "Danhof's Infallible Liver and Kidney Remedy" .....	3,348	July 10	24	104
Dare, James B., Salem, N. J. "Dare's Indian Pulmonic Syrup" .....	3,256	June 5	23	2124



## Alphabetical list of registrants of labels—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
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Darley, George B., East Orange, N. J. "Triangle Brand," (for Extracts and Essences).....	3,448	Aug. 21	24	708
Davenport, A. M. V., Philadelphia, Pa. "Lady Vere Tooth Powder".....	3,632	Oct. 30	25	398
Davis, Isaac, Dayton, Ohio. "Pearl-White Oil." (for Carbon Oil).....	3,747	Dec. 11	25	984
Davis, William B. T., Washington, D. C. "Kolb's Ossapadentine".....	3,187	May 8	23	1736
Dawson, Henry N., New York, N. Y. "Dawson's Neuralgic Cure".....	3,188	May 8	23	1736
De Pombo, José J., Brooklyn, N. Y. "Home Flour Mills".....	3,503	Sept. 11	24	998
De Pombo, José J., Brooklyn, N. Y. "La Redentora" (for Flour).....	3,504	Sept. 11	24	998
Decker, William F., Paterson, N. J. "Dr. Decker's Shakes and Malaria Cure".....	3,483	Sept. 4	24	904
Deez, August, Milwaukee, Wis. "Golden Spike" (for Cigars).....	3,654	Nov. 6	25	506
Dickinson & Allie, Middlebury, Ind. "Peerless Fire Proof Roof Paint".....	3,250	June 12	23	2242
Dirksen, Hermann, Brooklyn, N. Y. "Reduced Tax" (for Cigars).....	3,222	May 22	23	1930
Dold & Son, Jacob, Kansas City, Mo. "White Rose Brand," (for Lard).....	3,145	Apr. 17	23	1450
Dold & Son, Jacob, Kansas City, Mo. "Buffalo Brand" (for Meats).....	3,146	Apr. 17	23	1450
Donagbue, Patrick, Hartford, Conn. "Cocamoche Bitters".....	3,008	Feb. 27	23	744
Douglas, Charles H. J., Ann Arbor, Mich. "High School Index," (for a Periodical Publication) ..	3,690	Nov. 20	25	702
Doussau, Auguste, New Orleans, La. "Holt's German Cologne".....	3,161	Apr. 24	23	1532
Dowie & Moise, Charleston, S. C. "Wheatine" (for a Medicine).....	3,328	July 3	24	2
Drake, Reason, La Grange, Ind. "Elixir of Tamarack and Wild Cherry".....	3,257	June 5	23	2124
Drake, William B., Suffield, Conn. "Putnam Phalanx" (for Cigars).....	3,541	Sept. 25	24	1180
Dreufuss, Bernard, New York, N. Y. "No. 1" (For Buck Purses).....	3,070	Mar. 13	23	942
Drumgoole, J. P., and L. M. Gillam, Atlanta, Ga. "B. B. B. Botanic Blood Balm".....	3,388	July 24	24	306
Dunbar & Co., Boston, Mass. "Flying Yankee," (for Cigars).....	3,655	Nov. 6	25	506
Dyas, R. K., Crittenden, Ky. "Dr. Whitesel's German Congh Syrup".....	3,176	May 1	23	1626
Dyas, R. K., Crittenden, Ky. "Dr. Whitesel's Calisaya Bitters".....	3,177	May 1	23	1626
Dyas, R. K., Crittenden, Ky. "Dr. Whitesel's Calisaya Bitters".....	3,633	Oct. 30	25	398
Dyas, R. K., Crittenden, Ky. "Dr. Whitesel's German Congh Syrup".....	3,634	Oct. 30	25	398
Dyas, R. K., Crittenden, Ky. "Dr. Whitesel's German Liniment".....	3,635	Oct. 30	25	398
Dyas, R. K., Crittenden, Ky. "Dr. Whitesel's Blood Specific".....	3,636	Oct. 30	25	398
Eaton, Frank E., Syracuse, N. Y. "Horehound Balsam" (for a Congh Sirup).....	3,505	Sept. 11	24	998
Edler, Fred, C., Chicago, Ill. "Fred. C. Edler's Manhattan Animal and Poultry Foods".....	3,748	Dec. 11	25	984
Edmunds, F. H., Fredonia, N. Y. "Vigee" (for a Hair Tonic).....	3,587	Oct. 16	25	196
Edmondson, Joseph E., Athens, Ohio. "My Choice Dentifrice".....	3,329	July 3	24	2
Egerton, Herbert. (See Kraft, Jones, and Egerton.)				
Elastic Motion Sewing Machine Company, New York, N. Y. "Elastic Motion Sewing Machine Company".....	3,726	Dec. 4	25	886
Eller, George K., Kansas City, Mo. "A Sure Thing for Syphilis in all its Forms".....	3,542	Sept. 25	24	1180
Ellis & Co., H., Baltimore, Md. "Jersey Lily," (For Cigars).....	2,954	Feb. 6	23	440
Ellis, Henry P., Chelsea, Mass. "Vegetable & Mineral Compound." (For Burning Fluid).....	2,953	Feb. 6	23	440
Ellis, John W., Sigourney, Iowa. "Ellis' Nerve Tonic".....	3,281	June 12	23	2242
Elserberg, R. A., New York, N. Y. "O. K. Velvet Ribbon".....	2,955	Feb. 6	23	440
Emerick, Jacob T., Chicago, Ill. "Emerick's Hobby. Old-Fashioned Honesty" ("for Cigars, Cigarettes and Smoking Tobacco").....	3,258	June 5	23	2124
Emlen & Cope, Philadelphia, Pa. "Tonawanda Mills" (For Piece Dry Goods).....	3,029	Mar. 6	23	834
Emmert Proprietary Company, Chicago, Ill. "Uncle Sam's Nerve and Bone Liniment".....	3,416	Aug. 7	24	500
England, Charles W., Newark, N. J. "Peterson's Improved Celebrated Medicated Soap Liniment".....	3,725	Dec. 4	25	886
Ephraim, Myer, Flint, Mich. "Peoples Choice." (For Cigars).....	3,009	Feb. 27	23	744
Erikson, Anna, Worcester, Mass. "King of Liniments".....	3,349	July 10	24	104
Eustis, M. L., Minneapolis, Minn. "Uncle Josh's Rheumatic Cure".....	2,929	Jan. 23	23	274
Evans, Frances R., New York, N. Y. "Roman Art Colors".....	3,102	Mar. 27	23	1126
Fahnestock Baking Powder Company, Pittsburg, Pa. "Sun Flower" (For Baking Powder).....	3,030	Mar. 6	23	834
Falke, Julius, St. Louis, Mo. "St. Jacob's Bitters".....	3,282	June 12	23	2242
Farmers Fertilizer Company, Syracuse, N. Y. "Farmers' Fertilizer Co".....	3,527	Sept. 18	24	1094
Farmers Fertilizing Company, Syracuse, N. Y. "Floral" (for Chemical Fertilizers).....	3,706	Nov. 27	25	790
Farrington & Co., Chicago, Ill. "Yerba-Santa" (for a Medicine).....	3,399	July 31	24	394
Farrington & Co., Chicago, Ill. "Crown Bucan" (for a Medicine).....	3,400	July 31	24	394
Fay, Hiram G., Montpelier, Vt. "Mason's Compound Soap".....	3,119	Apr. 10	23	1340
Fay, Hiram G., Rutland, Vt. "Fay's Wonder Soap".....	3,691	Nov. 20	25	702
Fels & Co., Philadelphia, Pa. "Liquid Coffee".....	3,137	Apr. 10	23	1340
Ferguson, George E. (See Honghtaling and Ferguson.)				
Fenchwanger & Co., L., New York, N. Y. "Feuchtwanger's Disinfectant".....	3,389	July 24	24	306
Fingerhut, Richard, New York, N. Y. "Syrupus Malti Compositus" (for a Medical Preparation) ..	3,374	July 17	24	208
Fink & Boelter, H., Chicago, Ill. "Boonekamp of Maag-Bitter".....	3,236	May 29	23	2036
Fink, Conrad, and A. Nasse, St. Louis, Mo. "Pioneer's Pride," (for Coffee).....	3,443	Aug. 14	24	606
Fink, Conrad, and A. Nasse, St. Louis, Mo. "Amity," (for Coffee).....	3,444	Aug. 14	24	606
Fink, Conrad, and A. Nasse, St. Louis, Mo. "Farmer's Favorite" (for Coffee).....	3,445	Aug. 14	24	606
Fink, Conrad, and A. Nasse, St. Louis, Mo. "Miner's Comfort" (for Coffee).....	3,446	Aug. 14	24	606
Finlaw, J. P., Camden, N. J. "Finlaw's Dyspepsia and Liver Cure".....	3,449	Aug. 21	24	708
Finlaw, J. P., Camden, N. J. "Queen of the Forest," (for Medicine).....	3,450	Aug. 21	24	708
Finlaw, J. P., Camden, N. J. "Finlaw's King of Pain," (for a Medicine).....	3,451	Aug. 21	24	708
Firestone Card Company, New York, N. Y. "Whist Cards," (for Playing Cards).....	2,887	Jan. 2	23	2
Fish Bros. & Co., Racine, Wis. "Fish Brothers Wagon Co.".....	3,543	Sept. 25	24	1180
Fish, Luther S., Cleveland, Ohio. "Cito" (For Diphtheria and Sore Throat).....	2,931	Jan. 30	23	348
Fish, Luther S., Cleveland, Ohio. "Cito" (Catarrh Snuff).....	3,401	July 31	24	394
Fiske, George C., Springfield, Mass. "Fiske's Tissue Paper Label".....	3,071	Mar. 13	23	942
Fiske, George M., Peekskill, N. Y. "Dr. Lyon's Powders," (for a Medical Preparation) ..	3,428	Aug. 14	24	606
Fitzpatrick & Draper, Troy, N. Y. "Bob Link" (for Smoking and Chewing Tobacco).....	3,637	Oct. 30	25	398
Flitcher, Elizabeth, Springfield, Mass. "Fletcher's Dry Soap".....	3,768	Dec. 18	25	1082
Folwell Bro. & Co., Philadelphia, Pa. "Gerster" (for Dry Goods).....	3,313	June 26	23	2416
Folwell Bro. & Co., Philadelphia, Pa. "Melange" (for Dry Goods).....	3,314	June 26	23	2416
Fonerden, Clarence A., New York, N. Y. "John's Magic Pain King".....	3,528	Sept. 18	24	1094
Foot, J. Howard, New York, N. Y. "Imperial Russian Gut" (for Violin Strings).....	3,548	Oct. 16	25	196
Forbush, George L., Peterborough, N. H. "Chilline" (for a Remedy for Chills).....	3,749	Dec. 11	25	984
Fornwalt, M. L., Newark, N. J. "Ivoryine" (for a Liquid Tooth Wash).....	3,315	June 26	23	2416
Fornwalt, Martin L., Newark, N. J. "Capitol Troche".....	3,701	Nov. 20	25	702
Forrester & Cook, Kansas City, Mo. "Kansas City Preserving Co." (for Jellies, Jams, &c).....	3,653	Nov. 6	25	506
Foster, John, Jr., Rochester, N. Y. "Rheumatic Syrup".....	3,223	May 22	23	1930
Fougere, Charles E., Brooklyn, N. Y. "Crisoline" (for a Hair Wash).....	3,707	Nov. 27	25	790
Fougere, Charles E., Brooklyn, N. Y. "Fougere's Angelic Dentifrices".....	3,708	Nov. 27	25	790
Fougere, Charles E., Brooklyn, N. Y. "Fougere's Ready-Made Mustard Plasters".....	3,709	Nov. 27	25	790
Fougere, Charles E., Brooklyn, N. Y. "Fougere's Ready-Made Mustard Plasters".....	3,727	Dec. 4	25	886
Francis, Harriet A., Piqua, Ohio. "Indian Diarrhea Cure".....	2,971	Feb. 13	23	544
Franker Bros., Uhrichsville, Ohio. "Dr. Wilson's Anti-Bilious Cathartic Cordial".....	3,031	Mar. 6	23	834
Frank & Co., A. B., San Antonio, Tex. "Luck," (for Smoking and Cigarette Tobacco).....	2,888	Jan. 2	23	2
Frank & Co., A. B., San Antonio, Tex. "Ranchero," (for Smoking and Cigarette Tobacco).....	2,889	Jan. 2	23	2



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Name, residence, and title.	No.	Date.	Official Gazette.	
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French & Son, F., Hillsdale, Mich. "Dr. F. French's Unequaled Blood Purifier and Rheumatic Remedy".....	3,147	Apr. 17	23	1450
Friedman, Louis, New York, N. Y. "Cosmetic Lotion".....	2,972	Feb. 13	23	544
Friend & Co., San Francisco, Cal. "California Favorite" (for Cigars).....	3,529	Oct. 16	25	196
Fry, Schieber & Co., New York, N. Y. "Broadway" (for Jewelry).....	3,205	May 15	23	1836
Fuchs, Gustav, Chicago, Ill. "Western Union" (for Cigars).....	3,330	July 3	24	2
Fulton, Joseph M., New London, Pa. "Galvanic Liniment".....	3,561	Oct. 2	25	2
Gaertner, Fred, Louisville, Ky. "Progress" (for Cigars).....	3,189	May 8	23	1736
Gail & Ax, G. W., Baltimore, Md. "Paradise" (for Tobacco).....	3,924	May 22	23	1930
Gail & Ax, G. W., Baltimore, Md. "Grandee" (for Smoking and Chewing Tobacco).....	3,225	May 22	23	1930
Gall, Charles F., Burlington, Iowa. "The Palace," (for Cigars).....	3,710	Nov. 27	25	790
Gallagher, B. F., Philadelphia, Pa. "Dr. Gallagher's Sugar Coated Pills for Rheumatism".....	3,782	Dec. 25	25	1194
Gamble, John C., Garberville, Cal. "Lemon Bloom" (for Prepared Lemon Juice).....	3,590	Oct. 16	25	196
Gametis Bros., New Orleans, La. "Fruit Cream" (for Beverages).....	2,947	Jan. 30	23	348
Garney, Brown & Co., Scranton, Pa. "Garney, Brown & Co's Regulars," (for Cigars).....	3,711	Nov. 27	25	790
Gay, David, Oakland, Cal. "The Gay Line of Information." ("For Packages of Food").....	2,956	Feb. 6	23	440
Ghio & Rovira, New York, N. Y. "El Arabe" (for Cigars).....	3,613	Oct. 23	25	294
Gilbert, Philipp W., New York, N. Y. "Alter Schweden General".....	3,072	Mar. 13	23	942
Gillam, L. M. (See Dromgoole and Gillam.)				
Ginter, Lewis, Richmond, Va. "Oxford Hash" (for Smoking Tobacco).....	3,390	July 24	24	306
Ginter, Lewis, Richmond, Va. "Dubec" (for Cigarettes).....	3,488	Sept. 4	24	904
Glahn, Frederick, Green Bay, Wis. "The Senator" (for Cigars).....	3,138	Apr. 10	23	1340
Glen Cove Manufacturing Company, Glen Cove, N. Y. "Duryeas' Diamond XXX Glucose".....	3,331	July 3	24	2
Glen Cove Manufacturing Company, Glen Cove, N. Y. "Duryeas' Diamond X Glucose".....	3,332	July 3	24	2
Glen Cove Manufacturing Company, Glen Cove, N. Y. "Duryeas' Diamond Crystal Glucose".....	3,333	July 3	24	2
Glen Cove Manufacturing Company, Glen Cove, N. Y. "Duryeas' Diamond XX Glucose".....	3,334	July 3	24	2
Goddard & Fraser, New York, N. Y. "Goddard & Fraser's Amber Enamel," (for Earthenware and other Wares).....	3,148	Apr. 17	23	1450
Goddin & Tribbett, Richmond, Va. "Love Me" (for Cigars).....	3,712	Nov. 27	25	790
Goddin & Tribbett, Richmond, Va. "G. & T." (for Cigars).....	3,750	Dec. 11	25	984
Gogreve, Hermann R., New Orleans, La. "Braunschweiger" (for Malt Liqueurs).....	2,921	Jan. 16	23	196
Gogreve, Hermann R., New Orleans, La. "Sour Mash Teddy," (for Spirituous Liqueurs).....	2,922	Jan. 16	23	196
Goldsmith & Bro., I., Chicago, Ill. "Chicago Cable" (for Cigars).....	2,973	Feb. 13	23	544
Goldsmith & Bro., I., Chicago, Ill. "The New Chicago Board of Trade" (for Cigars).....	3,562	Oct. 2	25	2
Goldsmith & Son, J., Philadelphia, Pa. "Fishing Tackle".....	3,296	June 19	23	2330
Goodwin, Frank W., Framingham, Mass. "Goodwin's Oatmeal Bitters".....	3,398	July 31	24	394
Goodwin, Frank W., Framingham, Mass. "Dr. Schultz' Medicated Cigar".....	3,638	Oct. 39	25	398
Goodwin, Frank W., Framingham, Mass. "Dr. Schultz' Process Cigars".....	3,751	Dec. 11	25	984
Gordou, Henry J., Guttenberg, N. J. "High Life" (for Cologne).....	3,816	June 26	23	2416
Gorton, Adolos, Philadelphia, Pa. "Texas Fire Weed Aque & Neuralgia Pills".....	2,990	Feb. 20	23	634
Gradle & Strotz, Chicago, Ill. "Bohemian Smoking Tobacco".....	3,728	Dec. 4	25	886
Gradle & Strotz, Chicago, Ill. "Drummer Cut Plug" (for Chewing and Smoking Tobacco).....	3,729	Dec. 4	25	886
Grafke & Co., A., New York, N. Y. "The Ne Plus Ultra Parlor Match".....	3,487	Sept. 4	24	904
Grant, D. Lewis, Philadelphia, Pa. "Curaline," (for Petroleum Products and Petroleum and other Oils and Lubricating Compounds).....	3,672	Nov. 13	25	604
Grant, D. Lewis, Philadelphia, Pa. "Duratus" (for Petroleum Products and Petroleum and other Oils and Lubricating Compounds).....	3,673	Nov. 13	25	604
Grant, D. Lewis, Philadelphia, Pa. "Purity" (for Petroleum Products and Petroleum and other Oils and Lubricating Compounds).....	3,674	Nov. 13	25	604
Graves, Gilbert S., Buffalo, N. Y. "Gilbert S. Graves' Imperial Baking Powder".....	3,484	Sept. 4	24	904
Great Atlantic and Pacific Tea Company, New York, N. Y., and Baltimore, Md. "The Oriental Coffee".....	3,439	Aug. 14	24	606
Green, G. S., East Fairfield, Vt. "Dr. Green's Blood Purifier".....	3,421	Aug. 14	24	606
Greene, Tweed & Co., New York, N. Y. "Baxter's Diagonal Wrench".....	3,162	Apr. 24	23	1532
Greene, Tweed & Co., New York, N. Y. "Baxter's Adjustable "S" Wrench".....	3,163	Apr. 24	23	1532
Greenslade, Lewis B., Los Angeles, Cal. "The American Wonder—America's Tree of Life and Knowledge" (for a Medicine).....	3,506	Sept. 11	24	998
Griggs, Oakley, Streator, Ill. "Griggs' Kaldoderma," (for Proprietary Medicine).....	3,730	Dec. 4	25	886
Grinnell Manufacturing Corporation, New Bedford, Mass. "The Grinnell Ticket" (for Cotton Fabrics).....	3,485	Sept. 4	24	904
Grinnell Manufacturing Corporation, New Bedford, Mass. "The Bell Ticket" (for Cotton Fabrics).....	3,486	Sept. 4	24	904
Griswold, Norman W., Alameda, Cal. "Magic Glove and Clothes Cleaner".....	3,713	Nov. 27	25	790
Grommes & Ullrich, Chicago, Ill. "Elite," (for Cigars).....	3,402	July 31	24	394
Grommes & Ullrich, Chicago, Ill. "Pickwick Club," (for Cigars).....	3,403	July 31	24	394
Gross Bros., Milwaukee, Wis. "The A. B. C. of the Prudent Housewife," (for Soap).....	3,692	Nov. 20	25	702
Gross, Howard M., Brooklyn, N. Y. "Old Dr. Malcolm's Hop Poroused Plaster".....	3,010	Feb. 27	23	744
Gruning, Albert, New York, N. Y. "Deutsches Mohu Oel," (for Poppy-Seed Oil).....	3,297	June 19	23	2330
Gwinn, Henry H., and J. M. Baker, Saltville, Ind.; said Gwinn assignor to said Baker. "Dr. Gwinn & Baker's Celebrated Caroleum," (for a Medicine).....	3,675	Nov. 13	25	604
Haas, Joseph, Indianapolis, Ind. "Dr. Jos. Haas' Epizootic Remedy," (for Live Stock).....	3,298	June 19	23	2330
Haas, Joseph, Indianapolis, Ind. "Dr. Jos. Haas' Cattle Remedy".....	3,299	June 19	23	2330
Haas, Joseph, Indianapolis, Ind. "Dr. Jos. Haas' Lung Fever Remedy for Live Stock".....	3,300	June 19	23	2330
Haas, Joseph, Indianapolis, Ind. "Dr. Jos. Haas' Alternative for Horses and Cattle".....	3,301	June 19	23	2330
Haas, Joseph, Indianapolis, Ind. "Dr. Jos. Haas' Fever Drops," (for Live Stock).....	3,302	June 19	23	2330
Haas, Joseph, Indianapolis, Ind. "Dr. Jos. Haas' Colic Remedy," (for Live Stock).....	3,303	June 19	23	2330
Hadley Company, Boston, Mass. "Combed Shoe Thread".....	3,304	June 19	23	2330
Hadley Company, Boston, Mass. "Combed Shoe Thread".....	3,305	June 19	23	2330
Hadley Company, Boston, Mass. "Combed Shoe Thread".....	3,335	July 3	24	2
Hafner, Henry, New York, N. Y. "West Indian Copying Paper".....	3,190	May 8	23	1736
Hagan & Co., Chicago, Ill. "City of Chicago" (for Sugar Cured Smoked Hams).....	3,259	June 5	23	2124
Hagan, James, Centerville, Cal. "Centerville Drying & Packing Co., (for Canned Fruits).....	3,350	July 10	24	104
Haldeman Paper Company, Leekland, Ohio. "Meth Proof" (For Carpet Lining Paper).....	2,901	Jan. 9	23	96
Hall Chemical Company, Cincinnati, Ohio. "Hall's Improved Cough Remedy, Sanguinaria or Blood Root Compound".....	2,991	Feb. 20	23	634
Halsey, C. S., Galesburg, Ill. "Calenduline" (for a Chemical Preparation).....	3,591	Oct. 16	25	196
Hamm, John H., Kinderhook, N. Y. "J. H. Hamm's Emollient".....	3,139	Apr. 10	23	1340
Hammit, Charles H., Oakland, Cal. 9143 "Rheumatic Cure".....	3,529	Sept. 18	24	1094
Hammond, Benjamin, Mount Kisco, N. Y. "Hammond's Slug Shot".....	3,260	June 5	23	2124
Hanson, Francis G., Brooklyn, N. Y. "Extra Quality" (For Hat Linings).....	3,073	Mar. 13	23	942
Hanson, Francis G., Brooklyn, N. Y. "Extra Quality" (for Hat Linings).....	3,418	Aug. 7	24	500
Hanson, Francis G., Brooklyn, N. Y. "Ludgate & Co., (for Tip-Linings of Hats).....	3,783	Dec. 25	25	1194
Harding, Britton & Co., Philadelphia, Pa. "Choice German Prepared Coffee".....	3,769	Dec. 18	25	1082
Harris Brothers, San Francisco, Cal. "A. O. U. W., (for Cigars).....	3,417	Aug. 7	24	500
Harris' Sons, Joel H., Quincy, Ill. "Pay Day" (for Plug Tobacco).....	3,614	Oct. 23	25	294



*Alphabetical list of registrants of labels—Continued.*

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Harris' Sons, Joel H., Quincy, Ill. "Honey Bee" (for Plug Tobacco).....	3,615	Oct. 23	25	294
Harris' Sons, Joel H., Quincy, Ill. "No Plus Ultra" (for Plug Tobacco).....	3,616	Oct. 23	25	294
Harris' Sons, Joel H., Quincy, Ill. "The Sentinel" (for Plug Tobacco).....	3,617	Oct. 23	25	294
Harrison, Apollos W., Philadelphia, Pa. "Harrison's Golden Cologne Water".....	3,731	Dec. 4	25	886
Harrison, William H., New York, N. Y. "Dr. Henry's No. 2 Vigor Pills".....	3,452	Aug. 21	24	708
Hart, Seth, Harmer, Ohio. "Dr. Seth Hart's Napoleon Cure" (for a Medical Preparation).....	3,237	May 29	23	2036
Hart, Seth, Harmer, Ohio. "Dr. Seth Hart's Anodyne Cough Syrup".....	3,618	Oct. 23	25	294
Hasley, George, Allegheny, Pa. "French Soap".....	3,507	Sept. 11	24	998
Hasley, George, Allegheny, Pa. "Ladies Favorite French Soap".....	3,508	Sept. 11	24	998
Hassner, Valentine, San Francisco, Cal. "Valentine Hassner's Lung & Cough Syrup".....	2,992	Feb. 20	23	634
Hastings, John, Philadelphia, Pa. "Liquid Electricity" (For Medicine).....	3,011	Feb. 27	23	744
Hayes, Napoleon B., and C. F. Hopkins, Cincinnati, Ohio. "Elastic Asphalt Paint".....	3,261	June 5	23	2124
Haynes, John G., W. B. Miller, M. E. and I. Bloom, Cleveland, Ohio. "Little Darling" (for Washing Compound).....	3,784	Dec. 25	25	1194
Hegeman & Co., New York, N. Y. "Laxative Tonic Extracts".....	2,993	Feb. 20	23	634
Heinz, F. & J., Pittsburg, Pa. "Heinz's Catsup".....	2,974	Feb. 13	23	544
Heinz, F. & J., Pittsburg, Pa. "Heinz's Jelly".....	3,012	Feb. 27	23	744
Heinz, F. & J., Pittsburg, Pa. "Heinz's Radish".....	3,013	Feb. 27	23	744
Heinz, F. & J., Pittsburg, Pa. "Howard Brand" (For Jelly).....	3,014	Feb. 27	23	744
Heinz, F. & J., Pittsburg, Pa. "Pint English" (for Celery Sauce).....	3,317	June 26	23	2416
Henderson & Co., C. M., Chicago, Ill. "Henderson's School Shoes".....	3,391	July 24	24	306
Henry & Co., J. L., Ravenna, Ohio. "Chimney" (For Lamp Chimneys).....	2,994	Feb. 20	23	634
Henry & Co., W. W., Little Valley, N. Y. "Galvanic Oil".....	3,375	July 17	24	208
Hersheim & Bro., S., New Orleans, La. "Peacock" (for Cigars).....	3,430	Aug. 14	24	606
Herold, George, Baltimore, Md. "Triumph Brand" (for Canned Goods).....	3,351	July 10	24	104
Hickman Bros., Pittsburg, Pa. "Hickman's Hair Reviver".....	3,149	Apr. 17	23	1450
Higgins, Charles M., Brooklyn, N. Y. "Eternal Ink".....	3,032	Mar. 6	23	834
Higgins, Charles M., Brooklyn, N. Y. "Engrossing Ink".....	3,033	Mar. 6	23	834
Higgins, Charles M., Brooklyn, N. Y. "Waterproof Drawing Ink".....	3,093	Nov. 20	25	702
Higgins & Co., W. A., New York, N. Y. "Higgins Baking Powder".....	2,932	Jan. 30	23	348
Higgins, George E., Minneapolis, Minn. "Higgins' Balsamic Lotion" (for a Medicine).....	3,262	June 5	23	2124
Hill, Rowland F., New York, N. Y. "Hill's East Indian Manioca" (for a Preparation of Tapioca).....	3,752	Dec. 11	25	984
Hillyer & Tieston, Paribault, Minn. "Jersey Lily" (For Flour).....	3,091	Mar. 20	23	1036
Hinrichs, Theodore, Baltimore, Md. "Dr. Von Senden's Celebrated Fennel Honey Extract".....	3,732	Dec. 4	25	886
Hirschhorn & Bendheim, New York, N. Y. "Union Line" (for Cigars).....	3,352	July 10	24	104
Hiscox & Co., New York, N. Y. "Parker's Tonic".....	3,296	May 15	23	1836
Hiscox & Co., New York, N. Y. "Parker's Tonic".....	3,297	May 15	23	1836
Hoadley, Edward J., Hartford, Conn. "Hoadley's Cough Drops Label".....	3,178	May 1	23	1626
Hoadley, Edward J., Hartford, Conn. "Hoadley's Jamaica Ginger Tablets".....	3,336	July 3	24	2
Hoadley, Edward J., Hartford, Conn. "Hoadley's Blood Orange Pellets".....	3,337	July 3	24	2
Hoadley, Edward J., Hartford, Conn. "Hoadley's Lime Fruit Tablets".....	3,338	July 3	24	2
Hoey, Ellen M., West Lynn, Mass. "Delizia di Roma" (for a Cosmetic).....	3,576	Oct. 9	25	98
Holdstein, Gustav, Woodbury, N. J. "Swiss Balsam".....	3,465	Aug. 21	24	708
Hood, Bonbright & Co., Philadelphia, Pa. "Ingrain Carpet".....	3,353	July 10	24	104
Hood, Bonbright & Co., Philadelphia, Pa. "Ingrain Carpet".....	3,354	July 10	24	104
Hook, John G., Concord, N. H. "Elder Hook's Healing Balm," (for a Salve).....	3,392	July 24	24	306
Hooper & Co., F. L., Baltimore, Md. "Schroeder's Corn Solvent".....	3,226	May 22	23	1930
Hooper & Co., F. L., Baltimore, Md. "Drew's Yeast Powder".....	3,676	Nov. 13	25	604
Hoover, William G., Pittsburg, Pa. "World's Shoe House," (for Boots and Shoes).....	3,283	June 12	23	2242
Hopkins, Charles F. (See Hayes and Hopkins.)				
Horn, Charles W., Slatington, Pa. Horn's Telephone Liniment King of all Liniments".....	3,263	June 5	23	2124
Horn, Charles W., Slatington, Pa. "Horn's Telephone Cough Syrup, The Wonder of Cough Syrups".....	3,335	July 10	24	104
Honchens, J. T., Baltimore, Md. "The Family Physician" (for a Medical Compound).....	3,619	Oct. 23	25	294
Honghtaling, Charles E., and G. E. Ferguson, Albany, N. Y. "Mrs Day's Worm Remedy".....	3,509	Sept. 11	24	998
Honghtaling, Charles E., and G. E. Ferguson, Albany, N. Y. "Mrs Day's Baby Cordial".....	3,510	Sept. 11	24	998
Houghton & Co., E. F., Philadelphia, Pa. "Petrolatum, U. S. P." (For a Medicinal Preparation).....	2,933	Jan. 30	23	348
Houston & Co., James W., Pittsburg, Pa. "Ye Olden Time Coffee".....	3,620	Oct. 23	25	294
Howard, Edwin H., Baltimore, Md. "Directions to Fire-Escape".....	3,074	Mar. 13	23	942
Howes, Franklin, New York, N. Y. "Franklin Howes' Charm," (For a Liniment).....	3,015	Feb. 27	23	744
Hoyt & Co., E. W., Lowell, Mass. "Hoyt's German Cologne".....	3,770	Dec. 18	25	1082
Huber & Wack Milling and Live Stock Company, St. Louis, Mo. "White Crane," (for Flour).....	3,468	Aug. 28	24	802
Hubert, C. G., New York, N. Y. "A. B. C. Alpaca Braid".....	3,227	May 22	23	1930
Hunt, E. F., and S. L. Pellet, Richmond, Va. "Xanthine," (for Hair Restorative).....	3,785	Dec. 25	25	1194
Hunting, Benjamin F. (See Tooker and Hunting.)				
Huppmann, Joseph, New York, N. Y. "Monopole Turkish Tobacco and Cigarette Manufactory," (for Prepared Tobacco, Cigarettes Especially).....	3,469	Aug. 28	24	802
Husband, Thomas J., Philadelphia, Pa. "Husband's Calcined Magnesia," (for a Medicine).....	3,264	June 5	23	2124
Hyde, George M., Quincy, Iowa. "Water-Proof Oil Blacking".....	3,092	Mar. 20	23	1036
Ingham, Harvey A., Waltham, Vt. "Dr. H. A. Ingham's Vegetable Expectorant Nervine Pain Extractor".....	3,164	Apr. 24	23	1532
Ireland, John H., Brooklyn, N. Y., and W. J. Russell, Jersey City, N. J. "Knickerbocker Subscription Agency," (for a Catalogue).....	3,786	Dec. 25	25	1194
Ironmonger, Francis M., Brooklyn, N. Y. "Choice Table Nuts Mixed".....	3,621	Oct. 23	25	294
Ithaca Cigar Manufacturing Company, Ithaca, N. Y. "Lime Kiln Club" (for Cigars).....	3,284	June 12	23	2242
Itschner & Co., Werner, Philadelphia, Pa. "Tigoga" (for Silks and Silk Ribbons).....	3,501	Sept. 4	24	904
Ives, Frederick, Ogdensburg, N. Y. "Ives' Catarrh Cream".....	3,076	Mar. 13	23	942
Jackson, Benjamin F., Wilmington, Del. "Brazilian Balm" (for a Remedy).....	3,530	Sept. 18	24	1094
Jacoby & Fromer, New York, N. Y. "Invincibles" (For Cigar Boxes).....	3,016	Feb. 27	23	744
Jacoby & Fromer, New York, N. Y. "Peek-a-Boo," (for Cigars).....	3,191	May 8	23	1736
Jacoby & Fromer, New York, N. Y. "Lucky Hit," (for Cigars).....	3,228	May 29	23	2036
Jacoby & Fromer, New York, N. Y. "Quinine Cigars".....	3,225	June 12	23	2242
Jacoby & Fromer, New York, N. Y. "Duchess of Devonshire" (for Cigars).....	3,256	July 10	24	104
Jacoby & Fromer, New York, N. Y. "Fresh" (for Cigars).....	3,357	July 10	24	104
Jacoby & Fromer, New York, N. Y. "Bunch of Keys" (for Cigars).....	3,429	Sept. 4	24	904
Jacoby & Fromer, New York, N. Y. "Ewing's Cherubs" (for Cigars).....	3,656	Nov. 6	25	506
Jacoby & Fromer, New York, N. Y. "The Duffers," (for Cigars).....	3,657	Nov. 6	25	506
Jacoby & Fromer, New York, N. Y. "Butler" (for Cigars).....	3,658	Nov. 6	25	506
Jacoby & Fromer, New York, N. Y. "Standard Java," (for Cigars).....	3,659	Nov. 6	25	506
Jacoby & Fromer, New York, N. Y. "The Grand," (for Cigars).....	3,660	Nov. 6	25	506
Jacoby & Fromer, New York, N. Y. "Clippin" (for Cigars).....	3,677	Nov. 13	25	604
Japanese Oil Company, Ottumwa, Iowa. "Japanese Oil" (for a Medicated Compound).....	3,639	Oct. 30	25	398
Jeffreys, Lemuel A., Rochester, N. Y. "British White Oil for Man and Beast".....	3,714	Nov. 27	25	790
Jewell & Son, D., New Lots, N. Y. "Unxld," (For Prepared Flour).....	2,902	Jan. 9	23	96

*Alphabetical list of registrants of labels—Continued.*

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Johns Manufacturing Company, H. W., New York, N. Y. "Boiler Lagging" (for Fabric woven of Asbestos, &c.)	3,490	Sept. 4	24	904
Johns Manufacturing Company, H. W., New York, N. Y. "Air Chamber" (for Fabric woven of Asbestos, &c.)	3,491	Sept. 4	24	904
Johnson, R. M. (See Swan and Johnson.)				
Johnston, Aaron L., Cross Creek, Pa. "Johnston's Caustic Oil"	3,120	Apr. 10	23	1340
Jones, Edwards & Co., Plymouth, Pa. "B's Boot Protector"	3,179	May 1	23	1626
Jones, Evan B. (See Kraft, Jones, and Egerton.)				
Jones, John W., Brooklyn, N. Y. "Golden Anchor" (for Liniment)	3,694	Nov. 20	25	702
Jones, K. P., Chattanooga, Tenn. "Double Strength Baking Powder"	3,165	Apr. 24	23	1532
Jones, Seth A., Grand Rapids, Mich., and J. P. Primley, Elkhart, Ind. "Primley's Iron and Wahoo Tonic"	3,669	Nov. 6	25	506
Jones, Seth A., Grand Rapids, Mich., and J. P. Primley, Elkhart, Ind. "Primley's Speedy Cure for Coughs and Colds"	3,670	Nov. 6	25	506
Jones, Seth A., Grand Rapids, Mich., and J. P. Primley, Elkhart, Ind. "Jones' Glycerine Arnica Salve"	3,671	Nov. 6	25	506
Joslin, Benjamin, Uxbridge, Mass. "Dr. Joslin's Cough Syrup"	3,121	Apr. 10	23	1340
Joslin, Benjamin, Uxbridge, Mass. "Dr. Joslin's Blood Syrup"	3,122	Apr. 10	23	1340
Joslin, Benjamin, Uxbridge, Mass. "Dr. Joslin's Cough Syrup"	3,123	Apr. 10	23	1340
Kaufman & Sons, S., Pittsburg, Pa. "Extras" (for Clothing)	3,531	Sept. 18	24	1094
Keasbey & Mattison, Philadelphia Pa. "Bromo Caffeine" (for Medicine)	3,318	June 26	23	2416
Keeley, Leslie E., Dwight, Ill. "Headache Drops"	2,910	Jan. 16	23	196
Keeley, Leslie E., Dwight, Ill. "Headache Liniment"	2,911	Jan. 16	23	196
Kelley, George W., New York, N. Y. "Brilliantine for the Eyes"	3,124	Apr. 10	23	1340
Kellogg, Isaac T., New York, N. Y. "Vail's Extracts"	2,957	Feb. 6	23	440
Kelly, Andrew J., Worcester, Mass. "The Old English Veterinary Medicine"	3,640	Oct. 30	25	398
Kemp, George L., Jamesville, Tex. "Diphtheria Gargle"	3,031	Mar. 6	23	834
Kempshall Manufacturing Company, New Britain, Conn. "Gravity-Sash Lock"	3,319	June 26	23	2416
Keppler, Christian L., New Orleans, La. "Pyrophosphated Iron Water"	3,125	Apr. 10	23	1340
Kilmer & Co., Binghamton, N. Y. "Dr. Kilmer's Indian Medicine Jug"	3,563	Oct. 2	25	2
King, Frank T., Brooklyn, N. Y. "Hygeia" (for Effervescent Beverages)	3,771	Dec. 18	25	1082
Kline, James N., Williamsport, Pa. "My Horse Shoe & Bee Label," (for General Merchandise)	3,376	July 17	24	208
Kochs, Theodore A., Chicago, Ill. "Piedra Brazil" (for Razor Hones)	3,286	June 12	23	2242
Kuehne, Frederick T., St. Louis, Mo. "Seal of Kentucky," (For Whisky)	2,934	Jan. 30	23	348
Kohn, Adler & Co., Philadelphia, Pa. "Sublime" (for Ribbons)	3,753	Dec. 11	25	984
Kraft, George, E. B. Jones, and H. Egerton, Brooklyn, N. Y. "Silver King" (for a preparation for Polishing Metals)	3,733	Dec. 4	25	886
Küpper, Louis, and W. J. Anderson, Brooklyn, N. Y. "Canada Linseed Oil"	3,564	Oct. 2	25	2
Lalance & Grosjean Manufacturing Company, New York, N. Y. "Autocrat of the Breakfast Table," (for Coffee Pots)	3,287	June 12	23	2242
Lane & Co., J. H., New York, N. Y. "Cover to Sample Book"	3,140	Apr. 10	23	1340
Lane & Co., J. H., New York, N. Y. "Egyptian Boy," (for Dry Goods)	3,192	May 8	23	1736
Lane & Co., J. H., New York, N. Y. "Euretta Cloth" (for Dry Goods)	3,678	Nov. 13	25	604
Lassell, E. W., Wichita, Kan. "Lassell's All-Healing Balsam"	3,150	Apr. 17	23	1450
Latour, Madeline, New York, N. Y. "Cream of Beauty," (for a Cosmetic)	3,405	July 31	24	394
Lavolette & Nelson, Montreal, Canada. "Dr. Chevallier's Red Spruce Gum Paste," (for Cough Medicine)	3,288	June 12	23	2242
Lawson & Son, Joseph, Lynchburg, Va. "Glenwood" (for Whisky)	3,679	Nov. 13	25	604
Le Bontillier, Arlington, New York, N. Y. "Le Bontillier's Marvelous Catarrh Cure"	3,522	Sept. 18	24	1094
Le Mieux, Lucius A., Seymour, Wis. "Carbolated Sachet, Envelope or Pad" (for Disinfectants)	3,151	Apr. 17	23	1450
Leggett & Brother, New York, N. Y. "Chloride of Lime" (for Disinfectant)	3,470	Aug. 28	24	802
Leonard, Charles H., Grand Rapids, Mich. "Leonard's Selling Tickets" (for Lamps, Pendants, and Chandeliers)	3,734	Dec. 4	25	886
Levis Bros., New Orleans, La. "Levis Brothers Twins," (for Fine-Cut Tobacco)	3,736	Dec. 4	25	886
Lewenberg, C., New York, N. Y. "Madame Lewenberg's Pastilles de Florence" (for the Complexion)	3,358	July 10	24	104
Lewis & Bro., Pay, Rockford, Ill. "Maud Muller" (for Cigar Boxes)	3,560	Oct. 2	25	2
Lewis, John B., Reading, Mass. "Wear Resisters" (for Boots & Shoes)	3,377	July 17	24	208
Lilienthal & Bishop, Philadelphia, Pa. "Lilt Hop" (For Rheumatic Remedy)	3,093	Mar. 20	23	1036
Lindauer, Joseph E., New York, N. Y. "Card for Holding Separable Studs & Collar Buttons"	3,406	July 31	24	394
Lindauer, Joseph E., New York, N. Y. "Separable Buttons and Studs"	3,641	Oct. 30	25	392
Lindblad, Maurice, New York, N. Y. "Swedish Corn Remover"	2,926	Jan. 16	23	196
Lindsay, Robert J. (See Buchanan and Lindsay.)				
Lloyd, Charles E., Albany, N. Y. "Ror-To-Pi-Co-Ine," (for a Medicine)	3,208	May 15	23	1836
Loffie, Henry, Syracuse, N. Y. "Glycerine and Rice Face-Powder"	3,695	Nov. 20	25	702
Los Gatos Fruit Packing Company, Los Gatos, Cal. "Narrow Gauge Brand, Los Gatos Fruit Packing Co., Los Gatos, Cal."	2,958	Feb. 6	23	440
Los Gatos Fruit Packing Company, Los Gatos, Cal. "Forest Brand, Redwood Fruit Packing Co., Los Gatos, Cal."	2,959	Feb. 6	23	440
Lovett, I. D., Painesville, Ohio. "Cabinet Grand" (for Organs)	3,228	May 22	23	1930
Luquer & Co., R. S., New York, N. Y. "Our Own" (for Saddlery Hardware)	3,265	June 5	23	2124
Lowrey, John T., Overton, Tex. "Lowrey's Indian Vegetable Chill Pills"	3,622	Oct. 23	25	294
Luyties Brothers, New York, N. Y. "Rhine Wine"	3,453	Aug. 21	24	708
Luyties Brothers, New York, N. Y. "Vins Fins de Bordeaux" (for Wines)	3,454	Aug. 21	24	708
Luyties Brothers, New York, N. Y. "Veritas Bordeaux," (for Wines)	3,455	Aug. 21	24	708
Luyties Brothers, New York, N. Y. "Vins fins de Bourgogne" (for Wines)	3,523	Sept. 18	24	1094
Luyties Brothers, New York, N. Y. "Solera Whiskies"	3,524	Sept. 18	24	1094
Luyties Brothers, New York, N. Y. "Kaiser-Sprudel" (for Natural Mineral Water)	3,525	Sept. 18	24	1094
Lynch, Martha A., Baltimore, Md. "Lynch's Celebrated Dyspepsia Cordial"	3,623	Oct. 23	25	294
Lyndon, E. S., Athens, Ga. "Turkish Liniment"	3,715	Nov. 27	25	790
Lyon & Co., New York, N. Y. "Fleur d'Amerique Flour"	3,266	June 5	23	2124
Lyon, George R., New London, Conn. "Hop Pills"	3,735	Dec. 4	25	886
Lyon, John H., New York, N. Y. "John H. Lyon's Precious Ointment"	3,772	Dec. 18	25	1082
Maier & Co., J. J., Augusta, Me. "Clover Bitters"	2,975	Feb. 13	23	544
Main Bros. & Co., Lansingburg, N. Y. "Honest Box" (for Laundry Blue)	3,378	July 17	24	208
Manahan, George W. E., New York, N. Y. "Tarine" (for Pads for Exterminating Insects)	3,209	May 15	23	1836
Manahan, Margaret E., New York, N. Y. "Tarine" (for Toilet Paper)	3,544	Sept. 25	24	1180
Mandeville, Wilber J., Rochester, N. Y. "Toothache and Neuralgic Paste or Mass"	2,976	Feb. 13	23	544
Mann, Alice M., and E. S. Steward, Skowhegan, Me. "Dr. A. A. Mann's Cream of Life Pills"	3,545	Sept. 25	24	1180
Mann, C. H., executor. (See Mann, William.)				
Mann, William, deceased, Philadelphia, Pa., C. H. Mann, executor. "Mann's White Commercial Copying Books"	3,035	Mar. 6	23	834
Mann, William, deceased, Philadelphia, Pa., C. H. Mann, executor. "Mann's White Linen Letter Copying Books"	3,036	Mar. 6	23	834



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Mann, William, deceased, Philadelphia, Pa., C. H. Mann, executor. "Mann's Parchment Paper Copying Books".....	3,037	Mar. 6	23	834
Mann, William, deceased, Philadelphia, Pa., C. H. Mann, executor. "Mann's Parchment Copying Paper".....	3,038	Mar. 6	23	834
Mann, William, deceased, Philadelphia, Pa., C. H. Mann, executor. "Mann's American Rail-Road Copying Paper".....	3,039	Mar. 6	23	834
Marshall, Clark & Co., New York, N. Y. "Ambrosial Peach and Honey".....	3,642	Oct. 30	25	398
Marshall Canning Company, Marshalltown, Iowa. "Specr Brand Tomato".....	3,393	July 24	24	306
Marshall Canning Company, Marshalltown, Iowa. "Headlight Tomatoes".....	3,394	July 24	24	306
Marshall Canning Company, Marshalltown, Iowa. "Marshall Canning Co. (for Canned Corn)".....	3,431	Aug. 14	24	606
Martin & Co., L., Philadelphia, Pa. "Extra Coach Painters" (for Lamp Black).....	3,359	July 10	24	104
Martin & Co., L., Philadelphia, Pa. "Old Standard" (for Lamp Black).....	3,360	July 10	24	104
Martin & Co., L., Philadelphia, Pa. "Improved Coach Painters" (for Lamp Black).....	3,361	July 10	24	104
Martin & Co., L., Philadelphia, Pa. "Golden Star Spirit" (for Lamp Black).....	3,362	July 10	24	104
Martin & Co., L., Philadelphia, Pa. "Satin Gloss" (for Lamp Black).....	3,363	July 10	24	104
Martin & Co., L., Philadelphia, Pa. "Sign Painters" (for Lamp Black).....	3,364	July 10	24	104
Martin & Co., L., Philadelphia, Pa. "Germantown" (for Lamp Black).....	3,365	July 10	24	104
Mathews & Minick Filler Co., Lawrenceburg, Ind. "Mathews & Minick Double Quick Wood Filler".....	3,511	Sept. 11	24	998
Mathis, Charles B., Toms River, N. J. "Dutch Worm Syrup".....	3,716	Nov. 27	25	790
Matthias, Joseph, and A. Sterrett, Philadelphia, Pa. "Sterrett's Infallible Butternut Pills, Cathartic and Tonic".....	3,643	Oct. 30	25	398
Maul & Co. Hugo, New York, N. Y. "Imperial trimming".....	2,946	Jan. 30	23	348
Maulfair, William L., Lebanon, Pa. "Orange-Leaf" (for a Liniment).....	3,696	Nov. 20	25	702
McAllister, Francis E., New York, N. Y. "Eureka Coal Economizer".....	2,977	Feb. 13	23	544
McCambridge, John E., Philadelphia, Pa. "Insecticide".....	3,077	Mar. 13	23	942
McClelland, J. M., Emmlenton, Pa. "McClelland's Anti-constipation Pills".....	2,891	Jan. 2	23	2
McCulloch Brothers, Cincinnati, Ohio. "Saint Anne's Cough and Consumption Cure".....	3,773	Dec. 18	25	1082
McDonald & Co., R. H., New York, N. Y. "Hygienic Elixir".....	3,017	Feb. 27	23	744
McGowan, Thomas, Cleveland, Ohio. "Druid Oil" (for Liniment).....	3,456	Aug. 21	24	708
McIntosh & Co., Springfield, Mass. "McIntosh & Co., U. S. A." (for Shoes, Boots and Slippers).....	3,339	July 3	24	2
McIntosh, Sarah E., Almond, N. Y. "Mrs. Cary's Compound" (for a Medicinal Preparation).....	3,754	Dec. 11	25	984
McKenna, S. O., New Holland, Ill. "Anti Malarial Bitters".....	2,935	Jan. 30	23	348
McMenamin & Co., Hampton, Va. "Fresh Deviled Crabs".....	2,923	Jan. 16	23	136
McNellis, Thomas H., Boston, Mass. "Henry's Remedy for Cholera &c".....	3,532	Sept. 18	24	1094
McRae, Fulton M., Vicksburg, Miss. "The Australian (Eucalyptus Globulus) Anti-Periodic or Fever & Ague Tonic".....	3,126	Apr. 10	23	1340
Meador, Daniel D., East Salisbury, Mass. "D. D. Meador's Salve".....	2,995	Feb. 20	23	634
Merchant & Co., S. L., New York, N. Y., assignor to W. Y. Atlee, Washington, D. C. "Imperial Anti-Sneak Norwegian Tar Felting".....	3,717	Nov. 27	25	790
Merchant & Co., S. L., New York, N. Y., assignor to W. Y. Atlee, Washington, D. C. "Imperial Portland Cement".....	3,718	Nov. 27	25	790
Merkel, G. Hermann, Boston, Mass. "Oxymurin" (For a Remedy).....	3,094	Mar. 20	23	1036
Merrill Chemical Company, William S., Cincinnati, Ohio. "Fluid Diastase" (a Medicine).....	3,180	May 1	23	1026
Merrill, Mary M., Boston, Mass. "Dr. Seignard's Vegetable Panacea" (for a Medicine).....	3,457	Aug. 21	24	708
Merriman & Son, A. F., Oakland, Cal. "Dr. Merriman's Fragrant Kalliodent" (a Dentifrice).....	2,912	Jan. 16	23	196
Metzenauer, Emil, Little Rock, Ark. "Double Eagle" (for Baking Powder).....	3,737	Dec. 4	25	886
Meyer, Adolph C., Baltimore, Md. "Salvation Oil" (for Liniment).....	3,229	May 22	23	1930
Meyer Brothers & Co., San Francisco, Cal. "Iron Cross Brand" (for Groceries).....	3,774	Dec. 18	25	1082
Meyer & Bulte, St. Louis, Mo. "Carnation" (for Flour).....	3,434	Aug. 14	24	606
Meyer & Bulte, St. Louis, Mo. "Pride of the State" (for Flour).....	3,592	Oct. 16	25	196
Meyer & Bulte, St. Louis, Mo. "White Swan" (for Flour).....	3,624	Oct. 23	25	294
Meyer & Co., A. C., Baltimore, Md. "Dr. Bull's Cough Candy Drops".....	3,127	Apr. 10	23	1340
Meyer, Frank R., St. Louis, Mo. "Meyer's Pine Apple Lemonade".....	3,267	June 5	23	2124
Meyer, James, Jr., Pelhamville, N. Y. "James Meyer, Jr's, New, Inodorous, Germicide".....	3,230	May 22	23	1930
Meyer, James, Jr., Pelhamville, N. Y. "James Meyer, Jr's, New, Inodorous Germicide, Solution of Alumina".....	3,432	Aug. 14	24	606
Michaelis & Son, M., New York, N. Y. "The Lily on the Hudson" (for Perfumery).....	3,433	Aug. 14	24	606
Miles, Frank L., Elkhart, Ind. "Dr. Miles' Great Remedy".....	3,231	May 22	23	1930
Miller Match Co., Akron, Ohio. "Anti-Monopoly Match".....	3,476	Aug. 28	24	802
Miller, William B. (See Haynes, Miller, and Bloom.).....				
Millings, Robert C., Charleston, S. C. "Hampton Couch".....	3,232	May 22	23	1930
Mills, J. C., New York, N. Y. "Injection De Mandelena by Dr. Mills".....	3,407	July 31	24	394
Minor & Brown, Neosho, Mo. "White Swan" (for Flour).....	3,593	Oct. 16	25	196
Minor & Brown, Neosho, Mo. "Sterling" (for Flour).....	3,594	Oct. 16	25	196
Minor & Brown, Neosho, Mo. "Angel Food" (for a Certain Brand of Flour).....	3,595	Oct. 16	25	196
Mitchell, James, Camden, N. J. "Thistle" (for Liniment).....	3,379	July 17	24	208
Modisett, Charles H., Le Roy, N. Y. "Globe Plaster".....	2,960	Feb. 6	23	440
Modisett, Charles H., Le Roy, N. Y. "Globe Ointment".....	2,978	Feb. 13	23	544
Morrell, Charles E., New York, N. Y. "Compound Extract Copaiba, Cubebs and Iron".....	2,892	Jan. 2	23	2
Moore, Edward J., New York, N. Y. "Shoemakers' and Tanners' Friendly Dressing and Blacking".....	3,719	Nov. 27	25	790
Moore, Thomas, Philadelphia, Pa. "Dr. Moore's Fragrant Solace for cleansing and Preserving the Teeth".....	3,533	Sept. 18	24	1094
Morrison & Deprez, Shelbyville, Ind. "Morrison & Deprez' Horse and Cattle Powder".....	3,018	Feb. 27	23	744
Morse, Charles H., Holliston, Mass. "Morse's Asparagus Kidney Cure".....	3,095	Mar. 20	23	1036
Morse, Charles H., Holliston, Mass. "Morse's Compound Cough Syrup".....	3,459	Aug. 21	24	708
Morse, William L., Baltimore, Md. "My Maryland Bitters".....	2,965	Feb. 6	23	440
Mountain Valley Springs Company, Hot Springs, Ark. "Mountain Valley Springs Co." (for Natural Mineral Water).....	3,268	June 5	23	2124
Mountain Valley Springs Company, Hot Springs, Ark. "Mountain Valley Water" (for Natural Mineral Water).....	3,269	June 5	23	2124
Mullikin, Susan A., Baltimore, Md. "A Cap for Oyster Cans".....	2,913	Jan. 16	23	196
Murray & Co., E. E., New York, N. Y. "Zingari, The Gypsie Queen's Secret" (for Ointment).....	3,477	Aug. 28	24	802
Nasse, August. (See Fink and Nasse.).....				
Nathan Brothers, Philadelphia, Pa. "Ye Philadelphia Club Whisky".....	3,787	Dec. 25	25	1194
Ncasse & Co., G. W., North East, Pa. "Galvanic Oil".....	3,366	July 10	24	104
Nelson, Marietta, Jersey City, N. J. "Fruitaline" (for a Chemical Compound).....	3,408	July 31	24	394
Neurotoxic Manufacturing Company, Wilber, Nebr. "Neurotoxic" (a Remedy for Neuralgia).....	3,306	June 19	23	2330
Neustaedter & Co., P., New York, N. Y. "St. Bernard" (for Vegetable Pills).....	2,924	Jan. 16	23	196
New York Portland Cement Company, New York, N. Y. "Rosendale Hydraulic Cement".....	3,512	Sept. 11	24	998
Newberger, Ernest, Montreal, Quebec, Canada. "Parnell" (for Cigars).....	3,577	Oct. 9	25	98
Newman, Walter, Brooklyn, N. Y. "Morning Whiff" (for Cigars).....	3,435	Aug. 14	24	606
Newton Brothers & Co., San Francisco, Cal. "Newton's Evolution Soap".....	3,596	Oct. 16	25	196
Newton, W. D., Victor, N. Y. "Octimatus" (for Cigars).....	3,460	Aug. 21	24	708

*Alphabetical list of registrants of labels—Continued.*

Name, residence, and title.	No.	Date.	Official Gazette.	
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Nichols, G. D., New Canaan, Conn. "The Light of the World," (for Patterns for a Picture) .....	3,409	July 31	24	394
Noelle & Co., Charles, Baltimore, Md. "Noelle's Celebrated Peruvian Bitters" .....	3,775	Dec. 18	25	1082
Northrup & Penman, Scranton, Pa. "Ha! Ha! Cough Drops" .....	3,661	Nov. 6	25	506
O'Brien, Maurice, New York, N. Y. "Excelsior" (for Upholstery and Drapery Trimmings) .....	3,513	Sept. 11	24	998
O. K. Soap Co., Philadelphia, Pa. "O. K. Borax Soap" .....	3,644	Oct. 30	25	398
O'Lalor, David R., Boston, Mass. "Mann's Remedy" (for a Patent Medicine) .....	3,289	June 12	23	2242
O'Loughlin, Cyrus, Niagara Falls, N. Y. "Niagara Spray Cologne" .....	3,680	Nov. 13	25	604
O'Meara, John U., Washington, D. C. "O'Meara's Royal Glue" .....	2,979	Feb. 13	23	544
Oakes, J. E., Haverhill, N. H. "Oake's Balm of Life" (for a Medicine) .....	3,514	Sept. 11	24	998
Ohio Candle Company, Cincinnati, Ohio. "Daisy Soap" .....	3,078	Mar. 13	23	942
Oliver, D. C., Holly Springs, Miss. "The Wonderful Creole Blood Purifier." (For Medicine) .....	2,936	Jan. 30	23	348
Oriental Manufacturing Company, Philadelphia, Pa. "The Rising Sun Shoe Blacking" .....	3,492	Sept. 4	24	904
Oriental Manufacturing Company, Philadelphia, Pa. "Cirage Onctueux" (for Blacking) .....	3,597	Oct. 16	25	196
Orth, Adam, Milwaukee, Wis. "Holland Universal Stomach Bitters" .....	3,103	Mar. 27	23	1126
Ostheimer Brothers, Philadelphia, Pa. "Coppel Cutlery Co." (For Cutlery) .....	2,937	Jan. 30	23	348
Pacific Vinegar Works, San Francisco, Cal. "View of our Vineyard" (for Wine Vinegar) .....	3,625	Oct. 23	25	294
Page, Henry A., Boston, Mass. "Wellington Mills Standard Flexible Cabinet Glass Paper" .....	3,152	Apr. 17	23	1450
Page, Henry A., Boston, Mass. "Wellington Mills Standard Flexible Cabinet Glass Paper" .....	3,153	Apr. 17	23	1450
Page, Henry A., Boston, Mass. "Wellington Crystal Polish" .....	3,154	Apr. 17	23	1450
Palmer, Chillingworth C., Philadelphia, Pa. "Palmer's Indian Remedy for External and Internal Use" .....	2,996	Feb. 20	23	634
Parker, Frank, A. L. Vandewater, and T. G. Talmage, Islip, N. Y. "Pepsin Bitters" .....	3,755	Dec. 11	25	984
Paul, Lorenzo C., Boston, Mass. "The Duke's Choice Perfumes" .....	3,515	Sept. 11	24	998
Payne, John F. (See Williams and Payne.) .....				
Payn's Sons, B., Albany, N. Y. "Lena" (for Cigars) .....	3,471	Aug. 28	24	802
Pearson, William L., Troy, Ohio. "Vienna Baking Powder" .....	3,645	Oct. 30	25	398
Pellet, S. L. (See Hunt and Pellet.) .....				
Pemberton, Iverson & Denison, Atlanta, Ga. "A four (4) leafed Clover." (for Medical Compounds) .....	3,166	Apr. 24	23	1532
Perry & Co., H. W., Selma, Ala. "H. W. Perry & Co.'s National." (for Plug Tobacco) .....	3,681	Nov. 13	25	604
Peters, Henry E., Allentown, Pa. "Dandelion Liver Pellets" .....	3,395	July 24	24	306
Peters, Henry E., Allentown, Pa. "Dandelion Bitters" .....	3,396	July 24	24	306
Pevey, John M., Lowell, Mass. "Macrame Cord" .....	3,662	Nov. 6	25	566
Pevey, John M., Lowell, Mass. "Knitting Cotton" .....	3,682	Nov. 13	25	604
Phillips, Charles C., Philadelphia, Pa. "Phillips' Opalite" (for a Filler) .....	3,598	Oct. 16	25	196
Phillips, George M., Maysville, Ky. "Lavarre's Sure Cure" .....	2,930	Jan. 23	23	274
Phillips, John R., Baltimore, Md. "Camp Fire" (For Blankets) .....	2,961	Feb. 6	23	440
Phlips, George, Baraboo, Wis. "Prussian Heave Powders" .....	3,380	July 17	24	202
Pickit, J. B., Fergus Falls, Minn. "Pickit's Purifying Syrup" (for a Medicine) .....	3,516	Sept. 11	24	998
Pierce, A. J., Coldwater, Mich. "Snag" (For Cigar Boxes) .....	2,940	Jan. 30	23	348
Piers, Charles, Menomonee, Wis. "The Eclegm Consumption Cure" .....	3,320	June 26	23	2416
Pincus Bros., Philadelphia, Pa. "Choclatina" (for a Beverage) .....	3,599	Oct. 16	25	196
Pinski Brothers, New Orleans, La. "The Mascot Tobacco Cigarette" .....	3,128	Apr. 10	23	1340
Pirz & Sward, New York, N. Y. "Cosmaroma" (for a Toilet Liquid) .....	3,367	July 10	24	104
Plass, Ida I., Detroit, Mich. "Pick's Magic Mixture" (for a Medicine) .....	3,367	Sept. 15	24	1094
Plume & Atwood Manufacturing Company, Waterbury, Conn. "Family Pins" .....	3,565	Oct. 2	25	2
Poncet, M., Baltimore, Md. "M. Poncet's Invaluable Remedy for Small Pox" .....	3,019	Feb. 27	23	741
Popp, Jacob J. F., Harrisburg, Pa. "German Stomach Powder" .....	3,419	Aug. 7	24	500
Porous Plaster Company, Sing Sing, N. Y. "Alcock's Porous Plaster, Brandreth's Pills" .....	3,381	July 17	24	208
Portman & Co., J. N., Chipley, Ga. "Swiss Infallible Tetter Cure" .....	3,720	Nov. 27	25	790
Potter, Charles W., Wakefield, Mass. "I am the Excelsior Cough Syrup" .....	3,239	May 29	23	2036
Potts, Samuel T., Augusta, Ga. "Potts' Will Cure Liniment" .....	3,578	Oct. 9	25	88
Potts, Samuel T., Augusta, Ga. "Potts' Great Southern Worm Circles" .....	3,579	Oct. 9	25	88
Potts, Samuel T., Augusta, Ga. "Potts' Long Leaf Liniment" .....	3,580	Oct. 9	25	88
Powers, Edgar C., Danvers, Mass. "Powers' Specific" .....	3,155	Apr. 17	23	1450
Pringle, Jonathan P. (See Jones and Pringle.) .....				
Purdy, John H., Chicago, Ill. "Thin Mi-Concave Watch Glasses" .....	3,702	Nov. 20	25	702
Purdy & Stein, J. H., Chicago, Ill. "Mi-Concave." (For Watch Crystals) .....	2,997	Feb. 20	23	634
Purdy & Stein, J. H., Chicago, Ill. "Geneva" (For Watch Crystals) .....	2,998	Feb. 20	23	634
Purdy & Stein, J. H., Chicago, Ill. "Flat Lunette." (For Watch Crystals) .....	2,999	Feb. 20	23	634
Purdy & Stein, J. H., Chicago, Ill. "High Lunette." (For Watch Crystals) .....	3,000	Feb. 20	23	634
Purdy & Stein, J. H., Chicago, Ill. "Flat Concave." (For Watch Crystals) .....	3,001	Feb. 20	23	634
Queman, Anthony, Brooklyn, N. Y. "Excelsior" (For Cleaning and Removing Tarnish from Metallic and other Articles) .....	2,962	Feb. 6	23	440
Quigley, William G., College Point, N. Y. "Quigley's Consumption and Asthma Cure" .....	3,193	May 8	23	1736
Randall, Leander P., Philadelphia, Pa. "Randall's Pocket Case of Homœopathic Medicines for Travelers and Families" .....	3,420	Aug. 7	24	500
Rankin & Sherrick, New York, N. Y. "Big Find" (for Cigars) .....	3,270	June 5	23	2124
Rankin & Sherrick, New York, N. Y. "Two Sours" (for Cigars) .....	3,271	June 5	23	2124
Rankin & Sherrick, New York, N. Y. "Cupid M. D." (for Cigars) .....	3,272	June 5	23	2124
Rankin & Sherrick, New York, N. Y. "The Great Five" (for Cigars) .....	3,647	Oct. 30	25	398
Rankin & Sherrick, New York, N. Y. "The Washingtons" .....	3,758	Dec. 11	25	984
Rano, Charles O., Buffalo, N. Y. "Wheat, Beef and Iron" .....	2,903	Jan. 9	23	96
Rano, Charles O., Buffalo, N. Y. "Whisky and Beef" (Rye Whisky and Beef Broth) .....	2,948	Jan. 30	23	348
Rauch, Albert E., Indianapolis, Ind. "The When Cigar" .....	3,340	July 3	24	2
Rawson, William M. (See Bedford and Rawson.) .....				
Raymond, B. F., Essex, Mass. "Sarsaparillian Hygienic Wine Puzzle" .....	3,663	Nov. 6	25	506
Raymond, Benjamin F., Essex, Mass. "Raymond's Sarsaparillian Hygienic Wine" .....	3,020	Feb. 27	23	744
Raymond, George T., Coney Island, N. Y. "Raymond's Pectoral Plaster" .....	3,021	Feb. 27	23	744
Raze, Arthur E., Buffalo, N. Y. "Peerless Flavoring Extracts" .....	2,893	Jan. 2	23	2
Rhodes & Sons, M. M., Taunton, Mass. "Shoe Button" .....	3,626	Oct. 23	25	294
Rhodes & Sons, M. M., Taunton, Mass. "Shoe Button" .....	3,627	Oct. 23	25	294
Rehrig & Koons, Catsauqua, Pa. "Eureka Hoof Ointment" .....	3,438	Aug. 14	24	606
Reidy, Philip A., Malden, Mass. "Reidy's Scratch Ointment" .....	3,321	June 26	23	2416
Restein, John, Philadelphia, Pa. "Restein's Indicator." (for Checks, Notes, Drafts, &c) .....	3,290	June 12	23	2242
Restein, John, Philadelphia, Pa. "Restein's Indicator No. 2." (for Checks, Notes, Drafts, &c) .....	3,291	June 12	23	2242
Retzer, Elizabeth D., Philadelphia, Pa. "Retzer's Brown Salve" .....	2,925	Jan. 16	23	196
Reynolds & Co., N. Troy, N. Y. "Crystal Water Frosting" .....	2,941	Jan. 30	23	348
Rheumatic Manufacturing Company, St. Catharines and Niagara Falls, Ontario, Canada, and Suspension Bridge, N. Y. "Sutherland's Rheumatine" .....	3,156	Apr. 17	23	1450
Richardson, A. M., Buffalo, N. Y. "Richardson's Cough Cure" .....	2,942	Jan. 30	23	348
Richey, T. E., Princeton, Ky. "T. E. Richey's Anti-Malarial Pills" .....	3,210	May 15	23	1836
Ricker & Sons, Hiram, South Portland, Me. "Poland Water." (for Poland Mineral Spring Water) .....	3,273	June 5	23	2124
Ricker & Sons, Hiram, South Portland, Me. "Aerated Poland Water" (for Poland Mineral Spring Water) .....	3,274	June 5	23	2124



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Name, residence, and title.	No.	Date.	Official Gazette.	
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Ridenour, Baker & Co., Kansas City, Mo. "Green Seal Baking Powder" .....	3,167	Apr. 24	23	1332
Ridgway, Samuel, Hydetown, Pa. "Ridgway's Acme Liniment" .....	3,341	July 3	24	2
Rivers, J. S., New Orleans, La. "Mode of Distributing Money Dodgers," (for Blank Books, Stationery, and other like Articles) .....	3,410	July 31	24	394
Robbins, Charles B., Worcester, Mass. "Gutta Percha Court Plaster" .....	2,914	Jan. 16	23	196
Robinson, Harry, St. Joseph, Mo. "Professor Harry Robinson's Specific Lotion" .....	3,756	Dec. 11	25	984
Robinson Medical Manufacturing Company, J. H., Cleveland, Ohio. "Pioneer Coffee Settler" .....	3,342	July 3	24	2
Robison, Robert B., Allegheny, Pa. "Medical Wonder" .....	3,472	Aug. 23	24	802
Robison, Robert B., Allegheny, Pa. "Tokalon" (for a Hair Restorative) .....	3,335	Sept. 18	24	1094
Robison, Robert B., Allegheny, Pa. "Triumph Pills" .....	3,546	Sept. 25	24	1180
Roederer & Co., Théophile, Rheims, France. "Théophile Roederer & Co. Extra Dry" (for Champagne-Wine) .....	3,478	Aug. 23	24	802
Roesler, Adolph, Warsaw, Ill. "Black Lustre Stove Polish Paste" .....	3,437	Aug. 14	24	606
Rogan, James, Dunkirk, N. Y. "Nickel Plate" (for Cigars) .....	3,157	Apr. 17	23	1450
Rogers & Co., New York, N. Y. "Poke" (For Head Coverings) .....	3,002	Feb. 20	23	634
Rogers, Justin, Springfield, Mass. "Chasser Drops," (for a medicine) .....	3,104	Mar. 27	23	1126
Rogers, William, Hartford, Conn. "Athens" (for Silver-Plated Goods) .....	3,493	Sept. 4	24	904
Rose & Co., H. F., Binghamton, N. Y. "Cleveland" (for Cigars) .....	3,105	Mar. 27	23	1126
Rose, Hubbard F., Binghamton, N. Y. "Eclipse" (For Cigars) .....	2,943	Jan. 30	23	348
Ross, William H., Jamestown, N. Y. "The World Imperial Catarrh Cream" .....	3,096	Mar. 20	23	1036
Ross, William H., Jamestown, N. Y. "The World Imperial Throat Tonic" .....	3,233	May 22	23	1930
Ross, William T., Louisville, Ky. "Simpson's Uterine Suppositories" .....	3,436	Aug. 14	24	606
Rothschild & Co., V. Henry, New York, N. Y. "Highland" (For Printed Cotton Fabrics) .....	2,980	Feb. 13	23	544
Rowley, Robert E., Topeka, Kans. "Rowley's Rough on Rheumatism" .....	3,628	Oct. 23	25	294
Royal Canning Company, Muscatine, Iowa. "Canned Goods" (for Canned Fruits and Vegetables) .....	3,421	Aug. 7	24	500
Royal Canning Company, Muscatine, Iowa. "Canned Goods" (for Canned Fruits and Vegetables) .....	3,422	Aug. 7	24	500
Rudd, J. F., Jacksonville, Tex. "Dr. Rudd's Vegetable Kidney and Rheumatic Cure" .....	3,211	May 15	23	1836
Rudd, J. F., Jacksonville, Tex. "Dr. Rudd's Vegetable Liver Relief" .....	3,275	June 5	23	2124
Rudd, J. F., Jacksonville, Tex. "Dr. Rudd's Celebrated Flux Specific" .....	3,423	Aug. 7	24	500
Rudolph's Sons & Co., S. A., Philadelphia, Pa. "Marion Mills." (For Paper) .....	2,963	Feb. 6	23	440
Russell, William J. (See Ireland and Russell.) .....				
Ryle, John, Paterson, N. J. "A New Brand" (for Ribbons) .....	3,292	June 12	23	2242
Saberhagen, Charles. (See Yates and Saberhagen.) .....				
Sachs, Pruden & Co., Dayton, Ohio. "Sachs, Pruden & Co.'s Famous Ginger Ale" .....	3,022	Feb. 27	23	744
Sackett, Wilhelmus & Betzig, New York, N. Y. "Rejuvenator," (for Cigars) .....	3,697	Nov. 20	25	702
Sackett, Wilhelmus & Betzig, New York, N. Y. "Tantalus" (for Cigars) .....	3,788	Dec. 25	25	1194
Samostz, Oscar, Austin, Tex. "Samostz's Hypnotique, The Great Texas Cough Remedy" .....	3,141	Apr. 10	23	1340
Sanders & Co., William T., Crawfordsville, Ind. "Dr. Bass' Vegetable Liver Pills" .....	3,737	Dec. 11	25	984
Sanford & Sons, S. T. W., New York, N. Y. "Dr. Sanford's Liver Invigorator." (for a Proprietary Medicine) .....	3,343	July 3	24	2
Sanford & Sons, S. T. W., New York, N. Y. "Dr. Sanford's Liver Invigorator" (for a Proprietary Medicine) .....	3,344	July 3	24	2
Sanford & Sons, S. T. W., New York, N. Y. "Dr. Sanford's Liver Invigorator" .....	3,368	July 10	24	104
Sanford & Sons, S. T. W., New York, N. Y. "Dr. Sanford's Liver Invigorator" .....	3,566	Oct. 2	25	2
Sankey, John, Mifflinburg, Pa. "The Life of Leather," (for a Preparation for Preserving Leather) .....	3,666	Nov. 6	25	506
Sansfield, J. P., Sacramento, Cal. "Chronic Ulcer Salve" .....	3,040	Mar. 6	23	834
Saunders, George F., New York, N. Y. "Metallic Tablet and Razor Strop" .....	2,981	Feb. 13	23	544
Seaghone & Co., John, New York, N. Y. "Sicilian Balsam Liniment" .....	3,240	May 29	23	2036
Schlauch, John, Evansville, Ind. "Little Blackwood" (for Cigars) .....	3,106	Mar. 27	23	1126
Schlemm, Charles W. G., Reading, Pa. "Dr. C. W. G. Schlemm's Wine of Dandelion and Iron" .....	3,023	Feb. 27	23	744
Schoch, Charles H., New York, N. Y. "La America" (for Beer) .....	3,424	Aug. 7	24	500
Schoeder, Henry, Chicago, Ill. "The Genuine Kaiser Drops," (for Medical Compound) .....	3,212	May 15	23	1836
Schuh, Charles A., Buffalo, N. Y. "Dr. Messner's Indian Herb Tea" .....	3,003	Feb. 20	23	634
Schultz & Bro., Baltimore, Md. "The Oyster Shucker's Friend" (for a Medicine) .....	3,776	Dec. 18	25	1082
Schumacher & Ettlinger, New York, N. Y. "A Cigar Label" .....	2,904	Jan. 9	23	96
Schumacher & Ettlinger, New York, N. Y. "Pappoose" .....	3,011	Mar. 6	23	834
Schumacher & Ettlinger, New York, N. Y. "A Cigar Label" .....	3,042	Mar. 6	23	834
Schumacher & Ettlinger, New York, N. Y. "A Cigar Label" .....	3,043	Mar. 6	23	834
Schumacher & Ettlinger, New York, N. Y. "A Cigar Label" .....	3,044	Mar. 6	23	834
Schumacher & Ettlinger, New York, N. Y. "A Cigar Label" .....	3,045	Mar. 6	23	834
Schumacher & Ettlinger, New York, N. Y. "A Cigar Label" .....	3,046	Mar. 6	23	834
Schumacher & Ettlinger, New York, N. Y. "A Cigar Label" .....	3,047	Mar. 6	23	834
Scott, Andrew J., Hamilton, Ohio. "Scott's Asthma and Lung Cure" .....	3,241	May 29	23	2036
Scott, George, Rome, N. Y. "Old Homestead Wild Cherry Bitters" .....	3,307	June 19	23	2330
Scott, James E., Norfolk, Va. "Dr. W. W. Scott's Ague and Fever Mixture" .....	3,581	Oct. 9	25	98
Scott, Mathew A., Livermore, Cal. "Scotts Egyptian Cream" (for a toilet preparation) .....	3,547	Sept. 25	24	1180
Seibert, Joseph, Mansfield, Ohio. "The Crown of all" (for Soap) .....	3,738	Dec. 4	25	886
Shoemaker, William M., Philadelphia, Pa. "Cheltenham Poultry Food" .....	3,548	Sept. 25	24	1180
Shoemaker, William M., Philadelphia, Pa. "Aunt Abby's Mince Meat" .....	3,721	Nov. 27	25	790
Short, William H., Brooklyn, N. Y. "Hobb's Gout and Rheumatic Remedy" .....	3,024	Feb. 27	23	744
Shorten, John, Jr., Bangor, Me. "Scratch Ointment" .....	3,382	July 17	24	208
Shull & Co., D. F., Philadelphia, Pa. "Golden Butter Color" .....	3,080	Mar. 13	23	942
Sibley, Charles M., New York, N. Y. "Sibley's Improved" (for Anchor Steam Boiler Compound) .....	3,582	Oct. 9	25	98
Sidle Fletcher Holmes Company, Minneapolis, Minn. "Corrugated" (for Flour) .....	3,242	May 29	23	2036
Sidle Fletcher Holmes Company, Minneapolis, Minn. "Minnehaha" (for Flour) .....	3,243	May 29	23	2036
Sidle Fletcher Holmes Company, Minneapolis, Minn. "Granulated" (for Flour) .....	3,244	May 29	23	2036
Sidle Fletcher Holmes Company, Minneapolis, Minn. "Persian" (for Flour) .....	3,245	May 29	23	2036
Smith, America, Lagarta, Tex. "Old Texan Ointment" .....	3,025	Feb. 27	23	744
Smith & De Witt, Troy, N. Y. "Weaver's Pride" (for Carpet Warp) .....	3,583	Oct. 9	25	98
Smith, Frank L., Rochester, N. H. "Farrier's Secret" (for a Veterinary Remedy) .....	3,213	May 15	23	1836
Smith, Joshua, Chicago, Ill. "Dentaline," (for Dentifrice) .....	3,750	Dec. 11	25	984
Smith, M. H., Philadelphia, Pa. "Smith's Hair Beautifier" .....	3,129	Apr. 10	23	1340
Smith, Mary J., Troy, N. Y. "Mother's Friend" (for Pills) .....	3,130	Apr. 10	23	1340
Smith Middlings Purifier Company, George T., Jackson, Mich. "Smith Martin Centrifugal." (for Flour Bolting Machines) .....	3,214	May 15	23	1836
Smith, O. G., Seneca Falls, N. Y. "Hop Oil" .....	2,905	Jan. 9	23	66
Smith, Rufus E., Syracuse, N. Y. "Glycerine Pectina," (for Chapped Hands, Lips, &c) .....	3,194	May 8	23	1736
Snow, Ingham & Co., Abingdon, Va. "Two Kings," (for Tobacco) .....	2,890	Jan. 2	23	2
Snyder, Henry, Brooklyn, N. Y. "The Public Benefactor," (for Whisky) .....	3,760	Dec. 11	25	964
Snyder, Joseph W., Philadelphia, Pa. "Pillow Inhaler" .....	3,195	May 8	23	1736
Solomons, J. N., East Orange, N. J. "Digestro" .....	3,048	Mar. 6	23	834
Southwick, Arthur Q., New York, N. Y. "Bell's Adhesive and Water-Proof Belt Oil" .....	2,953	Feb. 13	23	544
Southwick, Arthur Q., New York, N. Y. "Polar Belt Dressing" .....	3,004	Feb. 20	23	634



*Alphabetical list of registrants of labels—Continued.*

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Southworth, Horatio W., Springfield, Mass. "Writing Paper" .....	3,739	Dec. 4	25	886
Spaar Bros., Milwaukee, Wis. "G. B." (for Cigars) .....	3,665	Nov. 6	25	506
Spalding, Charlotte, Brooklyn, N. Y. "Seth's Pile Cure" .....	3,369	July 10	24	104
Speicher Dandruff Cure Co., Philadelphia, Pa. "Speicher's Dandruff Cure" .....	3,777	Dec. 18	25	1082
Spencer & Brown, Greeneville, Tenn. "Ramon's Genuine Nerve and Bone Oil" .....	3,740	Dec. 4	25	886
Stahl, Jacob, New York, N. Y. "Grand Success," (For Cigars, Cigarettes, and Smoking Tobacco) .....	2,984	Feb. 13	23	544
Stahl, Jacob, New York, N. Y. "Our Eagle" (for Cigars, Cigarettes, and Smoking Tobacco) .....	2,961	Aug. 21	24	708
Stanard & Co., E. O., St. Louis, Mo. "Stanard's Eagle Steam Extra Roller Process" .....	2,915	Jan. 16	23	196
Stanard & Co., E. O., St. Louis, Mo. "Stanard's Roller Process Royal Patent" .....	2,916	Jan. 16	23	196
Standard Oil Company, Cleveland, Ohio. "Eocene" (for Illuminating Oil) .....	3,519	Sept. 14	24	928
Stauff & Foster, Baltimore, Md. "Hamburger Cough Syrup" .....	3,081	Mar. 13	23	942
Stay, William H., Glens Falls, N. Y. "Stay's Rheumatic Liniment" .....	3,383	July 17	24	208
Stayner, Charles W., Salt Lake City, Utah Ter. "Britannia" (for a Medicine) .....	3,664	Nov. 6	25	506
Steck & Co., Charles, Buffalo, N. Y. "Buffalo Sweet Chocolate" .....	3,097	Mar. 20	23	1036
Steinau, Joseph, Salt Lake City, Utah Ter. "Steinau's Asthma Cure" .....	3,049	Mar. 6	23	834
Sternsdorf & Co., R., Buffalo, N. Y. "Boonekamp Magen-Bitter" .....	3,131	Apr. 10	23	1340
Sternsdorf & Co., R., Buffalo, N. Y. "Boonekamp of Maag-Bitter" .....	3,215	May 15	23	1836
Sterrett, Achilles. (See Matthias and Sterrett.)				
Stevens, Frederick S., Bridgeport, Conn. "Fred. Stevens' Unfailing Cough Cure" .....	3,216	May 15	23	1836
Stevens Manufacturing Company, Boston, Mass. "Nature's Cure from the Wild Woods," (for a Medical Compound) .....	3,308	June 19	23	2330
Stevenson & Shingluff, Baltimore, Md. "Signal Service Boot" .....	3,196	May 8	23	1736
Steward, Eugene S. (See Mann and Steward.)				
Stewart, George W., Atlanta, Ga. "Female Curator," (for Medicine) .....	3,384	July 17	24	208
Stinard, William H., Syracuse, N. Y. "Stinard's Original Chocolate Cocoon Tea Rolls" .....	3,246	May 29	23	2036
St. Jacobs Bitters Company, Cincinnati, Ohio. "St. Jacobs Tonic" .....	3,404	July 31	24	394
Stoddart, Archibald C., San Francisco, Cal. "Dr. Liebig's German Invigorator" (for a Medical Compound) .....	3,494	Sept. 4	24	904
Stoddart, Archibald C., San Francisco, Cal. "Dr. Liebig's German Invigorator" (for a Medical Compound) .....	3,495	Sept. 4	24	904
Stout, Lemuel, Philadelphia, Pa. "Try Summerford's Kornease" .....	2,894	Jan. 2	23	2
Strong, C. H., Chicago, Ill. "Arnica Tooth Soap" .....	3,107	Mar. 27	23	1126
Sublett, Samuel H., Fordsville, Ky. "S. H. Sublett's Laundry and Toilet Soap" .....	3,168	Apr. 24	23	1532
Summers & Co., Charles G., Baltimore, Md. "Oriole Assorted Jellies" .....	3,181	May 1	23	1626
Sutton & Co., F., Philadelphia, Pa. "Premium Trunk Brand" (for Coffee) .....	3,182	May 1	23	1626
Swan, A. H., and R. M. Johnson, Austin, Tex. "New Zealand Sheep Dip" .....	3,309	June 19	23	2330
Sweetwater Mill Co., Sweetwater, Tenn. "Sweetwater Valley Roller Process" (for Flour Sacks) .....	3,549	Sept. 25	24	1180
Sweetheart Soap Co., Philadelphia, Pa. "Sweetheart's Best Borax Soap" .....	3,648	Oct. 30	25	398
Sweny, Henry J., Boston, Mass. "Dr. Henry J. Sweny's Imperial Hair Balm" .....	3,370	July 10	24	104
Swezey, Gershom H., New York, N. Y. "Caspicum Oil" (for Liniment) .....	3,520	Sept. 11	24	998
Swift Specific Company, Atlanta, Ga. "Swift's Specific" .....	3,142	Apr. 10	23	1340
Tallman & Sanborn, Chicago, Ill. "The New Board of Trade, Chicago" (for Cigars) .....	3,550	Sept. 25	24	1180
Talmage, Thomas G. (See Parker, Vandewater, and Talmage.)				
Taylor & Co., B. Z., Decatur, Ill. "Mexican Palmae," (for Soap) .....	3,197	May 8	23	1736
Taylor, Harry, Cincinnati, Ohio. "Honest John Shaker Yeast" .....	3,322	June 26	23	2416
Taylor, W. Scott, Trenton, N. J. "Red Liniment" .....	3,323	June 26	23	2416
Taylor, William B., Sr., Sparta, Ill. "Taylor's Sucker State Liniment" .....	3,198	May 8	23	1736
Tenney, Frank H., Worcester, Mass. "Tenney's Compound Vegetable Cough Syrup" .....	3,683	Nov. 13	25	604
Thomas & Bro., Richmond, Va. "Apres Souper" (for Cigars) .....	3,411	July 31	24	394
Thomas & Bro., Richmond, Va. "Toujours" (for Manufactured Tobacco) .....	3,551	Sept. 25	24	1180
Thomas & Bro., Richmond, Va. "Apres Dejeuner" (for Manufactured Tobacco) .....	3,552	Sept. 25	24	1180
Thomas & Bro., Richmond, Va. "Apres Diner" (for Manufactured Tobacco) .....	3,553	Sept. 25	24	1180
Thomas, Charles A., Rushville, Ohio. "Root and Herb Remedy" .....	3,600	Oct. 16	25	196
Thomas, Charles M., Jr., Philadelphia, Pa. "Celebrated Farmers Brand Coffee" .....	3,098	Mar. 20	23	1036
Thomas, Jesse K., Mount Pleasant, Ohio. "Dr. J. K. Thomas' Medicine for the People" .....	3,192	Apr. 10	23	1340
Thornton & Co., H., Buffalo, N. Y. "Little Daisy" (For a Carbonated Beverage) .....	2,939	Jan. 30	23	348
Thorp, T. C., Cincinnati, Ohio. "Dr. Thorp's Balsam of Life" .....	3,143	Apr. 10	23	1340
Thorpe, Philip, New York, N. Y. "Buttered Flour" .....	3,217	May 15	23	1836
Thurman, William S. P., St. Louis, Mo. "Dr. Thurman's Embrocation" .....	3,473	Aug. 28	24	802
Tichenor, George H., Red River Landing, La. "Dr. G. H. Tichenor's Antiseptic Refrigerant (for Wounds)" .....	3,183	May 1	23	1626
Timms, Henry, New York, N. Y. "Heil Anstalt," (for Medicinal Preparations) .....	3,684	Nov. 13	25	604
Tingle, R. D., Georgetown, Ky. "Cedrat Cold Cream," (for a Toilet Preparation) .....	3,789	Dec. 25	25	1194
Tooker, William W., and B. F. Huutting, Sag Harbor, N. Y. "Tooker's Castilian Laxative" .....	3,026	Feb. 27	23	744
Toppan, Nathaniel D., Brockton, Mass. "Pereuro Cough Syrup" .....	3,027	Feb. 27	23	744
Townsley, A. L., Cincinnati, Ohio. "Hindoo Corn Remover" .....	2,985	Feb. 13	23	544
Tuchman Bros., Topeka, Kans. "Gov. Glick's Choice," (for Cigars) .....	3,108	Mar. 27	23	1126
Tuck, William H., Wilkes-Barre, Pa. "William Tucks Anti Costive Pills" .....	3,778	Dec. 18	25	1082
Tucker, John H., Providence, R. I. "Dealbarine," (for a fluid, removing spots & stains) .....	3,109	Mar. 27	23	1126
Turner, Frederick, Philadelphia, Pa. "The Blue Seal Label of Philadelphia," (for Cigars) .....	3,466	Aug. 21	24	708
Twitchell, Herbert E., Darrtown, Ohio. "Bradbury & Co's. Hog Cholera Preventative" .....	3,345	July 3	24	2
Tyson, L. B., Cincinnati, Ohio. "Bonkocine," (For Medicine) .....	2,986	Feb. 13	23	544
Udell, C. E., St. Louis, Mo. "Badger State," (for Cheese) .....	3,234	May 22	23	1930
Underberg-Allbrecht, Hubert, Rheinberg, Prussia, Germany. "Boonekampe of Maag-Bitter" (for a Tonic Beverage) .....	3,567	Oct. 2	25	2
Union School Furniture Company, Battle Creek, Mich. "Automatic" (for School Furniture) .....	3,554	Sept. 25	24	1180
Union Tubing Company, New York, N. Y. "Union Tubing" .....	3,082	Mar. 13	23	942
Union Veteran Corps, Washington, D. C. "Union Veteran Corps Insignia" .....	3,474	Aug. 28	24	802
Upham, Harry M., Philadelphia, Pa. "Wine" .....	2,944	Jan. 30	23	348
Urban & Co., George, Buffalo, N. Y. "Urban's White Moss Rose" (for Flour) .....	3,496	Sept. 4	24	904
Urban & Co., George, Buffalo, N. Y. "Urban's Best" (for Flour) .....	3,497	Sept. 4	24	904
Urban & Co., George, Buffalo, N. Y. "Belle of Buffalo" (for Flour) .....	3,498	Sept. 4	24	904
Urban & Co., George, Buffalo, N. Y. "Pearl" (for Flour) .....	3,499	Sept. 4	24	904
Utica Match Company, Utica, N. Y. "The Best Matches" .....	3,649	Oct. 30	25	398
Vail Brothers, Philadelphia, Pa. "Titsworth's Sure Cure for Malaria" .....	3,218	May 15	23	1836
Van Keuren, J. A. & L. N., Bridgeport, Conn. "Waterproof Preservative Blacking" .....	3,083	Mar. 13	23	942
Van Brocklin, Eli, Amsterdam, N. Y. "German Red Cross Kidney Cure" .....	3,667	Nov. 6	25	506
Van Brunt, Cornelius, New York, N. Y. "Diamond Blue Label" (for Rosegrant's Patent, Chloride of Lime) .....	3,385	July 17	24	208
Van Liew, H. A., New York, N. Y. "Cloth of America" (for Silks) .....	3,235	May 22	23	1930
Vanderlinde, N. G., Muskegon, Mich. "Van's Magic Oil" (for a Medicine) .....	3,133	Apr. 10	23	1340
Vandewater, Albertus L. (See Parker, Vandewater, and Talmage.)				
Vega, Benito, New Orleans, La. "El Coro," (for Cigars) .....	3,293	June 12	23	2242
Vincent, George K., and M. Burchard, Rochester, N. Y. "Early York" (for Cigars) .....	3,412	July 31	24	394



## Alphabetical list of registrants of labels—Continued.

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Vogeler, Winkelman & Co., Baltimore, Md. "Hunt's Medicated Tar Drops".....	3,050	Mar. 6	23	834
Von Huppmann, Joseph, New York, N. Y. "Turkish Tobacco & Cigarette Manufactory, Monopole".....	3,075	Mar. 13	23	942
Walker, William, Richmond, Va. "Crack Shot" (for Cigars).....	3,741	Dec. 4	25	886
Ware, Charles F., Camden, N. J. "Ware's Common Sense Suspensory Bandage".....	3,441	Aug. 14	24	606
Warner Bros., New York, N. Y., and Bridgeport, Conn. "Base Balls".....	3,199	May 8	23	1736
Warner Bros., New York, N. Y., and Bridgeport, Conn. "Base Balls".....	3,200	May 8	23	1736
Warren, George T., Flint, Mich. "Our Governor." (For Cigars).....	3,051	Mar. 6	23	834
Warren, George T., Flint, Mich. "The Warren Cigar".....	3,052	Mar. 6	23	834
Warren, Philip, Washington, D. C. "St. Jacobs Pills".....	3,110	Mar. 27	23	1126
Waterall & Co., William, Philadelphia, Pa. "Red Seal White Lead".....	3,084	Mar. 13	23	942
Watt, Harry C., Philadelphia, Pa. "Watt's Peptonized Soda Mint Pellets".....	3,568	Oct. 2	25	2
Watts, Albert, Boston, Mass. "Dr. Al. Watts' Purifier," (for a Disinfectant).....	3,761	Dec. 11	25	984
Waugh, Cothren & Williams, Farmington, Me. "Farmington Sugar Corn".....	3,698	Nov. 20	25	702
Weaver Bros., Allentown, Pa. "The North Western Traveling Men's Association" (for Cigars).....	3,371	July 10	24	104
Weaver Bros., Allentown, Pa. "Chicago and North Western Old Reliable Ry." (for Cigars).....	3,413	July 31	24	394
Weaver Bros., Allentown, Pa. "Emmett" "Dot's me." (for Cigars).....	3,414	July 31	24	394
Webb, Horace F., Decoring, Me. "Pleasant Mountain Sugar Corn Oriental Brand".....	2,917	Jan. 16	23	196
Webb, J. Russell, St. Joseph, Mo. "Sentence-Builder or Dissected Cards".....	3,699	Nov. 20	25	702
Webb, Jennie E., Grand Island, N. Y. "Asthma Conqueror".....	3,500	Sept. 4	24	904
Webster & Churchill, Minneapolis, Minn. "Wheeler's Pulmonary Balsam".....	3,247	May 29	23	2036
Webster & Churchill, Minneapolis, Minn. "Wheeler's Sarsaparilla".....	3,248	May 29	23	2036
Weeman, Edward, Boston, Mass. "Antidotine" (for a Medicine).....	3,462	Aug. 21	24	708
Weigel, John G., Washington, D. C. "K. L." (for Bread).....	3,475	Aug. 28	24	802
Weismann & Muellerbach, New York, N. Y. "Muellerbach's Compound Balsam of Honey and Tolu".....	2,945	Jan. 30	23	348
Welles, Frank M., Chelsea, Mass. "Safe Antidote for Intoxication".....	3,762	Dec. 11	25	984
Wellman & Dwire Tobacco Company, Quincy, Ill. "Silver Dollar" (for Tobacco).....	3,517	Sept. 11	24	998
Wellman & Dwire Tobacco Company, Quincy, Ill. "Knights of Labor" (for Tobacco).....	3,518	Sept. 11	24	998
Wells, A. B., Richmond, Va. "Pluck" (for Manufactured Tobacco).....	3,536	Sept. 18	24	1094
Wells, A. B., Richmond, Va. "Duplicate" (for Manufactured Tobacco).....	3,629	Oct. 23	25	294
Wells, A. B., Richmond, Va. "Duplicate" (for Manufactured Tobacco).....	3,630	Oct. 23	25	294
Wells, A. B., Richmond, Va. "Magnolia" (for Manufactured and Smoking Tobacco).....	3,685	Nov. 13	25	604
Wells, A. B., Richmond, Va. "Eli" (for Manufactured Tobacco).....	3,686	Nov. 13	25	604
Wemple & Co., New York, N. Y. "Spread Eagle." (for Retail Clothing).....	3,219	May 15	23	1836
Wemple & Co., New York, N. Y. "Home." (for Cigars).....	3,276	June 5	23	2124
Wermüller, August, Hoboken, N. J. "Dr. Miller's Family Medicine." (for Stomach and Throat Diseases).....	3,294	June 12	23	2242
West, John H., Rocky Hill Station, Ky. "Dr. West's O. K. Bitters".....	2,907	Jan. 9	23	96
Westcott Son & Co., H., Binghamton, N. Y. "Parlor City" (for Cigars).....	3,372	July 10	24	104
Westphal, Paul, New York, N. Y. "Auxiliator," (for a Hair Preparation).....	2,908	Jan. 9	23	96
Whitcomb, Edwin P., and F. C., New York, N. Y. "Superior French Furniture Polish".....	3,555	Sept. 25	24	1180
Whitcomb, Frances C. (See Whitcomb, Edwin P. and F. C.).....				
White, Dorick, Weymouth, Mass. "Dorick's Salve".....	3,134	Apr. 10	23	1340
White Proprietary Company, Peleg, New York, N. Y. "The Peleg White Proprietary, New York, U. S." (for Plasters).....	3,646	Oct. 30	25	398
Whiteman, Frank M., Lorain, Ohio. "Sussex" (for Table Sauce).....	3,386	July 17	24	208
Whiting, Frederic A., Wellesley Hills, Mass. "Whiting's Magic" (for Marking Ink).....	3,631	Oct. 23	25	294
Whiting, Frederic A., Wellesley, Mass. "Whiting's Process Drawing Ink".....	3,700	Nov. 20	25	702
Whitney & Co., Hudson, Mich. "The Boss" (For Wheelbarrows).....	2,964	Feb. 6	23	440
Whitney, James H., Brooklyn, N. Y. "Elastic Motion Sewing Machine".....	3,742	Dec. 4	25	886
Whittier, Heman J., Cincinnati, Ohio. "Vitaline" (for a medicine).....	3,135	Apr. 10	23	1340
Widup, Emmet S., Richmond, Ind. "The Correct Invoice Label".....	3,201	May 8	23	1736
Wilcox, Algernon H., Philadelphia, Pa. "Pilla-Solvane" (for a Hair Solvent).....	3,324	June 26	23	2416
Wilkins & Co., H., Baltimore, Md. "Dairy Queen" (for Smoking and Chewing Tobacco, Snuff and Cigarettes).....	3,687	Nov. 13	25	604
Wilkins & Co., H., Baltimore, Md. "Seal of Virginia" (for Tobacco and Cigars).....	3,722	Nov. 27	25	790
Wilkowski Brothers, Watertown, Wis. "Exchange" (for Cigars).....	3,790	Dec. 25	25	1194
Williams, C. L., San Francisco, Cal. "Giant Cement" (for repairing broken articles).....	3,537	Sept. 18	24	1094
Williams, C. L., San Francisco, Cal. "Joint Cement" (for repairing broken articles).....	3,538	Sept. 18	24	1094
Williams, C. L., San Francisco, Cal. "Giant Baking Powder".....	3,539	Sept. 18	24	1094
Williams, Charles F., and J. F. Payne, Newton, Mass. "Dr. Wm. Crowd's Cure for Rheumatism".....	3,249	May 29	23	2036
Williams & Co., C. E., Stockton, Cal. "Moore's Sulphur Dip".....	3,111	Mar. 27	23	1126
Williams, Cone, Jacksonville, Fla. "Necat" (Poison for Animals).....	2,899	Jan. 9	23	96
Williams, Edward, Wellsville, N. Y. "Cabel" (for Cigars).....	3,668	Nov. 6	25	506
Williams, Edwin R. T., Newark, N. J. "I Sing Lass," (for Isinglass or similar Merchandise).....	3,584	Oct. 9	25	98
Wilson, Frederick H., Brunswick, Me. "Wilson's Cough Annihilator".....	3,502	Sept. 4	24	904
Wilson & Gorman, Pittsburg, Pa. "Clothes Winger Soap".....	3,310	June 19	23	2330
Wilson & Gorman, Pittsburg, Pa. "Clothes Winger Soap".....	3,325	June 26	23	2416
Wilson, Thomas A., Lodi, Cal. "Nevajo Ague Cure".....	3,169	Apr. 24	23	1532
Winckler, A. W., Hamburg, Germany. "Säkerhets-Tandstickor." (for Matches).....	3,346	July 3	24	2
With, C. F., Springfield, Mass. "Dr. Ballo's Hustena" (For Medicinal Preparation).....	3,053	Mar. 6	23	834
Wolfear, Frederick, Galveston, Tex. "Fred. Wolfear's Golden Gate Tonic".....	3,688	Nov. 13	25	604
Woodward, Orator F., Le Roy, N. Y. "Kemp's Balsam for the Throat & Lungs".....	3,158	Apr. 17	23	1450
Wooster, Adams & Co., Wellington, Ohio. "Von Tagans Alaxine The Great German Remedy for the Liver, Kidneys, Stomach, Blood and Heart Affections".....	3,005	Feb. 20	23	634
Wright, John H., Brooklyn, N. Y. "Doloricide" (for a Medicine).....	3,440	Aug. 14	24	606
Wright, V. S., Louisville, Ky. "Virgil," (for Cigars).....	3,202	May 8	23	1736
Wyly, A. C., Atlanta, Ga. "A. C. Wyly's Diamond Patent Flour".....	3,743	Dec. 4	25	886
Wyly & Greene, Atlanta, Ga. "Perfect Pastry Patent Flour".....	3,220	May 15	23	1836
Yale, Charles A., Wellsborough, Pa. "Grand Master" (For Cigar Boxes).....	3,054	Mar. 6	23	834
Yale Cigar Manufacturing Company, C. A., Wellsborough, Pa. "Ashes of Roses" (For Cigars).....	2,987	Feb. 13	23	544
Yannes, John, Freeland, Pa. "John Yannes' Bottle Mark".....	3,650	Oct. 30	25	298
Yates, Odaville, and C. Saberbagen, Albuquerque, N. Mex. Ter. "Yates's Rocky Mountain Vegetable Compound".....	3,689	Nov. 13	25	604
Young & Co., F. H., Miamisburg, Ohio. "Young's German Botanic Bitters".....	3,463	Aug. 21	24	708
Zeigler, George W., Norwalk, Ohio. "The Science Carpet Sweeper".....	3,464	Aug. 21	24	708

# DISCLAIMERS.

Name, residence, and invention.	No.	Filed.	Official Gazette.	
			Vol.	Page.
Bass, George H., Wilton, Me.; disclaimer filed by patentee. Shoe .....	252,715	Dec. 12, 1883	25	1082
Bell, Alonzo, New York, N. Y., E. Y. Bell, Englewood, N. J., assignee; disclaimer filed by said assignee. Water-closets of railways.....	175,909	June 14, 1883	23	2330
Bostwick, Jabez A., New York, N. Y., assignor to Lonis McMurray, Baltimore, Md., Edward M. Lang, and George Burnham, Jr., Portland, Me., trading as McMurray, Lang & Burnham; disclaimer filed by assignees. Soldering-iron. (Reissue).....	8,466	Sept. 25, 1883	25	2
Brush, Charles F., Cleveland, Ohio, Brush Electric Company, assignee; disclaimer filed by patentee and assignee. Electric lamp. (Reissue) .....	8,718	Apr. 6, 1883	23	1450
Casamajor, Paul, New York, N. Y.; disclaimer filed by patentee. Filtering saccharine solutions, &c .....	270,634	Dec. 7, 1883	25	1082
Fetter, David F., assignor by mesne assignments to Excelsior Drive Screw and Bolt Company, New York, N. Y.; disclaimer filed by present assignee Fetter Drive Screw Company, New York, N. Y. Drive-screw. (Reissue).....	8,121	Apr. 6, 1883	23	1450
Hayes, George, New York, N. Y. Skylight. (Reissue).....	8,688	Jan. 15, 1883	23	274
Hebbard, Albert, Cambridge, Mass., assignor to himself and John P. Onderdonk, Philadelphia, Pa.; disclaimer filed by Sarah A. Hebbard, administratrix of Albert Hebbard, deceased, and John P. Onderdonk, assignee. Car-spring. (Reissue).....	4,670	Mar. 9, 1883	23	1036
Hutchinson, Charles G., Chicago, Ill.; disclaimer filed by patentee. Bottle-stopper. (Reissue).....	8,755	June 18, 1883	23	2416
Litzelmann, Victor, New York, N. Y., Max Ams, assignee; disclaimer filed by assignee. Extracting glycerine from fatty matter .....	267,753	Dec. 26, 1882	23	2
Mallory, George, Bridgeport, Conn., assignor to Mallory Manufacturing Company; disclaimer filed by assignee. Hat.....	74,392	Oct. 3, 1883	25	98
Pease, Charles F., Boston, Mass. Shade-pull.....	280,507	July 14, 1883	24	306
Powers, Jesse, Chicago, Ill., assignor of part to John H. Edelmeyer and William C. Morgan, New York, N. Y.; disclaimer filed by assignees. Hod-elevator. (Reissue) .....	10,052	Oct. 27, 1883	25	506
Sharts, Theodore, New York, N. Y.; disclaimer filed by patentee. Vault-cover.....	138,204	Apr. 17, 1883	23	1532
Stoddard, John D., Centerville, Ind.; disclaimer filed by patentee. Boot or shoe sole.....	252,152	May 4, 1883	23	1836
Webster, Towner K., and John Chivill, Chicago, Ill., Webster and Comstock Manufacturing Company, assignee; disclaimer filed by said assignee. Screw-conveyer .....	276,103	June 13, 1883	23	2330
Westinghouse, John, Jr., Pittsburg, Pa., Westinghouse Air Brake Company, assignee; disclaimer filed by said assignee. Locomotive air-brake .....	144,005	Feb. 5, 1883	23	544
Wood, John H., assignor to Delaware Coal and Ice Company, Trenton, N. J., and Hamilton, Bailey, Harrisburg, Pa.; disclaimer filed by assignees. Wagon for unloading coal. (Reissue).....	9,368	Sept. 14, 1883	24	1180



# ALPHABETICAL LIST OF INVENTIONS.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Specification.	Drawing.	Volume.	Page.
Abdominal supporter .....	A. Galny .....	284,831	Sept. 11	826	230	24	1051
Abdominal supporter .....	C. A. Worden .....	283,734	Aug. 21	1523	430	24	790
Abrading-cylinder .....	J. L. Perry .....	285,666	Sept. 25	1834	524	24	1245
Abrading-machine .....	F. W. Coy .....	289,986	Dec. 11	764	215	25	1028
Abrasive-disk holder .....	L. D. Shepard .....	282,385	July 31	2596	713	24	473
Abrasive wheel .....	A. H. Rolfe .....	277,062	May 8	693	181	23	1751
Absorptive pad. Fibrous. ....	D. Goff .....	271,625	Feb. 6	51	13	23	449
Accordion .....	W. H. Bendler .....	282,834	Aug. 7	429	121	24	576
Accordion .....	L. Bernhardt .....	286,679	Oct. 16	1134	305	25	221
Accordion .....	B. Berry .....	274,705	Mar. 27	1887	526	23	1183
Accordion .....	F. Gessner .....	277,264	May 8	938	251	23	1793
Accordion .....	O. Spaethe .....	277,368	May 8	1060	285	23	1815
Acid. Apparatus for concentrating sulphuric .....	S. T. McDougall .....	289,293	Nov. 27	1867	518	25	860
Acid. Apparatus for concentrating sulphuric .....	W. West .....	280,425	July 3	107	29	24	21
Acid. Apparatus for the manufacture of hydrated sulphurous .....	F. Carlisle .....	284,817	Sept. 11	812	226	24	1048
Acid from borates. Process of and apparatus for obtaining boracic .....	W. R. Robertson, Jr. ....	274,660	Mar. 27	1832	509	23	1173
Acid from native borate of lime. Process and apparatus for obtaining boracic .....	J. B. Hobson .....	289,836	Dec. 11	583	162	25	995
Acid. Manufacture of cinnamic .....	C. Rudolph .....	276,888	May 1	455	.....	23	1706
Acid. Manufacture of sulphuric .....	T. D. Dotterer .....	270,763	Jan. 16	1164	333	23	242
Acid or partly acid fatty bodies. Treating .....	I. A. F. Bang and J. De Castro .....	290,835	Dec. 25	1865	.....	25	1937
Acid-tank .....	J. Withington .....	274,241	Mar. 20	1385	354	23	1071
Acids and chemicals. Apparatus for boiling .....	J. Hesch .....	275,041	Apr. 3	210	57	23	1262
Acids. Separation of nitric acid from a mixture of nitric and sulphuric .....	F. Jenssen .....	284,742	Sept. 11	722	201	24	1033
Adding-machine .....	W. H. Beatley .....	272,626	Feb. 20	1316	367	23	685
Adding-machine .....	P. Neary .....	276,866	May 1	429	114	23	1701
Adding-machine .....	A. Stettner, Jr .....	277,627	May 15	1374	371	23	1873
Adding-machine .....	J. N. Wilson .....	289,483	Dec. 4	142	39	25	911
Addressing-machine .....	C. D. White .....	270,714	Jan. 16	1102	315	23	230
Adjustable bracket .....	R. S. Redman .....	274,223	Mar. 20	1260	348	23	1066
Adjustable chair, desk, &c. ....	J. A. Smith .....	283,430	Aug. 21	1167	328	24	722
Adjustable chair or seat. Suspended .....	H. S. Peck .....	285,665	Sept. 25	1834	523	24	1245
Adjustable elevator .....	G. Milliken .....	287,042	Oct. 23	1599	440	25	309
Adjustable hook .....	F. D. Thomason .....	274,672	Mar. 27	1849	515	23	1176
Adjustable reclining-chair .....	D. W. Miller .....	287,769	Oct. 30	2547	685	25	493
Adjustable table .....	E. Tix .....	270,263	Jan. 9	516	151	23	111
Adjustable table .....	J. S. Wilson .....	274,162	Mar. 20	1182	326	23	1052
Advertising .....	F. Marquart and W. P. Hooper .....	280,318	June 26	2094	589	23	2505
Advertising apparatus. Mechanical .....	S. E. Riblet .....	290,474	Dec. 18	1390	384	25	1147
Advertising-card .....	B. Dreyfuss .....	270,764	Jan. 16	1165	333	23	242
Advertising-card .....	H. R. Grace .....	279,866	June 19	1544	431	23	2401
Advertising-card rack .....	M. Umbdenstock .....	272,000	Feb. 6	511	137	23	528
Advertising device .....	W. De Meza .....	272,533	Feb. 20	1197	334	23	664
Advertising device .....	J. A. Knapp .....	284,025	Aug. 28	1906	534	24	868
Advertising device .....	J. Wrightsman .....	275,450	Apr. 10	770	205	23	1366
Advertising device. Automatic .....	A. Anderson .....	272,184	Feb. 13	743	205	23	580
Advertising device. Automatic .....	F. F. Gokey .....	279,936	June 26	1638	459 460	23	2424
Advertising device. Automatic .....	N. H. Power .....	282,925	Aug. 7	531	150	24	595
Advertising device, card and picture holder .....	E. W. Taylor .....	274,052	Mar. 13	1027	281	23	1018
Advertising device for cars .....	E. Kitz .....	288,578	Nov. 13	994	274	25	689
Advertising device. Revolving .....	I. J. French .....	272,174	Feb. 13	730	201	23	578
Advertising-fan .....	C. De Quillfeldt .....	278,410	May 29	2361	645	23	2061
Advertising-fan .....	A. Wichl .....	290,827	Dec. 25	1857	513	25	1235
Advertising letter-paper and envelope .....	F. P. D'Opdorp .....	290,179	Dec. 11	988	279	25	1069
Advertising match-box .....	J. T. Appleberg .....	283,741	Aug. 28	1539	435	24	803
Advertising-stand .....	G. S. Starling .....	282,794	Aug. 7	384	108	24	567
Advertising-table. Automatic .....	A. G. Macdonell .....	283,408	Aug. 21	1135	321	24	717
Advertising-wheel .....	C. W. Hamill .....	285,357	Sept. 18	1463	412	24	1170
Advertising-windmill .....	T. B. Peacock .....	274,651	Mar. 27	1823	506	23	1171
Advertising-windmill .....	J. E. and G. S. Spencer .....	276,640	May 1	120	32	23	1647
Aerated-water apparatus .....	A. D., Jr., and L. W. Puffer .....	275,076	Apr. 3	255	71	23	1270
Aerial navigation. Apparatus for .....	J. C. R. De Souza .....	280,914	July 10	708	199	24	131
Aerial railway .....	D. R. Olmsted .....	287,458	Oct. 30	2122	576	25	412
Aerial ship .....	E. F. Falconnet .....	270,939	Jan. 23	1376	397 398	23	287
Aerial vessel .....	J. Ray .....	270,122	Jan. 2	341	100	23	70
Aging liquors. Process of and apparatus for .....	H. Glass .....	287,272	Oct. 23	1888	517	25	361
Aging whisky. Apparatus for .....	W. X. Stevens .....	272,346	Feb. 13	938	261	23	615
Agricultural boiler .....	S. N. Alford .....	285,541	Sept. 25	1687	475	24	1217
Agricultural boiler .....	F. Funk .....	286,805	Oct. 16	1289	349	25	249
Agricultural boiler .....	A. R. Nash and J. Sadler .....	284,884	Sept. 11	887	250	24	1062
Agricultural implement .....	P. S. Keele .....	282,644	Aug. 7	204	59	24	535
Agricultural implement .....	B. Lanoizelet .....	279,958	June 26	1664	467	23	2428
Agricultural implement. Combined .....	R. W. Rutherford .....	284,982	Sept. 11	1003	283	24	1084

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Disg.	Vol.	Page.
Agricultural implements. Spring-tooth for.....	N. Nilson.....	280,072	June 26	1803	507	23	2453
Agricultural machine.....	J. Bacheider.....	278,675	June 5	1	1	23	2125
Agricultural machine.....	F. Nishwitz.....	288,657	Nov. 20	1094	300	25	713
Agricultural machine. Combined.....	A. Bradford.....	277,982	May 22	1790	{ 488 489	{ 23	1953
Ague. Composition for.....	T. A. Wilson.....	287,602	Oct. 30	2323	.....	25	451
Ague remedy.....	W. T. Killingworth.....	282,091	July 31	2212	.....	24	408
Ague remedy.....	C. L. Robinson.....	275,524	Apr. 10	866	.....	23	1382
Air and gas engines. Valve for.....	G. H. Reynolds.....	278,270	May 22	2159	593	23	2016
Air and steam trap.....	J. T. Kelly.....	286,446	Oct. 9	836	226	25	162
Air. Apparatus for producing currents of pure or carbureted.....	E. Vigneux.....	272,002	Feb. 6	513	138	23	529
Air. Apparatus for separating nitrogen from atmosphere.....	J. F. Bennett.....	281,002	July 10	818	228	24	151
Air brake. Compressed.....	A. Thayer and M. J. Connelly.....	283,534	Aug. 21	1282	359	24	743
Air-brake for cars and locomotives.....	P. Reilly.....	290,269	Dec. 18	1113	313	25	1099
Air-brake for railway-cars. Automatic.....	W. J. Ford. (Reissue).....	10,298	Mar. 27	2109	{ 586 587	{ 23	1220
Air-brake pressure-regulator.....	G. Westinghouse, Jr.....	270,528	Jan. 9	862	251	23	179
Air-compressing apparatus.....	J. J. Lawler.....	272,711	Feb. 20	1418	398	23	703
Air-compressing engine.....	F. Honigmann.....	288,435	Nov. 13	818	{ 221 222	{ 25	658
Air-compressing machinery.....	G. H. Reynolds.....	272,771	Feb. 20	1496	421	23	717
Air-compressing machinery.....	T. Sturgeon.....	275,959	Apr. 17	1409	389	23	1484
Air-compressor.....	W. A. Babcock.....	280,997	July 10	810	226	24	150
Air-compressor.....	W. A. P. Bicknell.....	273,014	Feb. 27	1813	503	23	779
Air-compressor.....	G. R. Cullingworth.....	287,104	Oct. 23	1677	460	25	324
Air-compressor.....	W. T. Fox.....	285,743	Sept. 25	1943	550	24	1263
Air-compressor.....	T. F. Freeman.....	290,764	Dec. 25	1777	491	25	1222
Air-compressor.....	C. Moore.....	285,297	Sept. 18	1391	{ 393 394	{ 24	1159
Air-compressor. Hydraulic.....	W. A. Babcock.....	287,358	Oct. 23	1995	544	25	381
Air-compressor. Hydraulic.....	H. Webster.....	286,751	Oct. 16	1223	330	25	237
Air-compressor valves. Device for operating.....	C. A. Bennett.....	283,955	Aug. 28	1799	509	24	851
Air-compressors. Inlet-valve for.....	G. R. Cullingworth.....	287,004	Oct. 23	1548	426	25	298
Air-compressors. Inlet-valve for.....	G. R. Cullingworth and C. W. Potter.....	287,007	Oct. 23	1550	427	25	299
Air-compressors. Outlet-valve for.....	G. R. Cullingworth.....	287,005	Oct. 23	1548	427	25	298
Air-compressors. Pressure-regulator for.....	G. R. Cullingworth and C. W. Potter.....	287,105	Oct. 23	1681	461	25	325
Air-compressors. Safety-governor for.....	G. R. Cullingworth.....	287,101	Oct. 23	1674	459	25	323
Air-compressors. Water-pump attachment for.....	C. W. Potter.....	287,325	Oct. 23	1957	534	25	374
Air-cooling apparatus.....	H. Kropff.....	271,716	Feb. 6	153	42	23	467
Air-cushioning device.....	S. Whitlock.....	284,524	Sept. 4	447	127	24	980
Air-engine.....	H. H. Burritt.....	278,397	May 29	2345	641	23	2058
Air-engine heater.....	J. A. Woodbury, J. Merrill, G. Pat- ten, and E. F. Woodbury.....	289,484	Dec. 4	142	39	25	911
Air-engine heater.....	J. A. Woodbury, J. Merrill, G. Pat- ten, and E. F. Woodbury.....	289,485	Dec. 4	143	40	25	911
Air for refrigerating and ventilating purposes. Cool- ing and distributing compressed.....	T. S. Very.....	275,964	Apr. 17	1415	390	23	1485
Air for refrigerating, freezing, &c. Apparatus for } cooling.....	J. Chambers.....	280,131	June 26	1867	{ 526 527	{ 23	2466
Air in buildings. Apparatus for moistening.....	G. D. Bancroft.....	287,898	Nov. 6	138	40	25	532
Air-motor.....	W. E. Eastman.....	278,228	May 22	2101	579	23	2007
Air motor. Atmospheric.....	B. J. Forster.....	274,305	Mar. 20	1364	374	23	1084
Air motor. Compressed.....	C. W. Potter.....	270,982	Jan. 23	1434	{ 413 414	{ 23	295
Air-purifying device.....	O. B. Rowlett.....	283,724	Aug. 21	1512	427	24	783
Air-ship.....	G. Koch.....	282,647	Aug. 7	207	60	24	536
Air-trap for water-engines.....	G. Murray, Jr.....	286,551	Oct. 9	960	258	25	185
Alarm: See Bridge-alarm. Heat-alarm. Burglar-alarm. Low-water alarm. Clock-alarm. Railway-alarm. Door-alarm. Railway-crossing alarm. Electro-magnetic Railway safety-alarm. alarm. Telegraph-alarm. Elevator-alarm. Till-alarm. Fire-alarm. Water-alarm. Fire and burglar alarm.							
Alarm-lock.....	E. J. Masseron.....	279,409	June 12	1008	{ 279 280	{ 23	2303
Alarm-lock.....	H. J. H. Schuett.....	275,527	Apr. 10	868	234	23	1382
Alarm-lock for jails. Pneumatic.....	I. Hodgson.....	275,656	Apr. 10	1034	{ 279 280	{ 23	1411
Alarm-signal.....	H. A. Eaton. (Reissue).....	10,295	Mar. 13	1092	301	23	1029
Album.....	A. J. Megee.....	281,102	July 10	935	261	24	173
Album and book clasp.....	R. R. Baker.....	278,762	June 5	106	30	23	2141
Album-clasp.....	T. M. Hass.....	277,722	May 15	1479	400	23	1892
Album-clasp.....	A. Pfleger.....	289,133	Nov. 27	1679	466	25	824
Album-clasp.....	L. Vorpahl and H. Pohl.....	289,363	Nov. 27	1956	544	25	877
Album for photographs, &c.....	V. J. Angir.....	271,765	Feb. 6	216	60	23	478
Album leaf. Photograph.....	R. Moser.....	290,648	Dec. 18	1615	444	25	1185
Alcohol and alcoholic liquors. Treating and amelior- ating.....	A. Ralu, Fils.....	273,604	Mar. 6	469	.....	23	914
Alcohol and other crude spirits. Rectifying.....	H. Roussan and M. G. De Barbeyrac.....	272,585	Feb. 20	1264	.....	23	676
Alcohol. Process of and apparatus for purifying.....	J. Bendix.....	287,089	Oct. 23	1657	455	25	320
Ale-condenser.....	J. W. Evenden.....	278,525	May 29	2502	683	23	2066
Alkali. Packing caustic.....	T. C. Taylor.....	270,997	Jan. 23	1452	.....	23	299
Alkali. Packing caustic.....	T. C. Taylor.....	270,998	Jan. 23	1453	.....	23	299
Alkalies. Manufacture of.....	E. W. Parnell.....	283,508	Aug. 21	1260	.....	24	739
Alkalies. Manufacturing caustic.....	C. Löwig.....	274,619	Mar. 27	1786	.....	23	1164



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. 56	Vol.	Page.
Alkaline bicarbonates. Preparing .....	E. N. Horsford and C. A. Catlin .....	270,668	Jan. 16	1043	.....	23	220
Alloy for coating metals .....	J. B. Jones. (Reissue) .....	10,415	Dec. 4	521	.....	25	977
Alloying iridium .....	J. Holland .....	285,895	Oct. 2	149	.....	25	29
Alphabet block and case .....	W. E. Crandall .....	275,329	Apr. 3	568	155	23	1392
Alum. Manufacture of porous zinciferous .....	C. V. Petraeus .....	269,957	Jan. 2	160	.....	23	34
Alumina. Manufacture of anhydrous .....	F. Gardair and T. Gladysz .....	282,878	Aug. 7	484	.....	24	586
Alumina. Manufacture of sulphate of .....	C. Semper .....	280,088	June 26	1823	.....	23	2457
Alumina. Manufacture of sulphate of .....	C. Semper .....	280,089	June 26	1824	.....	23	2457
Alumina. Manufacture of sulphate of .....	C. Semper .....	280,090	June 26	1824	.....	23	2457
Alumina. Producing .....	J. D. Darling .....	285,579	Sept. 25	1729	.....	24	1225
Aluminous cake. Manufacture of .....	C. Semper .....	271,371	Jan. 36	1920	.....	23	386
Aluminium from corundum, &c. Extracting .....	W. Frishmuth .....	282,621	Aug. 7	177	.....	24	531
Aluminium from corundum, &c. Extracting .....	W. Frishmuth .....	282,622	Aug. 7	178	.....	24	531
Amalgam. Retorting .....	C. A. Stetefeldt .....	279,840	June 19	1509	422	23	2395
Amalgamating and concentrating ores. Apparatus for .....	J. Alves .....	273,662	Mar. 6	537	144	23	926
Amalgamating and concentrating ores. Machine for .....	G. Dean .....	273,969	Mar. 13	933	{ 256 } 257	23	1002
Amalgamating and separating gold, &c., from their ores. Apparatus for .....	S. L. Trippe .....	271,162	Jan. 23	1647	474	23	331
Amalgamating apparatus .....	E. H. Gollings .....	287,431	Oct. 30	2088	567	25	405
Amalgamating apparatus .....	A. K. Huntington and W. E. Koch .....	281,629	July 17	1613	441	24	294
Amalgamating-furnace .....	W. E. Harris .....	273,275	Mar. 6	36	12	23	841
Amalgamating machine. Ore .....	E. R. Lucas .....	272,726	Feb. 20	1438	{ 403 } 404	23	707
Amalgamating ores and sands containing gold .....	A. B. Paul .....	285,508	Sept. 25	1647	463	24	1209
Amalgamating ores. Apparatus for .....	E. Bollinger .....	278,861	June 5	260	75	23	2167
Amalgamating ores. Process of and apparatus for .....	C. E. Tripler .....	287,981	Nov. 6	241	68,69	23	549
Amalgamating-pan .....	C. Gracey .....	284,293	Sept. 4	169	48	24	932
Amalgamating-pans. Shoe and die for .....	J. S. Johnson and M. Osborn .....	276,418	Apr. 24	1990	551	23	1591
Amalgamating the gold and silver in pulverized ores. Machine for .....	W. E. Harris .....	282,982	Aug. 14	595	168	24	613
Amalgamation. Obtaining precious metals from ores by .....	E. N. Riette .....	289,781	Dec. 4	506	140	25	974
Amalgamator .....	J. Alves .....	273,003	Feb. 27	1800	504	23	776
Amalgamator .....	A. H. Bliss .....	279,319	June 12	876	244	23	2282
Amalgamator .....	A. C. Bowen .....	271,305	Jan. 30	1824	529	23	369
Amalgamator .....	H. Cook .....	277,889	May 22	1684	459	23	1935
Amalgamator .....	J. C. Dane and W. L. Card .....	284,392	Sept. 4	296	80	24	952
Amalgamator .....	J. T. Davis and I. Stead .....	281,982	July 24	2070	567	24	379
Amalgamator .....	G. Dean .....	286,791	Oct. 16	1270	344	25	245
Amalgamator .....	W. E. Harris .....	272,544	Feb. 20	1206	337	23	666
Amalgamator .....	W. and H. R. Hawkins .....	281,060	July 10	886	{ 246 } 247	24	164
Amalgamator .....	S. G. Lindsey .....	272,564	Feb. 20	1244	346	23	672
Amalgamator .....	W. T. McGinnis .....	274,211	Mar. 20	1247	343	23	1064
Amalgamator .....	H. B. Meech .....	277,316	May 8	1002	269	23	1805
Amalgamator .....	W. Moller .....	272,741	Feb. 20	1460	410	23	710
Amalgamator .....	W. Moller .....	272,742	Feb. 20	1461	410	23	711
Amalgamator .....	H. Moon .....	282,352	July 31	2559	{ 701 } 702	24	466
Amalgamator .....	E. W. Nelson and E. H. Cowles .....	280,069	June 26	1800	506	23	2452
Amalgamator .....	G. W. and W. L. Strong .....	278,059	May 22	1883	515	23	1970
Amalgamator .....	H. M. Thompson .....	282,131	July 31	2220	626	24	419
Amalgamator .....	J. M. Thompson .....	290,815	Dec. 25	1842	510	25	1233
Amalgamator .....	H. T. Vanderhoof .....	283,540	Aug. 21	1289	{ 360 } 361	24	745
Amalgamator .....	T. Walker .....	279,995	June 26	1703	478	23	2436
Amalgamator and concentrator .....	B. Tyson .....	270,156	Jan. 2	386	{ 112 } 113	23	78
Amalgamator and separator. Combined .....	T. R. Timby .....	281,651	July 17	1637	447	24	298
Amalgamator and settler .....	F. Morris .....	278,035	May 22	1859	507	23	1965
Amalgamator. Dry .....	I. Stead .....	273,775	Mar. 13	701	189	23	962
Amalgamator. Ore .....	W. E. Harris .....	272,045	Feb. 13	574	155	23	551
Amber into a large block. Uniting small pieces of .....	B. Borowsky .....	288,300	Nov. 13	632	173	25	626
Amber. Manufacture of articles from waste .....	F. J. Kaldenberg .....	290,888	Dec. 25	1930	.....	25	1248
Ambulance .....	J. E. Wilkie .....	273,925	Mar. 13	883	241	23	993
Ammonia and its salts. Manufacture of .....	J. P. Rickman and J. B. Thompson .....	278,823	June 5	199	58	23	2157
Ammonia. Apparatus for the manufacture of .....	A. Feldmann .....	278,115	May 22	1951	535	23	1981
Ammonia. Apparatus for the manufacture of sulphate of .....	J. Coates .....	272,651	Feb. 20	1348	{ 378 } 379	23	691
Ammonia-engine .....	G. Sweaner .....	284,987	Sept. 11	1012	{ 284 } 285	24	1085
Ammonia from bone-black retorts. Apparatus for taking off .....	F. Osmer .....	287,570	Oct. 30	2269	615	25	441
Ammonia from its solution in the manufacture of ice, &c. Process of and apparatus for separating .....	G. O. Rinman .....	287,056	Oct. 23	1617	445	25	312
Ammonia. Process of and apparatus for making .....	T. B. Fogarty .....	288,323	Nov. 13	663	{ 183 } 184	25	631
Ammonia. Process of and apparatus for manufacturing .....	T. B. Fogarty .....	288,324	Nov. 13	668	184	25	631
Ammonia. Process of and apparatus for obtaining .....	F. Lorenz .....	277,041	May 8	666	174	23	1746
Ammoniacal liquors. Apparatus for purifying foul .....	J. Taylor .....	275,541	Apr. 10	884	239	23	1385
Ammoniacal salts. Manufacture of .....	E. H. Wardwell .....	273,411	Mar. 6	222	60	23	871
Anesthetic. Liquefied .....	E. E. Murphy, Jr. .....	275,511	Apr. 10	847	229	23	1379
Anesthetic mixture .....	U. K. Mayo .....	283,800	Aug. 28	1613	.....	24	817
Anchor .....	L. T. Dickson .....	279,230	June 12	768	212	23	2264
Anchor .....	L. H. Rhoades .....	270,484	Jan. 9	795	232	23	165
Anchor .....	C. E. Willis .....	270,168	Jan. 2	402	116	23	82
Anchor catter and fisher .....	J. N. Purdy .....	284,979	Sept. 11	1001	282	24	1083
Androids or automaton shoe-factory .....	R. G. Shute .....	284,338	Sept. 4	219	61	24	941
Angle-iron .....	W. Lorey .....	280,841	July 10	629	177	24	117
Angle-iron. Bending .....	M. Mosler .....	283,136	Aug. 14	787	221	24	647
Animal cover or blanket .....	S. H. Boynton .....	284,803	Sept. 11	796	222	24	1045

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Animal matter. Apparatus for desiccating	H. Breer	286,897	Oct. 16	1408	{ 386 387 }	25	269
Animal-shears	E. D. and J. D. Benson	287,794	Nov. 6	7	3	25	508
Animal-shears	H. C. Chiles	281,454	July 17	1399	384	24	259
Animal-shears	L. D. Gleason and R. A. Holt	287,018	Oct. 23	1570	433	25	303
Animal-shears	W. M. Lindsey	284,968	Sept. 11	989	278	24	1081
Animal-shears	J. H. Orr	288,104	Nov. 6	390	110	25	575
Animal-trap	S. Ayres	282,482	Aug. 7	5	2	24	501
Animal-trap	C. F. Barrett	286,252	Oct. 9	581	159	25	116
Animal-trap	J. H. Brubaker	279,126	June 12	656	{ 179 180 }	23	2245
Animal-trap	H. C. Chadwell	275,995	Apr. 17	1454	401	23	1492
Animal-trap	J. H. Cook	281,461	July 17	1405	386	24	260
Animal-trap	J. G. Gilleland	288,225	Nov. 13	537	149	25	611
Animal-trap	F. Glasson	290,034	Dec. 11	824	232	25	1039
Animal-trap	G. W. Jolly	289,268	Nov. 27	1835	506	25	854
Animal-trap	C. A. Ketcham	285,754	Sept. 25	1957	554	24	1265
Animal-trap	C. H. Lutz	282,463	July 31	2700	742	24	491
Animal-trap	J. A. H. Marty	290,082	Dec. 11	880	250	25	1049
Animal-trap	J. H. and T. D. Morris	287,387	Oct. 23	2030	552	25	387
Animal-trap	J. H. and T. D. Morris	288,182	Nov. 6	481	133	25	591
Animal-trap	A. W. Paull	278,730	June 5	70	21	23	2136
Animal-trap	L. J. Phelps	275,786	Apr. 10	1197	328	23	1439
Animal-trap	W. H. Reed	284,759	Sept. 11	744	207	24	1036
Animal-trap	A. B. Smith	273,321	Mar. 6	101	30	23	851
Animal-trap	E. E. Thomas	269,972	Jan. 2	176	51	23	37
Animal-trap	T. B. Turley	271,952	Feb. 6	444	122	23	519
Animal-trap	A. W. Walker	283,171	Aug. 14	830	232	24	654
Animal-trap	G. B. Wood	280,431	July 3	116	31, 32	24	22
Animal-trap	T. B. Zeller	272,507	Feb. 20	1166	326	23	658
Animal-trap. Self-setting	G. Johannes and P. Cyphers	273,547	Mar. 6	395	106	23	901
Annealing cast-steel or iron	J. Henderson	284,550	Sept. 4	472		24	985
Annealing-furnace	A. Mogren	285,426	Sept. 25	1556	438	24	1193
Annunciator and alarm system. Combined	E. A. Sperry	286,970	Oct. 16	1499	412	25	284
Annunciator and communicating apparatus. Electric	W. Humans	277,286	May 8	962	258	23	1798
Annunciator and fire-alarm. Electric	S. Van Benschoten and H. H. Johnson	282,016	July 24	2111	579	24	385
Annunciator and fire-alarm. Electric hotel	A. T. Hess	271,707	Feb. 6	143	40	23	465
Annunciator and fire-alarm. Electric hotel	A. T. Hess	288,570	Nov. 13	980	{ 269 270 }	25	686
Annunciator. Electric	E. Flint, Jr.	283,590	Aug. 21	1353	378	24	757
Annunciator. Electric	F. Happersberger	289,411	Dec. 4	46	13	25	895
Annunciator. Electric	A. C. Palmer	289,552	Dec. 4	226	63	25	926
Annunciator. Electrical	D. A. McCormick	284,878	Sept. 11	882	247	24	1061
Annunciator. Hotel and burglar alarm electric	W. S. Corwin	289,233	Nov. 27	1797	{ 497 498 }	25	846
Annunciator. Oral	J. Ireland	269,860	Jan. 2	47	15	23	12
Annunciator. Oral	J. Ireland	280,930	July 10	738	{ 205 206 }	24	136
Annunciator. Telephone	F. B. Hazlett	279,946	June 26	1650	462	23	2426
Annunciator. Telephonic	G. L. Weaver	276,739	May 1	273	69	23	1671
Anthracinone and alizarine. Purifying impure	F. Brönnner	275,128	Apr. 3	329	91	23	1283
Antimony-furnace	A. Hudson	286,200	Oct. 9	515	142	25	105
Antimony. Producing golden sulphuret of	C. E. Parsons	278,816	June 5	186		23	2154
Antiseptic	C. M. Pielstick	281,554	July 17	1515		24	279
Anvil	O. Dimock	281,847	July 24	1911	522	24	352
Anvil	J. Hamlin	278,237	May 22	2113	522	23	2009
Anvil. Punching and riveting	J. C. Rothbarth	277,511	May 15	1232	332	23	1851
Anvils. Constructing	W. C. McCarthy	277,311	Oct. 8	997	268	23	1804
Anvils. Manufacture of	W. C. McCarthy	286,459	Oct. 9	848	230	25	165
Apple-mill	J. F. Patterson	275,939	Apr. 17	1390	382	23	1480
Apple-slicer	F. B. Pease	274,220	Mar. 20	1257	346	23	1065
Apple-slicer	H. A. and W. Tripp	283,686	Aug. 21	1465	{ 412 413 }	24	779
Apple-slicing machine	C. De Puy and E. H. Burghardt	269,835	Jan. 2	20	7	23	6
Apron. Workman's	S. D. Webb	277,178	May 8	844	223	23	1776
Arch	T. J. Lovegrove	271,344	Jan. 30	1874	{ 543 544 }	23	378
Arch and ceiling. Fire-proof	P. B. Wight	273,419	Mar. 6	230	62	23	873
Archery apparatus	C. P. and W. H. Goldey	273,510	Mar. 6	338	91, 92	23	892
Arm-rest	W. J. Butler	281,338	July 17	1247	346	24	233
Arm. Universal jointed	J. J. Greenough. (Reissue)	10,278	Jan. 30	2184	628	23	433
Armatures. Cylinder for rotary	J. F. Gilleland	276,024	Apr. 17	1491	410	23	1498
Armor for war-ships. Deflecting	N. B. Clark	282,498	Aug. 7	22	6, 7, 8	24	504
Artist's box	W. H. Brownell	275,882	Apr. 17	1328	365	23	1469
Asbestos and articles or goods made therefrom.	J. B. Amyot	281,951	July 24	2033		24	373
Preparation of							
Asbestos cloth	H. W. Johns	290,239	Dec. 18	1073	300	25	1092
Ash-depositor	J. H. Hart	277,718	May 15	1475	399	23	1891
Ashes. Device for arresting dust from	W. H. Graham	281,867	July 24	1931	528	24	355
Asphaltum. Refining	E. J. De Smedt	286,396	Oct. 9	778	210	25	152
Assay-furnace	J. C. Tappeiner	272,599	Feb. 20	1283	357	23	679
Assorting-machine	S. M. Park	283,414	Aug. 21	1140	323	24	719
Atomizer	P. Chaplain	275,997	Apr. 17	1455	461	23	1493
Atomizer	W. Kennish	282,090	July 31	2212	608	24	408
Atomizer	B. F. Sutton	281,942	July 24	2022	553	24	371
Atomizer	W. A. Turner	276,940	May 1	533	138	23	1717
Attrition-mill	J. J. Newsum	288,724	Nov. 20	1187	324	25	727
Auger	H. Halligan and H. Rugg	278,539	May 29	2518	687	23	2069
Auger	I. T. Payne	270,977	Jan. 23	1429	412	23	294
Auger	J. Swan	279,204	June 12	740	203	23	2260
Auger	J. Swan	285,440	Sept. 25	1571	442	24	1195
Auger	J. L. Whiteside	277,966	May 22	1773	483	23	1950
Auger and bit blanks. Roller-die for making	C. O. Tinker	286,972	Oct. 16	1502	413	25	285



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Auger and gimlet.....	W. W. Brigg.....	270,200	Jan. 9	440	129	23	97
Auger and lifting and lowering device for well-curb- ing. Earth-.....	G. D. Pettingill.....	270,472	Jan. 9	783	229	23	163
Auger-bit.....	J. Swan.....	283,040	Aug. 14	676	190	24	627
Auger-bit.....	J. Swan.....	290,812	Dec. 25	1840	509	25	1232
Auger-bits and other boring-tools. Manufacture of.....	G. F. Stearns.....	288,676	Nov. 20	1121	308	25	717
Auger-bits. Machine for forming.....	W. L. Parmelee.....	286,554	Oct. 9	966	260	25	186
Auger-bits. Machine for twisting.....	W. Tucker.....	283,304	Aug. 14	996	279 280	24	666
Auger-blanks. Machine for making.....	C. O. Tinker.....	280,098	June 26	1833	516	23	2459
Auger. Hollow.....	J. A. Rodman.....	286,964	Oct. 16	1492	410	25	283
Auger. Hollow.....	W. L. Stoddard.....	270,856	Jan. 16	1267	366	23	263
Auger. Portable steam.....	W. F. Leach.....	271,480	Jan. 30	2063	594	23	412
Auger. Post.....	J. E. Miles.....	283,010	Aug. 14	640	181	24	620
Auger. Post and well.....	E. Frazier and N. J. Edwards.....	284,956	Sept. 11	976	274	24	1078
Auger. Post-hole.....	M. J. Romine and D. P. Lee.....	283,283	Aug. 14	973	272	24	689
Auger. Post-hole.....	A. H. Swain.....	269,895	Jan. 2	86	26	23	19
Augers. Metal die for making.....	D. W. Harris.....	276,033	Apr. 17	1501	413	23	1499
Augers. Wringer-plate for twisting.....	G. G. Holley.....	276,043	Apr. 17	1514	416 417	23	1501
Automatic double gate.....	J. Austin and R. Chamberlain.....	272,619	Feb. 20	1308	365	23	683
Automatic driving-gate.....	F. Willard.....	279,063	June 5	552	152	23	2218
Automatic gate.....	D. Herschberger.....	281,692	July 24	1704	463	24	315
Automatic gate.....	E. Little.....	276,434	Apr. 24	2009	557	23	1594
Automatic gate.....	W. Thornton and A. Ferris.....	288,601	Nov. 13	1024	281	25	695
Automatic gate.....	P. J. Wieland.....	271,963	Feb. 6	456	125	23	521
Automatic lubricator.....	W. S. Germeyer.....	280,736	July 3	481	136	24	85
Automatic register.....	J. R. Trott and J. W. McElvain.....	281,652	July 17	1638	447 448	24	298
Automatic switch and cut-out.....	C. G. Perkins.....	287,321	Oct. 23	1953	533	25	373
Averaging-machine.....	W. S. Auchincloss.....	281,953	July 24	2034	556 557	24	373
Awl. Belt.....	C. M. Lothrop and H. L. Hewins.....	289,009	Nov. 27	1526	422	25	797
Awl. Brad.....	J. H. Stickney.....	270,258	Jan. 9	511	150	23	110
Awning.....	A. J. Chandler.....	288,207	Nov. 13	516	143	25	606
Awning.....	W. Freeland.....	273,503	Mar. 6	331	90	23	891
Awning.....	E. W. Hastings.....	289,532	Dec. 4	199	56	25	921
Awning.....	F. Hohorst.....	289,772	Dec. 4	494	137	25	972
Awning.....	W. H. Isley.....	284,741	Sept. 11	721	201	24	1032
Awning.....	F. B. Mallory.....	284,872	Sept. 11	875	246	24	1060
Awning.....	J. Moynan.....	284,882	Sept. 11	885	249	24	1062
Awning.....	J. L. Rieger.....	272,772	Feb. 20	1499	422	23	718
Awning.....	J. L. Smith.....	286,495	Oct. 9	889	240	25	172
Awning.....	M. E. Stern.....	269,894	Jan. 2	85	25	23	18
Awning and curtain frame for boats.....	F. B. Mallory.....	270,448	Jan. 9	754	221	23	156
Awning-bracket.....	R. H. Rodgers.....	283,023	Aug. 14	658	186	24	624
Awning for decks of vessels.....	R. L. Robertson, Jr.....	273,315	Mar. 6	95	28	23	850
Awning for hop-pickers.....	J. Engle, Jr.....	276,791	May 1	339	90	23	1655
Awning-frame.....	G. Borst.....	275,573	Apr. 10	923	250	23	1392
Ax and tool handle guard.....	G. P. Morrill.....	279,582	June 19	1217	337	23	2344
Ax-handle.....	J. D. Blaker.....	271,303	Jan. 30	1823	529	23	360
Axes. Machine for making.....	E. Rogers.....	275,273	Apr. 3	497	137 138	23	1311
Axle and box. Car.....	L. H. Roberts.....	278,048	May 22	1872	512	23	1968
Axle bearing. Car.....	I. P. Wendell.....	280,978	July 10	792	220	24	146
Axle-bearing for vehicles.....	C. J. Forsman.....	270,214	Jan. 9	464	135	23	101
Axle-bearing. Vehicle.....	A. E. Wallace.....	280,421	July 3	100	27	24	20
Axle-box.....	H. V. Appley.....	271,764	Feb. 6	215	60	23	477
Axle-box.....	F. D. Bliss.....	288,299	Nov. 13	631	173	25	626
Axle-box.....	R. Cartwright.....	273,463	Mar. 6	288	79	23	882
Axle-box.....	J. Kritch.....	270,903	Jan. 23	1333	385	23	280
Axle-box.....	P. Lincoln.....	282,539	Aug. 7	76	22	24	513
Axle-box.....	H. G. McGirr.....	272,293	Feb. 13	874	245	23	604
Axle-box.....	R. C. Parvin.....	288,251	Nov. 20	1335	366	25	755
Axle box. Car.....	J. R. Baker.....	269,995	Jan. 2	205	58	23	42
Axle box. Car.....	W. S. G. Baker.....	276,210	Apr. 24	1721	476	23	1545
Axle box. Car.....	W. S. G. Baker.....	282,149	July 31	2299	631	24	422
Axle box. Car.....	R. Brewer.....	285,217	Sept. 18	1301	366	24	1142
Axle box. Car.....	C. W. Collier.....	279,342	June 12	916	256	23	2288
Axle box. Car.....	N. H. Davis.....	273,473	Mar. 6	302	82	23	885
Axle box. Car.....	W. Don.....	288,780	Nov. 20	1246	342	25	739
Axle box. Car.....	S. R. Dyer.....	273,484	Mar. 6	313	85	23	887
Axle box. Car.....	J. G. Ernst.....	282,871	Aug. 7	475	134	24	585
Axle box. Car.....	J. Garland and J. Kenyon.....	278,698	June 5	28	8	23	2129
Axle box. Car.....	G. F. Godley.....	288,705	Nov. 20	1155	317	25	723
Axle box. Car.....	W. F. Grassler.....	270,421	Jan. 9	717	212	23	150
Axle box. Car.....	H. Millholland.....	270,908	Jan. 23	1339	386	23	221
Axle box. Car.....	O. Pagan.....	287,572	Oct. 30	2271	616	25	441
Axle box. Car.....	F. J. Roberts.....	289,934	Dec. 11	698	196	25	1015
Axle box. Car.....	J. Schmelter.....	280,087	June 26	1822	513	23	2457
Axle box. Car.....	O. S. Stearns.....	282,796	Aug. 7	387	109	24	568
Axle box. Car.....	G. W. Sweeney.....	279,506	June 12	1122	310 311	23	2320
Axle box. Car.....	P. Sweeney.....	270,262	Jan. 9	515	151	23	111
Axle box. Car.....	P. Sweeney.....	291,006	Dec. 25	2092	576 577	25	1273
Axle box. Car.....	J. G. Thomas.....	288,890	Nov. 20	1321	381	25	764
Axle box. Car.....	J. Timms.....	277,382	May 8	1074	289	23	1818
Axle box. Car.....	E. Whiting.....	274,159	Mar. 20	1175	394 325	23	1051
Axle box. Car.....	C. M. and R. M. Wood.....	273,928	Mar. 13	886	242	23	993
Axle box. Car.....	R. Zeppenfeld.....	272,508	Feb. 20	1167	326	23	658
Axle-box lid. Car.....	J. R. Baker.....	270,172	Jan. 2	406	118	23	82
Axle-box lid. Car.....	J. R. Baker.....	283,691	Aug. 21	1470	414	24	780

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Axle-box lid. Car.	W. J. Ball	281,173	July 10	1026	287	24	188
Axle boxes. Dust-guard for car.	N. M. George	285,994	Oct. 2	266	74	25	50
Axle. Car.	H. C. Atkinson	277,825	May 15	1599	437	23	1914
Axle. Car.	M. O. Baldwin	275,323	Apr. 3	562	153	23	1321
Axle. Car.	G. W. Bedbury	275,324	Apr. 3	563	153	23	1322
Axle. Car.	G. W. Bedbury	284,800	Sept. 11	793	221	24	1044
Axle. Car.	C. E. Eaton	234,194	Sept. 4	48	14	24	913
Axle. Car.	W. S. Eberman	282,507	Aug. 7	37	11	24	507
Axle. Car.	G. Farnum	269,926	Jan. 2	123	36	23	26
Axle. Car.	J. Gamblee and J. F. Haring	273,506	Mar. 6	334	90	23	891
Axle. Car.	T. Meehan	284,462	Sept. 4	363	102	24	966
Axle. Car.	A. T. Peirce	285,509	Sept. 25	1649	463	24	1210
Axle. Car.	F. P. Smith	290,938	Dec. 25	1995	550	25	1259
Axle. Car.	A. Walton	287,202	Oct. 23	1803	494	25	346
Axle. Carriage	C. S. Harper	276,174	Apr. 24	1678	464	23	1538
Axle. Carriage	W. Jones	286,139	Oct. 2	440	120	25	82
Axle. Carriage	L. W. Smith	284,034	Aug. 14	669	188	24	626
Axle cutter. Carriage	T. Sherry	280,678	July 3	407	114	24	473
Axle for trucks. Stub.	A. B. Colton	289,752	Dec. 4	478	135	25	970
Axle for two-wheeled vehicles.	F. Gilbert	284,626	Sept. 11	570	161	24	1007
Axle-gage.	W. Buckeridge	278,868	June 5	269	77	23	2169
Axle-lubricator	W. H. De Kay	279,355	June 12	930	260	23	2291
Axle-lubricator	F. C. Hockensmith	273,990	Mar. 13	954	263	23	1005
Axle-lubricator	A. D. Howe	280,826	July 10	607	169	24	113
Axle-lubricator	E. L. Young and L. Dyer	272,398	Feb. 13	1018	284	23	627
Axle-lubricator. Car.	A. B. and N. H. Davis	280,587	July 3	303	84	24	54
Axle-lubricator. Car.	C. P. Holmes	273,991	Mar. 13	955	263	23	1005
Axle-lubricator. Car.	L. D. Howard and A. Chance	290,957	Dec. 25	2068	569	25	1270
Axle-lubricator. Car.	W. J. Jackson	284,209	Sept. 4	66	18	24	916
Axle-lubricator. Car.	M. Mac Mahon	281,538	July 17	1496	411	24	276
Axle-lubricator. Car.	F. M. Taneyhill	274,152	Mar. 20	1165	321	23	1049
Axle-lubricator. Car.	S. J. Wallace	280,265	June 26	2025	570	23	2493
Axle-lubricator. Car.	J. F. Webb	286,098	Oct. 2	394	108	25	72
Axle-lubricator. Railway-car	C. P. Holmes	278,964	June 5	430	118	23	2197
Axle nut. Carriage	D. S. Hall	286,131	Oct. 2	431	117	25	80
Axle-skein	J. W. Anderson	290,511	Dec. 18	1444	399	25	1156
Axle-skein	T. Ebeline	283,982	Aug. 28	1829	516	24	856
Axle-skein	A. C. Emmick	282,289	July 31	2466	679	24	451
Axle-skein	R. Lane	277,579	May 15	1320	354	23	1864
Axle-skein	A. H. Southworth	277,624	May 15	1372	370	23	1878
Axle-skeins. Machine for forming	A. C. Emmick	290,982	Dec. 25	2063	567 568	25	1269
Axle-spindle brace	R. R. Spedden	274,230	Mar. 20	1269	350	23	1068
Axle. Vehicle	M. E. Burris	271,571	Jan. 30	2168	625	23	430
Axle. Vehicle	M. E. Burris	273,458	Mar. 6	282	76	23	852
Axle. Vehicle	M. E. Burris	278,396	May 29	2344	641	23	2058
Axle. Vehicle	W. Caswell	275,994	Apr. 17	1453	400	23	1492
Axle. Vehicle	J. Folant	288,563	Nov. 13	972	267 268	25	685
Axle. Vehicle	W. H. Fowler	287,921	Nov. 6	166	48	25	536
Axle. Vehicle	R. W. and W. Hubbard	287,438	Oct. 30	2098	570	25	407
Axle. Vehicle	D. F. Hull	274,776	Mar. 27	1971	549	23	1197
Axle. Vehicle	J. J. Maroney	271,489	Jan. 30	2073	597	23	414
Axle. Vehicle	G. A. Mott	289,689	Dec. 4	394	113	25	956
Axle. Vehicle	A. E. Smith	281,310	July 17	1212	335	24	228
Axle. Vehicle	G. H. Williams	286,378	Oct. 9	733	196	25	144
Axle. Wagon	J. M. Coombs	288,029	Nov. 6	303	85	25	559
Axle. Wagon	S. R. Edney	290,760	Dec. 25	1773	490	25	1221
Axle. Wagon	J. and P. Herrmann	287,675	Oct. 30	2414	651	25	469
Axle. Wagon	A. Kimble	274,341	Mar. 20	1416	388	23	1093
Axle. Wagon	F. Ulrich	278,755	June 5	99	28	23	2140
Axles. Device for truing	J. F. Thomas and W. Baker	270,916	Jan. 23	1348	388 389	23	282
Axles. Self-adjusting bearing for car	O. S. Stearns	281,157	July 10	1005	281 282	24	184
Baby-carrier	J. H. Lancaster	278,437	May 29	2398	653	23	2067
Baby-jumper and swing	M. M. Raymond	279,432	June 12	1035	287	23	2307
Baby-walker	J. B. Dufour	283,222	Aug. 14	894	249	24	667
Baby-walker	J. Habegger	282,980	Aug. 14	593	168	24	614
Back-bands. Draft-chain loop for	J. C. Smither and J. D. Carlisle	289,157	Nov. 27	1707	475	25	829
Back-rest	A. W. Streeper	271,944	Feb. 6	434	119	23	517
Back-strap attachment	G. M. Bowen	277,669	May 15	1423	384	23	1882
Badge. Bouquet	M. G. Carleton	273,666	Mar. 6	545	145	23	927
Bag.							
See Feed-bag.	Mail-bag.						
Filtering-bag.	Paper bag.						
Hand-bag.	Traveling-bag.						
Bag and twine holder	W. R. Poage	288,853	Nov. 20	1337	367	25	755
Bag and twine holder	L. Steinberger	271,147	Jan. 23	1624	467	23	328
Bag, bale, and bundle tie	D. E. Ladd	281,704	July 24	1719	467	24	318
Bag-dumping machinery	E. W. Scott	274,664	Mar. 27	1839	511 512	23	1174
Bag-fastener	C. W. Bradford	277,210	May 8	878	233	23	1782
Bag-fastener	C. W. Bradford	287,755	Oct. 30	2525	680	25	489
Bag-fastener	C. A. Brobst	281,663	July 24	1663	454	24	308
Bag-fastener	F. H. Lindington	285,908	Oct. 2	165	47	25	32
Bag-fastener	G. H. St. John	271,536	Jan. 30	2126	612	23	423
Bag filling and weighing machine. Combined	A. F. Johnson and J. P. Turner	290,240	Dec. 18	1074	300	25	1092
Bag-frame catch	E. C. Holmes	272,880	Feb. 27	1664	465	23	753
Bag-frames, &c. Catch for	W. Roemer	272,902	Feb. 27	1683	472	23	757
Bag-holder	N. Adams	277,651	May 15	1404	378	23	1879
Bag-holder	E. E. Alderman	277,654	May 15	1407	379	23	1879
Bag-holder	W. H. Dungan	286,793	Oct. 16	1275	344	25	246
Bag-holder	C. A. Gibbs	284,835	Sept. 11	832	233	24	1052



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Bag-holder .....	H. W. Nelson .....	277,772	May 15	1544	420	23	1904
Bag-holder .....	L. Rohmer .....	290,114	Dec. 11	914	259 260	25	1056
Bag-holder .....	W. E. Shellenberger .....	271,930	Feb. 6	421	115	23	514
Bag-holder .....	A. Sherman .....	285,692	Sept. 25	1870	533	24	1251
Bag-holder .....	C. T. Smith .....	275,086	Apr. 3	273	75	23	1273
Bag-holder .....	D. F. Smith .....	289,721	Dec. 4	441	123	25	963
Bag-holder .....	L. Valentine .....	289,181	Nov. 27	1736	483	25	834
Bag holder and filler .....	D. R. Adkisson .....	271,759	Feb. 6	208	58	23	476
Bag-lock .....	D. S. Hammond .....	277,714	May 15	1473	398	23	1891
Bag-machine .....	B. F. Sawyer .....	271,922	Feb. 6	412	111 112 113	23	513
Bag or satchel .....	C. W. Jenks .....	287,680	Oct. 30	2419	652	25	470
Bag or satchel .....	L. Sanders .....	288,495	Nov. 13	898	244	25	671
Bag or satchel .....	C. Vehring .....	277,812	May 15	1584	433	23	1912
Bag or satchel lock .....	R. Flocke .....	287,114	Oct. 23	1691	463	25	327
Bags, &c., for protecting jewelry. Manufacture of.	O. Thowless .....	286,346	Oct. 9	719		25	141
Bag seam. Grain .....	E. Detrick .....	274,736	Mar. 27	1916	534	23	1188
Bagasse-furnace .....	I. A. Hedges .....	278,547	May 29	2526	699	23	2090
Bagasse-furnace .....	J. Hill .....	276,400	Apr. 24	1970	545	23	1587
Bagasse-furnace .....	J. C. Semones .....	284,246	Sept. 4	115	31	24	924
Bagasse-furnace .....	D. Wilde .....	284,101	Aug. 28	1997	556	24	884
Bagasse-furnace .....	E. Williams .....	281,218	July 10	1091	300 301	24	200
Bagasse. Method of and furnace for burning green.	J. C. Bidwell .....	285,103	Sept. 18	1167	327	24	1118
Bagasse-washing and saccharine-extracting machine.	A. S. Wheeler .....	276,513	Apr. 24	2106	585	23	1611
Bail ear and lock. Combined .....	I. M. and J. W. Ross .....	275,416	Apr. 10	724	193	23	1350
Bails to pails. Ear for attaching .....	C. A. Wright .....	283,316	Aug. 14	1010	283	24	688
Bait. Artificial .....	H. Comstock .....	271,424	Jan. 30	1982	572	23	398
Bait. Artificial fish .....	E. F. Pünger .....	272,317	Feb. 13	905	253	23	610
Bait. Artificial fish .....	E. F. Pünger .....	284,056	Aug. 28	1978	542	24	873
Bait for fishing. Spoon .....	W. T. J. Lowe .....	276,055	Apr. 17	1527	420	23	1504
Bake-pan and steamer .....	A. C. Kasson .....	285,905	Oct. 2	162	46	25	32
Baking-pan .....	G. E. Clark .....	277,679	May 15	1434	326	23	1884
Baking-pan .....	H. Dyer .....	271,321	Jan. 30	1849	536	23	373
Baking-pan .....	I. H. Graham .....	272,679	Feb. 20	1379	388	23	696
Baking-pan .....	W. I. Lee .....	289,667	Dec. 4	365	103	25	951
Baking-pans. Manufacture of .....	S. J. Williams and H. Richey .....	271,388	Jan. 30	1937	560 561	23	390
Baking-powder .....	W. P. Clotworthy .....	273,958	Mar. 13	921		23	999
Balance .....	T. D. King .....	274,202	Mar. 20	1235	337	23	1060
Balance. Counter .....	O. Elwell .....	284,827	Sept. 11	823	229	24	1050
Balance. Duplex spring .....	N. A. L. J. Johannsen .....	269,941	Jan. 2	143	42	23	30
Balance-wheel .....	J. B. Tibbits .....	290,096	June 26	1829	514	23	2458
Balcony. Adjustable .....	W. Donegan .....	273,823	Mar. 13	759	206	23	972
Bale bands or ties. Cordage to be used for .....	S. Atkins .....	279,852	June 19	1525		23	2398
Bale binder. Cotton .....	L. Burr .....	277,220	May 8	887	236	23	1784
Bale header. Cotton .....	L. C. Terry .....	282,801	Aug. 7	391	110	24	569
Bale-tie .....	A. Arnold .....	281,821	July 24	1877	513	24	346
Bale-tie .....	O. P. Fannin .....	278,787	June 5	151	45	23	2148
Bale-tie .....	J. W. Griswold .....	274,486	Mar. 27	1624	450	23	1136
Bale-tie .....	I. A. Kilmer .....	282,991	Aug. 14	608	172	24	616
Bale-tie .....	A. A. Southwick .....	277,367	May 8	1059	285	23	1815
Bale-tie .....	A. A. Southwick and F. A. Wittich .....	277,432	May 8	1135	306	23	1827
Bale-tie .....	W. R. Williamson .....	273,926	Mar. 13	884	241	23	993
Bale tie. Cotton .....	T. H. Dodge .....	280,725	July 3	465	133	24	83
Bale tie. Cotton .....	J. Ferguson .....	290,921	Dec. 18	1054	296	25	1089
Bale tie. Cotton .....	W. L. Jones .....	285,489	Sept. 25	1625	456	24	1205
Bale-tie fastening .....	W. A. Du Bois .....	290,549	Dec. 18	1491	412	25	1164
Bale-tie fastening .....	E. S. Lenox .....	290,636	July 3	359	100	24	63
Bale-tie tightener .....	G. A. Boughton .....	272,943	Feb. 27	1734	484	23	764
Bale-tie. Wire .....	J. R. Ashley .....	285,947	Oct. 2	217	61	25	41
Bale-tie. Wire .....	E. S. Lenox .....	272,891	Feb. 27	1676	469	23	755
Bale-tie. Wire .....	W. Young .....	285,338	Sept. 18	1435	405	24	1166
Bale-ties. Wire-bending machine for .....	C. D. Raudel .....	271,514	Jan. 30	2104	055	23	419
Bales of pressed hay, cotton, &c. Binding .....	P. K. Dederick .....	275,366	Apr. 10	634	175	23	1346
Baling and packing away cotton .....	G. W. Grador .....	281,490	July 17	1442	395	24	266
Baling-press .....	J. H. Badgley .....	286,168	Oct. 9	474	131	25	99
Baling-press .....	A. H. Ballagh .....	277,439	May 15	1151	309	23	1837
Baling-press .....	K. W. Bennet .....	281,959	July 24	2045	560	24	375
Baling-press .....	E. J. Bennett .....	275,118	Apr. 3	313	87	23	1280
Baling-press .....	D. Boyer .....	286,771	Oct. 16	1246	337	25	241
Baling-press .....	W. O. Budd .....	285,007	Sept. 18	1049	294	24	1088
Baling-press .....	J. S. Davis .....	285,237	Sept. 18	1327	374	24	1146
Baling-press .....	P. K. Dederick .....	270,760	Jan. 16	1160	332	23	242
Baling-press .....	P. K. Dederick .....	271,811	Feb. 6	273	75	23	489
Baling-press .....	P. K. Dederick .....	271,812	Feb. 6	275	76	23	489
Baling-press .....	P. K. Dederick .....	280,456	July 3	150	40	24	28
Baling-press .....	P. K. Dederick .....	287,107	Oct. 23	1684	461	25	325
Baling-press .....	E. G. Fuller .....	288,937	Nov. 20	1435	395	25	774
Baling-press .....	T. G. Holloway .....	285,621	Sept. 25	1786	508	24	1236
Baling-press .....	J. McIver .....	276,615	May 1	85	23, 24	23	1642
Baling-press .....	C. B. Orton .....	280,325	June 26	2103	590	23	2506
Baling-press .....	A. C. Porter .....	284,894	Sept. 11	895	254	24	1064
Baling-press .....	W. H. Reynolds .....	286,846	Oct. 16	1345	368	25	259
Baling-press .....	J. A. Spencer .....	278,371	May 29	2316	634	23	2053
Baling-press .....	G. H. Sullivan .....	271,153	Jan. 23	1632	470	23	329
Baling-press .....	H. Tyack .....	273,407	Mar. 6	217	58, 59	23	870
Baling-press .....	J. Watson .....	283,838	Aug. 28	1655	467	24	824
Baling-press .....	R. W. Whitehurst .....	282,017	July 24	2113	579	24	386
Baling-press .....	G. F. Whitman .....	274,871	Mar. 27	2025	579	23	1216
Baling-press .....	P. Wright .....	289,364	Nov. 27	1957	544 545	25	877

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Baling-press. Continuous .....	P. J. Kelley .....	282,089	July 31	2210	608	24	408
Baling-press packing attachment .....	J. R. Shepherd .....	277,619	May 15	1366	368	23	1872
Ball:							
<i>See</i> Base-ball.							
Billiard-ball.	Game-ball.						
Return-ball.							
Ball-trap .....	N. Fischer .....	281,356	July 17	1273	353	24	238
Ballasting .....	F. G. Johnson .....	284,210	Sept. 4	68	19	24	916
Balloon .....	J. W. Emsley .....	276,012	Apr. 17	1474	407	23	1495
Balloon for wrecking purposes .....	J. W. Powers .....	284,667	Sept. 11	619	174	24	1015
Balloon or aerial machine .....	A. Debayoux .....	282,060	July 31	2171	596	24	402
Baluster .....	W. J. Tait .....	278,200	May 22	2067	570	23	2002
Band-cutter .....	J. Allen .....	287,212	Oct. 23	1817	498	25	348
Band-cutter .....	W. B. Bowers .....	274,707	Mar. 27	1889	526	23	1183
Band-cutter .....	J. C. Burnes .....	275,463	Apr. 10	783	210	23	1368
Band-cutter .....	J. T. Shoup, Jr. ....	284,765	Sept. 11	750	208	24	1037
Band-cutter and feeder .....	C. B. Scherer .....	289,030	Nov. 27	1556	429	25	802
Bandage. Suspensory .....	C. F. Ware .....	286,657	Oct. 16	1103	297	25	216
Banjo .....	E. J. Cubley .....	274,915	Apr. 3	35	9	23	1232
Banjo .....	A. Lopes .....	280,839	July 10	626	176	24	116
Banjo .....	H. McCord .....	279,172	June 12	709	193	23	2254
Banjo .....	H. McCord .....	279,173	June 12	709	193	23	2254
Banjo .....	H. McCord .....	283,352	Aug. 14	1065	300	24	699
Banjo .....	T. Williams .....	288,905	Nov. 20	1396	385	25	767
Banjo-heads. Device for tightening .....	H. C. Tallmadge .....	288,679	Nov. 20	1125	309	25	718
Banjo tail-piece .....	W. A. Scollay .....	283,519	Aug. 21	1970	355	24	741
Bank-book. Depositor's .....	E. T. Moulton .....	287,045	Oct. 23	1602	441	25	309
Banker's case, note-book, &c. ....	J. Casey .....	283,965	Aug. 28	1810	512	24	853
Bar:							
<i>See</i> Car draw-bar.	Mower and reaper cut-						
Chain-bar.	ter-bar.						
Claw-bar.	Mowing and reaping ma-						
Clothes-bar.	chine finger-bar.						
Cutter-bar.	Planing-machine presser-						
Draft-bar.	bar.						
Draw-bar.	Rail-joint splice-bar.						
Furnace fire-bar.	Railway-rail splice-bar.						
Furnace grate-bar.	Railway-splice-bar.						
Glazing-bar.	Sash-bar.						
Grate-bar.	Skylight-bar.						
Harvester cutter-	Sleigh draft-bar.						
bar.	Vehicle-seat bar.						
Harvester sickle-	Vehicle-spring center-						
bar.	bar.						
Bar and pipe cutter .....	C. W. Lane .....	280,487	July 3	190	50	24	35
Bar or toggle .....	G. E. Adams .....	273,792	Mar. 13	718	195	23	966
Bars, &c. Apparatus for compressing, surfacing, and straightening .....	J. L. Lewis .....	290,077	Dec. 11	874	248	25	1048
Bars. Device for bending and shaping the ends of .....	J. H. Dougherty .....	281,470	July 17	1416	389	24	262
Bars. Machine for bending and straightening .....	J. H. Wells .....	279,618	June 19	1252	347	23	2351
Barber's chair .....	E. Berninghaus .....	270,572	Jan. 16	920	265	23	197
Barber's chair .....	H. A. Candrian .....	285,109	Sept. 18	1175	329	24	1119
Barber's chair .....	A. N. Hornung .....	286,611	Oct. 16	1046	282	25	206
Barber's chair register .....	F. G. Lane .....	282,332	July 31	2533	604	24	462
Bark-conveyer .....	O. A. Lane .....	276,605	May 1	77	21	23	1641
Bark-cutter .....	J. Daignean .....	278,686	June 5	33	4	23	2127
Bark-mill .....	L. Reed .....	282,771	Aug. 7	358	101	24	562
Barn. Stock .....	B. Walton .....	288,896	Nov. 20	1388	383	25	765
Barrel .....	J. B. Bennette .....	284,267	Sept. 4	136	38	24	928
Barrel .....	J. Kantz .....	273,853	Mar. 13	795	216	23	970
Barrel .....	I. Swope .....	285,320	Sept. 18	1417	400	24	1163
Barrel-adjuster .....	W. E. Foreman .....	272,227	Feb. 13	797	222	23	590
Barrel-cover .....	H. C. Barnes .....	280,206	Nov. 27	1770	491	25	841
Barrel-cover .....	M. F. James .....	276,045	Apr. 17	1515	417	23	1502
Barrel-cover .....	F. G. Lane .....	278,563	May 29	2547	694	23	2093
Barrel-cover. Expandible .....	A. Swoboda .....	276,670	May 29	2677	733	23	2116
Barrel crozing, chamfering, and howeling machine .....	T. C. Seaman .....	284,245	Sept. 4	114	31	24	923
Barrel-finishing machine .....	W. L. Field .....	283,477	Aug. 21	1219	343	24	732
Barrel-former .....	T. L. Lee .....	290,334	Dec. 18	1197	335	25	1113
Barrel-head cutter .....	W. J. Smith .....	271,934	Feb. 6	425	116	23	515
Barrel-head fastenings. Tool for applying .....	F. L. Tetamore and S. E. Fordham .....	284,923	Sept. 11	934	263	24	1070
Barrel-head holder .....	J. Wado .....	273,646	Mar. 6	521	140	23	923
Barrel-head-strengthening device .....	J. C. Keefe .....	284,022	Aug. 28	1903	533	24	867
Barrel-heater .....	S. Anson .....	271,763	Feb. 6	214	59	23	477
Barrel-heater .....	M. C. Dann .....	288,213	Nov. 13	522	145	25	608
Barrel-heater .....	A. R. Hynson .....	284,018	Aug. 28	1899	532	24	867
Barrel-heater .....	P. Weidmann .....	282,814	Aug. 7	404	114	24	571
Barrel. Knockdown fruit .....	C. E. Bartram .....	281,230	July 17	1111	306	24	210
Barrel-lining .....	P. Uyrich .....	290,721	Dec. 25	1722	475	25	1212
Barrel-making machine .....	J. Massie .....	285,285	Sept. 18	1378	389	24	1156
Barrel-making machine .....	J. S. O'Sullivan .....	275,072	Apr. 3	251	69, 70	23	1269
Barrel. Metallic coal-oil .....	J. W. Cuthbertson .....	284,950	Sept. 11	970	272	24	1077
Barrel or bin. Tilting .....	A. M. Herman .....	281,506	July 17	1458	400	24	269
Barrel-pitching machine .....	F. Wullen and C. Mayser .....	270,272	Jan. 9	524	154	23	113
Barrel-rack for storing and aging whisky .....	J. McMurry and C. M. Johnson .....	271,892	Feb. 6	368	102	23	506
Barrel-trussing machine .....	W. L. Field .....	283,476	Aug. 21	1218	342	24	732
Barrel. Ventilated .....	T. L. Lee .....	290,335	Dec. 18	1198	336	25	1114
Barrels. Fastener for retaining the heads and bottoms in .....	F. L. Tetamore and S. E. Fordham .....	275,544	Apr. 10	890	240	23	1386
Barrels. Process of and apparatus for setting up double-stave .....	M. C. Dann .....	289,393	Dec. 4	25	8	25	891
Base-ball .....	A. W. Boynton .....	288,766	Nov. 20	1236	338	25	737



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Base-ball.....	S. D. Castle.....	281,238	July 17	1124	310	24	212
Base-ball.....	B. F. Shibe.....	272,984	Feb. 27	1778	497	23	772
Base-balls. Manufacture of.....	T. P. Taylor.....	277,809	May 15	1582	432	23	1911
Base-burning boiler. Portable.....	A. H. Fowler.....	271,621	Feb. 6	46	11, 12	23	449
Basin and water-closet valve.....	H. Smith.....	289,937	Dec. 11	701	197	25	1016
Basin. Catch.....	T. Gallat.....	279,374	June 12	963	267	23	2296
Basin for ships. Self-leveling.....	D. Wellington.....	270,525	Jan. 9	858	250	23	178
Basin. Wash.....	J. Benner.....	289,496	Dec. 4	158	43	25	914
Basin. Wash.....	A. C. Hawes.....	279,943	June 26	1647	461	23	2425
Basin. Enameled iron wash.....	J. C. Milligan and J. Chaumont.....	285,645	Sept. 25	1811	515	24	1241
Basket.....	W. F. Benedict.....	278,856	June 5	252	73	23	2166
Basket.....	J. H. Marvel.....	273,864	Mar. 13	812	220	23	981
Basket. Clothes.....	C. Ferguson.....	276,377	Apr. 24	1940	537	23	1582
Basket. Folding.....	H. T. Morse.....	288,654	Nov. 20	1091	299	25	712
Basket-handle.....	J. H. McConnell and M. W. Chandler.....	281,900	July 24	1975	541	24	363
Basket. Wicker.....	J. J. Hallock.....	282,516	Aug. 7	48	14	24	508
Basket. Wire.....	W. J. Moore.....	286,952	Oct. 16	1478	406	25	281
Bat and ball. Combined.....	W. L. Sweeten.....	286,570	Oct. 9	987	266	25	190
Bat-gathering attachment for cotton-condensers.....	F. C. Mann.....	271,488	Jan. 30	2072	597	23	414
Bath: See Portable bath. Swimming-bath. Steam bath. Vapor bath.							
Bath and wash tub.....	L. J. Groem.....	289,345	Nov. 27	1932	537	25	873
Bath-room.....	J. C. McLaughlin.....	275,837	Apr. 17	1271	349	23	1458
Bath-tub attachment.....	G. P. Bassett.....	285,378	Sept. 25	1495	421	24	1182
Bath-tub. Folding or cabinet.....	F. H. Fickett and J. W. Reid.....	281,255	July 17	1149	317	24	216
Bath-tub overflow-connection.....	A. P. Creque.....	286,270	Oct. 9	600	165	25	120
Bathing apparatus and commode. Combined.....	Q. S. Backus.....	275,011	Apr. 3	168	45	23	1254
Bathing apparatus. Vapor-generator for.....	H. T. Willis.....	286,666	Oct. 16	1113	300	25	218
Bathing-garment.....	L. Weil.....	286,660	Oct. 16	1105	298	25	216
Battery: See Chloride-of-silver Secondary or storage bat- Electric battery. tery. Galvanic battery. Storage battery. Secondary battery. Thermo-electric battery. Secondary electric Voltaic battery. battery.							
Battery box or vessel.....	E. T. Starr.....	282,795	Aug. 7	385	109	24	568
Battery-plate.....	W. Taylor and F. King.....	290,611	Dec. 18	1572	432	25	1178
Battery-screen.....	J. G. Avery.....	284,735	Sept. 11	713	199	24	1031
Batting. Fibrous.....	D. Goff.....	271,624	Feb. 6	50	13	23	449
Batting. Machine for rolling cotton.....	W. Hinchliffe.....	276,402	Apr. 24	1972	546	23	1588
Beading-tool.....	J. A. Traut.....	284,777	Sept. 11	764	213	24	1040
Beamer.....	E. Cadigan.....	278,873	June 5	273	79	23	2170
Bean-sorting machine.....	C. N. Keeney.....	279,953	June 26	1657	465	23	2427
Beans. Staddle for drying.....	R. S. Morse.....	270,970	Jan. 23	1419	408	23	293
Bearing. Adjustable anti-friction.....	G. A. and A. N. Parnall.....	290,001	Dec. 18	1559	429	25	1176
Bearing. Anti-friction.....	J. G. Avery.....	287,215	Oct. 23	1820	499	25	349
Bearing. Anti-friction.....	H. G. Yates.....	281,950	July 24	2032	556	24	373
Bearing. Anti-frictional.....	T. R. Ferrall.....	279,552	June 19	1184	327	23	2339
Bearing-plate.....	J. B. Armstrong.....	289,597	Dec. 4	284	79	25	937
Bearing. Self-lubricating.....	T. R. Ferrall.....	272,869	Feb. 27	1643	459	23	750
Bed and spring. Spring.....	J. H. Shields.....	273,401	Mar. 6	209	56	23	869
Bed. Atmospheric.....	E. Blochman and G. R. Evans.....	272,116	Feb. 13	669	182	23	567
Bed attachment.....	W. T. Fuson.....	277,563	May 15	1299	349	23	1861
Bed-bottom.....	M. E. Graves.....	278,330	May 29	2259	619	23	2042
Bed-bottom.....	E. A. Haight and D. Williams.....	272,950	Feb. 27	1747	488	23	766
Bed-bottom.....	A. F. Miller.....	290,087	Dec. 11	886	251	25	1050
Bed-bottom.....	H. A. Mueller.....	272,076	Feb. 13	611	166	23	558
Bed-bottom.....	S. E. Moore.....	275,690	Apr. 10	1073	292	23	1418
Bed-bottom.....	H. Roberts.....	275,523	Apr. 10	865	234	23	1352
Bed-bottom. Adjustable.....	J. W. Ogden.....	272,973	Feb. 27	1765	494	23	770
Bed-bottom. Folding spring.....	C. L. Mills.....	277,323	May 8	1012	271	23	1806
Bed-bottom spring.....	C. L. Mills.....	277,322	May 8	1011	271	23	1806
Bed-bottom. Spring.....	J. and R. Ainslie.....	277,652	May 15	1405	378	23	1879
Bed-bottom. Spring.....	A. Q. Allis.....	286,166	Oct. 9	473	131	25	99
Bed-bottom. Spring.....	I. Bair.....	289,493	Dec. 4	155	42	25	913
Bed-bottom. Spring.....	G. W. Fishering.....	275,476	Apr. 10	807	218	23	1372
Bed-bottom. Spring.....	C. H. Fitch.....	274,925	Apr. 3	48	13	23	1234
Bed-bottom. Spring.....	P. Fraser.....	288,223	Nov. 13	535	148	25	610
Bed-bottom. Spring.....	J. A. Gipe.....	273,063	Feb. 27	1871	525	23	789
Bed-bottom. Spring.....	E. W. Grafton.....	287,120	Oct. 23	1697	465	25	328
Bed-bottom. Spring.....	J. V. Gray.....	270,949	Jan. 23	1390	401	23	289
Bed-bottom. Spring.....	H. B. Howard.....	274,331	Mar. 20	1400	384	23	1090
Bed-bottom. Spring.....	A. L. Jaynes.....	275,661	Apr. 10	1046	281	23	1412
Bed-bottom. Spring.....	G. and A. Keenholts.....	270,811	Jan. 16	1219	351	23	253
Bed-bottom. Spring.....	J. M. Keith.....	275,668	Apr. 10	1049	284	23	1413
Bed-bottom. Spring.....	P. H. Keschberg.....	275,497	Apr. 10	830	225	23	1376
Bed-bottom. Spring.....	E. D. Laraway.....	283,903	Aug. 24	1731	482	24	836
Bed-bottom. Spring.....	E. D. Laraway.....	283,904	Aug. 28	1734	489	24	837
Bed-bottom. Spring.....	J. McPeck.....	275,928	Apr. 17	1376	379	23	1478
Bed-bottom. Spring.....	C. J. Mengel.....	282,746	Aug. 7	330	94	24	558
Bed-bottom. Spring.....	A. F. Purefoy.....	278,362	May 29	2305	631	23	2651
Bed-bottom. Spring.....	A. F. Purefoy.....	279,013	June 5	486	133	23	2206
Bed-bottom. Spring.....	D. Renshaw.....	271,517	Jan. 30	2108	606	23	420
Bed-bottom. Spring.....	D. Renshaw.....	274,823	Mar. 27	2022	593	23	1206
Bed-bottom. Spring.....	W. H. Shipman.....	272,167	Feb. 13	722	199	23	577
Bed-bottom. Spring.....	F. Spoehr.....	276,918	May 1	489	128	23	1711

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. 5	Vol.	Page.
Bed-bottom. Spring	W. D. Strowger	271,945	Feb. 6	435	119	23	517
Bed-bottom. Spring	S. P. Whitcomb	288,533	Nov. 13	939	256	25	679
Bed-bottom. Spring	J. D. Wilkinson	285,331	Sept. 18	1429	404	24	1165
Bed-bottom. Spring	J. Wishard	273,660	Mar. 6	535	144	23	925
Bed-bottoms. Device for stretching	I. Lorenzen	272,721	Feb. 20	1432	401	23	706
Bed-canopy. Folding	A. Steveley	277,372	May 8	1064	286	23	1816
Bed. Convertible sofa	R. E. Hammer	278,136	May 22	1984	545	23	1987
Bed. Cot	C. F. C. Hahn	290,418	Dec. 18	1308	364	25	1132
Bed. Cot	C. T. Segar	281,930	July 24	2008	550	24	369
Bed-coverings, &c. Manufacture of	T. M. Willey	274,690	Mar. 27	1869	521	23	1180
Bed. Folding	A. A. Allen	271,760	Feb. 6	209	58	23	476
Bed. Folding	L. Leeds	278,564	May 29	2547	694 695	23	2093
Bed. Folding	S. Lude	271,485	Jan. 30	2069	596	23	413
Bed. Folding	D. J. Powers	276,464	Apr. 24	2048	569	23	1601
Bed. Folding	C. Williams	272,502	Feb. 20	1158	325	23	657
Bed. Invalid	J. J. Bowker	277,208	May 8	876	232	23	1782
Bed. Invalid	A. P. Fobes	270,046	Jan. 2	257	74	23	52
Bed-lounge	F. Rentschler	287,165	Oct. 23	1751	480	25	338
Bed-lounge	N. H. Van Winkle	272,991	Feb. 27	1784	500	23	773
Bed-lounge	G. Weidemann	273,203	Feb. 27	2045	576	23	820
Bed or lounge. Folding	O. Stechhan	276,729	May 1	261	66	23	1669
Bed or pillow	E. Blochman and G. R. Evans	277,979	May 22	1787	487	23	1952
Bed-pan	F. Dickinson	280,360	July 3	25	7	24	7
Bed-rail-slat lock	J. H. Selby	275,718	Apr. 10	1106	302	23	1423
Bed-slat clamp	T. M. Sale	288,668	Nov. 20	1108	304	25	715
Bed-slat fastening	C. D. C. Bowers	277,541	May 15	1272	341	23	1857
Bed-slats. Device for fastening springs to	C. L. Ames and A. H. Frost	276,548	May 1	2	1	23	1627
Bed. Sofa	A. S. Burnham	278,870	June 5	870	78	23	2169
Bed. Sofa	B. F. Farrar	278,004	May 22	1823	498	23	1959
Bed. Sofa	W. D. Fisher	273,352	Mar. 6	149	41	23	859
Bed. Sofa	A. Häslar	277,721	May 15	1479	400	23	1892
Bed. Sofa	H. R. Plimpton	271,919	Feb. 6	407	110 111	23	512
Bed. Sofa and lounge	R. O. Peirce	274,368	Mar. 20	1448	397	23	1099
Bed. Spring	J. J. McCormack	270,453	Jan. 9	760	223	23	157
Bed. Spring	S. Pariseau	281,789	July 24	1898	502	24	338
Bed. Spring	W. Price	280,762	July 3	522	146	24	92
Bed. Spring	C. D. Rodebaugh	279,188	June 12	724	198	23	2257
Bed. Spring	G. Wenzell	277,639	May 15	1387	374	23	1876
Bed-spring	W. M. Davis	277,121	May 8	771	203	23	1764
Bed-spring	J. U. Fiester	279,731	June 19	1387	387	23	2374
Bed-spring	B. H. Hickok	276,818	May 1	367	97	23	1690
Bed-spring	E. A. Jones	276,421	Apr. 24	1993	552	23	1591
Bed-spring	J. A. Kienardt	277,136	May 8	797	209	23	1768
Bed-spring	P. R. Philles	270,110	Jan. 2	324	95	23	66
Bed, &c., spring	S. F. Seely	276,901	May 1	471	124	23	1708
Bed-spring	C. Slack	290,126	Dec. 11	932	264	25	1059
Bed-spring	J. Watters	271,534	Jan. 30	2149	619	23	427
Bed-spring cover	D. S. Clark	269,918	Jan. 2	111	33	23	23
Bed. Wardrobe	H. S. Hale	277,566	May 15	1302	350	23	1861
Bedstead	J. A. D'Arman	284,617	Sept. 11	561	159	24	1005
Bedstead	J. T. Dettler	275,894	Apr. 17	1339	369	23	1471
Bedstead	G. W. Ellis	277,470	May 15	1187	318	23	1843
Bedstead	G. Gentle	275,187	Apr. 3	395	108	23	1294
Bedstead	H. A. Mueller	272,077	Feb. 13	613	166	23	558
Bedstead	W. J. Myers	272,078	Feb. 13	615	167	23	558
Bedstead	W. S. Winterbottom and J. Murray	280,704	July 3	439	125	24	78
Bedstead and table. Interconvertible	A. L. and C. A. Warner	277,637	May 15	1386	374	23	1876
Bedstead. Cabinet	F. C. Payne	279,426	June 12	1024	284	23	2305
Bedstead-fastening	C. H. Goebel	270,051	Jan. 2	262	75	23	54
Bedstead-fastening	H. E. Swift	271,996	Feb. 6	508	136	23	523
Bedstead-fastening	B. A. Wilton	278,649	May 29	2653	726	23	2112
Bedstead. Folding	H. C. Bardwell	276,212	Apr. 24	1724	477	23	1546
Bedstead. Folding	A. Hodgson	283,485	Aug. 21	1236	347	24	735
Bedstead. Folding	R. F. Meissner	277,046	May 8	672	175	23	1747
Bedstead. Folding	V. A. Menuez	277,501	May 15	1222	329	23	1840
Bedstead. Folding	J. M. Montgomery, Jr.	276,859	May 1	417	111	23	1699
Bedstead. Folding	T. T. Woodruff	276,546	Apr. 24	2148	598	23	1618
Bedstead. Invalid	G. E. Sargent	274,392	Mar. 20	1477	406	23	1104
Bedstead. Invalid	J. Q. A. Sargent	270,912	Jan. 23	1343	387	23	921
Bedstead. Invalid	R. T. White	276,515	Apr. 24	2108	586	23	1612
Bedstead-slat supporter	C. M. Woodin	273,332	Mar. 6	120	34	23	854
Bedstead. Sofa	T. Coleman	283,210	Aug. 14	881	246	24	664
Bedstead. Sofa	C. V. Stumpf	276,501	Apr. 24	2092	581	23	1609
Bedstead. Wardrobe	J. J. Adgate	269,985	Jan. 2	190	55	23	40
Bedstead. Wardrobe	J. J. Adgate	273,424	Mar. 6	236	64	23	874
Bedstead. Wardrobe	W. Donoghue	273,480	Mar. 6	309	84	23	886
Bedstead. Wardrobe	R. F. Meissner	270,327	Jan. 9	595	175 176	23	126
Bedstead. Wardrobe	J. Ruebsamen	274,226	Mar. 20	1263	349	23	1067
Bedstead. Wardrobe	F. Schmidt	281,144	July 10	993	277	24	182
Bedsteads, &c. Slat-support for	J. W. Hammerschmidt	275,202	Apr. 3	416	114	23	1298
Bee-hive	D. Bailey	283,554	Aug. 21	1307	366	24	748
Bee-hive	C. H. Bernheim	280,560	July 3	268	73	24	48
Bee-hive	G. Briggs	280,126	June 26	1861	525	23	2464
Bee-hive	J. H. Burrage	279,856	June 19	1533	428	23	2399
Bee-hive	A. F. Combs	275,328	Apr. 3	567	154	23	1322
Bee-hive	J. T. Denny	282,284	July 31	2460	678	24	450
Bee-hive	J. T. Fife and L. E. Mercer	271,197	Jan. 23	1693	489	23	337
Bee-hive	G. S. Fisk and H. K. Vergason	273,674	Mar. 6	558	148	23	929
Bee-hive	A. Fraley	290,022	Dec. 11	810	228	25	1036
Bee-hive	J. H. French	281,483	July 17	1436	393	24	265
Bee-hive	R. H. J. Hildreth	270,666	Jan. 16	1040	298	23	219



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Bee-hive .....	G. K. Hubbard .....	270,803	Jan. 16	1208	{ 348 349 }	23	252
Bee-hive .....	E. H. Key .....	273,691	Mar. 6	580	154	23	933
Bee-hive .....	N. Lloyd, Sr. ....	284,312	Sept. 4	190	54	24	937
Bee-hive .....	E. Meyer .....	289,683	Dec. 4	385	{ 110 111 }	25	954
Bee-hive .....	J. Phillips .....	272,975	Feb. 27	1769	495	23	770
Bee-hives. Moth-catcher for .....	I. Q. Holmes .....	284,014	Aug. 28	1894	531	24	866
Beer, &c. Air-pressure apparatus for forcing .....	W. T. Fox .....	270,944	Jan. 23	1384	400	23	288
Beer. Apparatus for regulating the fermentation of .....	C. Schunck .....	276,083	Apr. 17	1559	430	23	1509
Beer barrels, casks, &c. Device for tapping .....	P. Pauly .....	285,065	Sept. 18	1122	314	24	1110
Beer-chip .....	B. Rice .....	279,019	June 5	496	134	23	2307
Beer-chip .....	B. Rice .....	286,637	Oct. 16	1080	291	25	212
Beer-chip cutting and reaming machine .....	B. Rice .....	280,952	July 10	764	212	24	140
Beer-cooler .....	F. Richter .....	270,844	Jan. 16	1256	362	23	260
Beer-cooler. Swimming .....	J. Schathaus .....	280,405	July 3	81	22	24	17
Beer-cooling apparatus .....	W. Nussbeck .....	276,870	May 1	434	115	23	1702
Beer-cooling device .....	E. Sauser and M. Haller .....	289,717	Dec. 4	437	122	25	963
Beer-forcing apparatus .....	G. Engel .....	275,756	Apr. 10	1161	319	23	1432
Beer. Hermetic apparatus for racking .....	J. Pusch .....	274,516	Mar. 27	1665	463	23	1142
Beer. Process of and apparatus for brewing .....	J. J. Metzler .....	276,617	May 1	88	24	23	1643
Beer. Process of and apparatus for preserving and venting .....	P. Brady .....	281,963	July 24	2052	562	24	376
Beer, sirup, and distilled liquor. Manufacturing .....	A. E. and W. E. Feroe .....	282,619	Aug. 7	173	52	24	531
Bell .....	L. E. Clark .....	287,238	Oct. 23	1850	506	25	354
Bell .....	J. F. Wollensak .....	281,747	July 24	1775	483	24	327
Bell and fire-alarm system. Combined call .....	C. E. Bnell .....	286,529	Oct. 9	934	{ 251 252 }	25	180
Bell attachment. Sleigh .....	G. W. Goff .....	280,305	June 26	2078	585	23	2503
Bell. Bicycle .....	H. B. Hart .....	275,485	Apr. 10	816	221	23	1374
Bell. Bicycle .....	E. M. Senceney .....	279,448	June 12	1052	291	23	2310
Bell. Call .....	A. H. Jones .....	277,741	May 15	1500	407	23	1896
Bell. Call .....	A. H. Jones .....	280,748	July 3	500	142	24	89
Bell. Car .....	D. R. Hart and J. B. Geach .....	273,358	Mar. 6	156	44	23	861
Bell-cord coupling .....	C. H. Tunney .....	276,705	Jan. 16	1093	313	23	228
Bell. Door .....	E. S. Bloomfield, Jr. ....	289,804	Dec. 11	538	150	25	967
Bell. Door .....	W. S. Foster .....	279,370	June 12	959	266	23	2295
Bell. Door .....	E. Lawson .....	286,714	Oct. 16	1181	318	25	229
Bell. Door .....	W. Scranton .....	272,336	Feb. 13	929	258	23	613
Bell. Electric .....	C. F. De Redon .....	274,573	Mar. 27	1731	481	23	1154
Bell for bicycles. Alarm .....	H. Serrell .....	285,933	Oct. 2	201	56	25	39
Bell. Gong .....	H. W. Barnes .....	286,169	Oct. 9	476	131	25	99
Bell. Gong .....	W. S. Foster .....	280,924	July 10	734	203	24	134
Bell. Gong .....	G. B. Owen. (Reissue) .....	10,348	July 3	550	153	24	97
Bell. Horse .....	A. D. Jacobus .....	278,709	June 5	43	13	23	2132
Bell. Letter-box .....	J. K. Ross .....	269,961	Jan. 2	165	48	23	35
Bell. Pneumatic door .....	R. P. Garsed .....	282,186	July 31	2351	648	24	429
Bell. Polarized electric .....	W. J. Bowen .....	288,202	Nov. 13	512	142	25	005
Bell-pull .....	J. B. Boyle .....	285,961	Oct. 2	232	65	25	44
Bell-pull. Electric .....	F. J. Wall .....	282,246	July 31	2421	666	24	443
Bell-ringer. Steam .....	E. Lawson .....	276,185	Apr. 24	1690	467	23	1540
Bell-ringing apparatus. Pneumatic .....	R. Latowski .....	284,311	Sept. 4	189	54	24	936
Bell. Sleigh .....	G. W. McClintock .....	282,344	July 31	2547	698	24	465
Bell. Street-car .....	J. T. Marett .....	284,032	Aug. 28	1912	536	24	869
Belt and bucket elevator .....	P. Okell .....	277,774	May 15	1546	420	23	1905
Belt conveyer. Endless .....	W. R. Fowler .....	274,306	Mar. 20	1366	{ 374 375 }	23	1084
Belt conveyer. Endless .....	E. H. Parker and C. Robinson .....	284,324	Sept. 4	205	57	24	939
Belt-coupling .....	C. Eihee .....	275,896	Apr. 17	1342	369	23	1472
Belt-coupling .....	A. Johnston .....	280,186	June 26	1923	541	23	2475
Belt. Driving .....	C. C. Campbell .....	277,678	May 15	1432	386	23	1884
Belt. Electro-galvanic .....	G. E. Palmer .....	279,881	June 19	1561	436	23	2405
Belt-fastener .....	J. Bachmann .....	285,543	Sept. 25	1690	476	24	1218
Belt-fastener .....	H. Blake .....	282,258	July 31	2433	669	24	445
Belt-fastener .....	S. Budlong and W. O. Talcott .....	278,393	May 29	2340	640	23	2057
Belt-fastener .....	J. B. Conrad .....	279,716	June 19	1368	382	23	2371
Belt-fastener .....	H. C. Hart .....	272,685	Feb. 20	1387	389	23	697
Belt-fastener .....	H. C. Hart .....	281,058	July 10	885	246	24	164
Belt-fastener .....	H. Heaton .....	289,414	Dec. 4	50	14	25	895
Belt-fastener .....	C. I. Humphreys .....	270,673	Jan. 16	1050	300	23	221
Belt-fastener .....	D. Lovejoy .....	284,868	Sept. 11	870	244	24	1058
Belt-fastener .....	L. A. Roberts .....	286,072	Oct. 2	362	100	25	66
Belt-fastener .....	W. F. Wilkins .....	271,010	Jan. 23	1468	422	23	301
Belt-fastening .....	E. Maynz .....	281,708	July 24	1724	468	24	318
Belt-fastening .....	J. B. Norton .....	289,926	Dec. 11	692	194	25	1014
Belt-fastening .....	W. L. Potter .....	270,117	Jan. 2	333	98	23	67
Belt-fastening .....	M. A. Nye .....	276,620	May 1	93	25	23	1643
Belt-gearing .....	J. Rittig .....	276,078	Apr. 17	1552	428	23	1509
Belt-joint .....	A. H. Kennedy .....	287,297	Oct. 23	1924	526	25	368
Belt-replacer .....	E. L. Liedke .....	277,909	May 22	1705	465	23	1939
Belt-roller. Endless .....	G. W. Emerson .....	289,793	Dec. 4	520	144	25	976
Belt-shifter .....	R. S. Bacon .....	280,282	June 26	2045	575	23	2497
Belt-shifter .....	G. H. Motley .....	280,847	July 10	634	178	24	118
Belt-shifter .....	W. R. Santley .....	285,683	Sept. 25	1855	529	24	1249
Belt-shifter for elevators. Automatic .....	F. W. Fuller .....	280,674	Dec. 25	1652	455	25	1198
Belt-suspending device .....	J. M. Estabrook .....	280,219	Dec. 18	1050	295	25	1069
Belt-tie .....	C. Kennedy .....	283,491	Aug. 21	1241	348	24	736
Belt-tightener .....	A. Box .....	283,856	Aug. 28	1675	473	24	827
Belt-tightener .....	J. B. Conlan .....	282,500	Aug. 7	29	8	24	505
Belt-tightener .....	S. Kryzki .....	288,579	Nov. 13	994	274	25	690
Belt-tightener .....	J. Withington .....	280,276	June 26	2041	574	23	2496
Belt-tightener .....	G. H. Zschech .....	284,703	Sept. 11	671	189	24	1024
Belt-tightener. Automatic .....	F. W. Coddington .....	283,572	Aug. 21	1336	373	24	753

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Belts and preventing their slipping. Compound for preserving	W. H. Durkee	277,017	May 8	633		23	1740
Belts and pulleys. Operating	R. J. Olivey	289,440	Dec. 4	81	23	25	901
Belts and pulleys. Operating	R. J. Olivey	289,441	Dec. 4	82	23	25	901
Belts, &c. Mechanism for making	E. Brown	279,219	June 12	754	208	23	2262
Belts on shafting. Mechanism for preventing the lapping of	W. Hayes, Jr.	272,687	Feb. 20	1390	390	23	698
Belts. Tool for connecting and disconnecting the ends of	G. H. Clark	287,417	Oct. 30	2072	563	25	402
Belting	E. M. Cross	274,280	Mar. 20	1331	367	23	1079
Belting	B. F. Goodrich	270,303	Jan. 9	562	165	23	120
Belting	J. Murphy	284,221	Sept. 4	84	23	24	919
Belting	J. K. Tullis	290,147	Dec. 11	954	270	25	1063
Belting. Device for joining the ends of leather	J. J. Brislin	272,523	Feb. 20	1182	330	23	661
Belting. Manufacture of	J. J. Haley	271,629	Feb. 6	59	16	23	450
Belting. Manufacture of	J. J. Haley	271,630	Feb. 6	60	17	23	450
Bench: See Shoe-maker's bench. Work-bench.							
Bench-clamp	T. Crispin	282,961	Aug. 14	577	163	24	610
Bench-dog	W. H. Stanuand	282,792	Aug. 7	382	108	24	567
Bench-plate socket	J. H. Buckley	277,675	May 15	1429	385	23	1883
Berth. Automatic ship's	W. T. Milligan	277,321	May 8	1008	270	23	1806
Berth-guard for sleeping-cars	H. S. Billings	272,520	Feb. 20	1179	329	23	661
Berth-lock for sleeping-cars	J. Kirby, Jr.	271,867	Feb. 6	341	94	23	500
Berth. Self-leveling	A. P. Bickmore	276,341	Apr. 24	1898	526	23	1575
Berth. Self-leveling	J. H. Laskey	270,084	Jan. 2	298	89	23	61
Berth. Self-leveling	J. H. Laskey	288,822	Nov. 20	1300	356	25	748
Berth. Self-leveling	F. Lebacqz	282,649	Aug. 7	209	61	24	536
Berth. Self-leveling	B. F. Merrill	284,879	Sept. 11	882	248	24	1061
Berth. Self-leveling	C. A. Milligan and M. J. Killion	273,581	Mar. 6	442	119	23	910
Berth. Self-leveling	L. D. Newell	276,867	May 1	430	115	23	1702
Berth. Self-leveling	J. H. Porter	276,874	May 1	436	117	23	1703
Berth. Self-leveling	J. H. and E. F. Porter	278,732	June 5	73	22	23	2137
Berth. Self-leveling ship's	D. Parks	280,233	June 26	1986	558	23	2486
Berth. Self-leveling ship's	W. Wells	280,977	July 10	792	220	24	145
Berth. Sleeping-car	A. Davis	279,137	June 12	670	184	23	2948
Berths. Counter-balance for folding steps for	S. D. Castle and A. Skaats	286,998	Oct. 23	1540	424	25	297
Berths. Governor for swinging	W. Wells	279,619	June 19	1253	347	23	2351
Berths. Swinging arm for securing folding steps to movable	S. D. Castle and A. Skaats	285,569	Sept. 25	1717	485	24	1223
Bessemer converter	S. G. Thomas	274,055	Mar. 13	1030	282	23	1019
Bessemer plant	W. Hainsworth	272,683	Feb. 20	1383	389	23	697
Bessemer plant	W. Hainsworth	284,005	Aug. 28	1882	528	24	864
Bessemer process. Basic	J. Reese	278,363	May 29	2308		23	2052
Betanaphthol. Production of sulpho-acid compound of	H. Endemann	277,864	May 15	1649		23	1923
Bevel	L. S. Starrett	289,463	Dec. 4	106	31	25	905
Bevel. Carpenter's	J. B. Cumming and B. F. Van Amringe.	278,405	May 29	2355	643	23	2060
Bevel. Carpenter's	C. E. Overend	282,560	Aug. 7	107	32	24	519
Bevel. Cooper's	J. F. Lonergan	270,086	Jan. 2	300	89	23	61
Beveling colters, &c. Machine for	R. C. Nugent	272,082	Feb. 13	620	168	23	559
Beveling-instrument	L. S. Starrett	282,583	Aug. 7	132	39	24	523
Beveling the edges of metal plates. Machine for	E. H. Johnston	275,666	Apr. 10	1046	283	23	1413
Beverages. Apparatus for rapidly cooling and straining mixed	W. J. Wright	272,506	Feb. 20	1165	326	23	658
Beverages. Treating unmaltd cereals for the manufacture of fermented	F. Licht	288,076	Nov. 6	355		25	568
Bicycle	J. Beale	280,558	July 3	263	71	24	48
Bicycle	J. B. Girard	281,489	July 17	1441	395	24	266
Bicycle	W. S. Hamby	290,576	Dec. 18	1528	421	25	1171
Bicycle	H. Kellogg	283,612	Aug. 21	1374	384	24	761
Bicycle	D. Kennedy	287,943	Nov. 6	194	56, 57	25	541
Bicycle	W. Klahr	285,821	Oct. 2	46	15	25	10
Bicycle	E. G. Latta	280,633	July 3	354	98, 99	24	62
Bicycle	J. Lewis	286,835	Oct. 16	1330	363	25	256
Bicycle	R. S. and J. W. McCall	280,054	June 26	1783	500	23	2449
Bicycle	C. P. Padmore	288,849	Nov. 20	1333	365	25	754
Bicycle	S. A. Potter	287,717	Oct. 30	2472	666	25	480
Bicycle-lock	W. Kenfield and H. M. Stilwell	276,600	May 1	71	20	23	1640
Bicycle-saddle	T. J. Kirkpatrick	278,560	May 29	2541	693	23	2092
Bicycle-seat	J. L. Wilson	274,163	Mar. 20	1183	326	23	1053
Bicycle-spring	E. K. Hill	275,910	Apr. 17	1356	374	23	1474
Bicycle performances. Fire-wheel for	J. B. Elliott	288,413	Nov. 13	794	215	25	654
Bicycle riding-platform	J. B. Elliott	288,414	Nov. 13	795	216	25	654
Bicycle-saddle	H. B. Hart	285,891	Oct. 2	145	41	25	28
Bicycle-saddle	T. J. Kirkpatrick	289,272	Nov. 27	1838	507	25	854
Bicycle-seat	B. F. Peet	290,919	Dec. 25	1965	543	25	1254
Bicycles. Backbone-coupling for	R. C. Scherling	285,685	Sept. 25	1857	530	24	1249
Bicycles. Ball-bearing for	A. E. Schaaf	287,476	Oct. 30	2146	583	25	417
Bilge-water indicator	J. M. Fenerty	274,474	Mar. 27	1586	435	23	1131
Bill holder. Play-	P. J. Worn and P. A. O. Kober	296,757	Oct. 16	1231	332	25	238
Bill-journal	J. J. De Garis and T. L. Paine	289,514	Dec. 4	180	50	25	918
Billet and buckle fastener	C. A. Draper	289,816	Dec. 11	553	155	25	990
Billiard-ball	A. R. Kusche	275,923	Apr. 17	1371	377	23	1477
Billiard-cue	S. J. Gleason	278,934	June 5	394	108	23	2190
Billiard-cue	W. Zachringer	286,670	Oct. 16	1121	302	25	219
Billiard-cue clamp	C. Munzner	285,360	Sept. 18	1466	413	24	1171
Billiard-cue tips. Machine for fitting	T. Lomas	282,741	Aug. 7	326	93	24	557
Billiard-cue trimmer	W. B. Gwyn	284,548	Sept. 4	470	133	24	984



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. E.	Vol.	Page.
Billiard-cues. Attachment for holding tips on.....	D. Dessauer.....	270,402	Jan. 9	696	206	23	145
Billiard-cushion.....	S. De Gaetano. (Reissne).....	10,322	May 8	1142	307	23	1829
Billiard-cushion.....	S. May.....	283,129	Aug. 14	781	219	24	646
Billiard or pool tables. Pocket-fastening for.....	G. J. Bock.....	273,447	Mar. 6	267	72	23	878
Billiard-table.....	M. Ludwig.....	280,198	June 26	1939	545	23	2478
Billiard-table cushion.....	H. W. Collender.....	275,592	Apr. 10	942	256	23	1396
Billiard-table cushion.....	H. W. Collender.....	275,593	Apr. 10	944	256	23	1396
Billiard-table leveler.....	W. M. Dawson, R. A. Simpson, and L. S. Longcor.....	287,913	Nov. 6	155	45	25	535
Billiard-table leveler.....	T. Eubank.....	285,739	Sept. 25	1938	549	24	1262
Billiard-tables. Chalk-replacing device for Bin.....	F. R. Williams.....	282,476	July 31	2714	747	24	493
See Flour-bin. Lime-bin.							
Binder for pamphlets, &c.....	H. S. Williams.....	274,429	Mar. 20	1521	418	23	1112
Binder or holding device.....	W. R. Clough.....	272,620	Feb. 20	1347	373	23	691
Binder or holding device.....	W. R. Clough.....	276,001	Apr. 17	1460	402	23	1493
Binder. Self.....	W. N. Whiteley, W. Bayley, and L. H. Lee.....	274,071	Mar. 13	1058	292	23	1023
Bindor. Self.....	W. N. Whiteley, W. Bayley, and L. H. Lee.....	283,445	Aug. 21	1183	332 } 333 }	24	725
Binder. Temporary.....	A. S. Bunker.....	272,028	Feb. 13	552	149	23	548
Binder. Temporary.....	C. Jackson.....	282,527	Aug. 7	64	19	24	511
Binder. Temporary.....	O. C. Mackenzie.....	280,199	June 26	1941	545	23	2478
Binder. Temporary.....	E. J. Paxson.....	283,653	Aug. 21	1418	397	24	770
Binders. Knotting mechanism for self-binding-post.....	W. N. Whiteley and W. Bayley.....	274,870	Mar. 27	2084	579	23	1216
Bird-cage.....	W. R. Patterson.....	279,274	June 12	821	227	23	2274
Bird-cage bathing attachment.....	A. B. Hendryx.....	277,724	May 15	1481	401	23	1892
Bird-cage food-holder.....	S. P. Park.....	276,871	May 1	434	115	23	1703
Bird-cage spring.....	H. Ireland.....	270,071	Jan. 2	285	84	23	58
Bird-cage sunshade.....	W. D. Chapman.....	279,081	June 5	573	157	23	2222
Bird-perch.....	H. Bishop.....	290,838	Dec. 25	1867	516	25	1237
Bit.....	F. L. Gregory.....	276,392	Apr. 24	1962	543	23	1586
See Anger-bit. Expanding rose-bit.							
Boring-bit. Expansion-bit.							
Bridle-bit. Ronter-bit.							
Driving-bit.							
Bit.....	E. Hall.....	287,538	Oct. 30	2221	603	25	432
Bit-brace.....	J. Chantrell.....	284,276	Sept. 4	147	41	24	929
Bit-brace.....	E. C. Merryman.....	273,122	Feb. 27	1947	546	23	802
Bit-brace.....	J. Watson.....	288,748	Nov. 20	1215	332	25	733
Bit-brace and washer-cutter. Combined.....	I. W. Heysinger.....	286,610	Oct. 16	1042	282	25	206
Bit-brace fastening.....	E. E. Rose.....	275,860	Apr. 17	1300	357	23	1463
Bit-brace. Ratchet.....	W. R. Clarkson.....	286,388	Oct. 9	764	207	25	149
Bit-stock.....	C. H. Amidon.....	283,844	Aug. 28	1663	469	24	825
Bit-stock.....	W. J. Bayer.....	277,105	May 8	752	197	23	1760
Bit-stock.....	E. Buell.....	289,502	Dec. 4	165	45	25	915
Bit-stock.....	J. Chantrell.....	284,275	Sept. 4	145	40	24	929
Bit-stock.....	F. Grant.....	280,607	July 3	324	91	24	58
Bit-stock.....	W. A. Ives.....	270,072	Jan. 2	286	85	23	58
Bit-stock.....	G. C. Paine.....	286,840	Oct. 16	1336	365	25	257
Bit-stock.....	W. L. Parmelee.....	281,920	July 24	1997	547	24	367
Bit-stock.....	H. V. Smith.....	274,040	Mar. 13	1012	277	23	1016
Bit-stock.....	H. V. Smith.....	274,041	Mar. 13	1013	278	23	1016
Bits. Extension-shank for.....	C. Schoch.....	281,568	July 17	1530	419	24	280
Bitters. Tonic.....	H. Litz.....	289,673	Dec. 4	873	.....	25	952
Bituminous compounds. Apparatus for melting and mixing.....	B. D. Healey.....	277,277	May 8	952	256	23	1796
Blackboard.....	O. M. Mitchell.....	281,112	July 10	949	266	24	175
Blackboard.....	N. F. Potter and W. H. Fenner, Jr.....	290,651	Dec. 18	1617	.....	25	1186
Blackboard. Portable.....	K. W. Whittemore and L. J. Couch.....	288,145	Nov. 6	433	122	25	583
Blackboard-rubber.....	J. Dooner.....	283,870	Aug. 28	1695	477	24	830
Blackboard. School.....	H. Hamstein.....	276,010	May 22	1830	500	23	1960
Blacking apparatus and chair combined. Shoe.....	E. S. Farson.....	275,621	Apr. 10	991	263	23	1403
Blacking-box holder.....	F. N. Lacey.....	283,256	Aug. 14	942	263	24	675
Blacking-box holder.....	C. E. Skinner.....	283,428	Aug. 21	1166	327	24	722
Blacking case. Boot.....	F. J. Triggs.....	276,542	Apr. 24	2144	596	23	1617
Blacking frame. Boot.....	G. Irving, Jr.....	273,545	Mar. 6	394	105	23	901
Blacking. Water-proof preservative.....	J. A. Van Keuren.....	272,606	Feb. 20	1290	.....	23	680
Blacksmiths' fullers. Die for making.....	J. F. Duffy.....	277,468	May 15	1184	318	23	1843
Blank, form, &c. Printed.....	J. O. Cole.....	289,892	Dec. 11	653	181 } 182 }	25	1007
Blanket. Bed.....	J. Holland.....	271,461	Jan. 30	2039	587	23	408
Blanket-pin.....	S. F. Merritt.....	277,318	May 8	1004	269	23	1805
Blankets. Putting up.....	D. A. Swaney.....	287,394	Oct. 23	2041	555	25	388
Elast apparatus. Continuous.....	D. T. Porter.....	280,079	June 26	1812	510	23	2454
Elast-furnace.....	J. J. Fronheiser.....	282,512	Aug. 7	43	13	24	507
Elast-furnace.....	W. Kent.....	273,742	Mar. 13	647	172	23	953
Elast-furnace.....	P. L. Veimer.....	287,204	Oct. 23	1805	495	25	346
Elast-furnace for burning gaseous fuel.....	L. D. York.....	288,607	Nov. 13	1029	283	25	696
Elast-furnace plant.....	J. Reese.....	273,311	Mar. 6	87	26	23	849
Elast-furnaces. Apparatus for charging.....	F. W. Gordon.....	290,037	Dec. 11	828	234	25	1039
Elast-furnaces. Hot-blast stove for.....	C. Alger.....	289,952	Dec. 11	719	203	25	1019
Elast-furnaces. Hot-blast stove for.....	H. W. Ellicott.....	276,790	May 1	338	90	23	1685
Elast-furnaces. Water-bosh for.....	A. F. Wendt.....	277,638	May 15	1387	374	23	1876
Elast-pipe ventilator.....	J. Devine.....	270,182	Jan. 2	416	121	23	85
Elasting-needle.....	R. B. Platt.....	288,110	Nov. 6	398	112	25	576
Elasting out stumps.....	H. D. Van Campen.....	270,351	Jan. 9	624	184	23	132
Elasting. Self-setting tamp for.....	H. E. Dennett.....	282,061	July 31	2172	596	24	402
Elasting-tool.....	H. and L. Iwan.....	288,706	Nov. 20	1157	318	25	723
Bleaching and dyeing fibrous materials.....	A. Higgins and F. Wilkinson.....	273,078	Feb. 27	1885	529	23	791
Bleaching palm-oil, &c.....	B. T. Babbitt.....	281,823	July 24	1879	513	24	346
Bleaching threads and fabrics.....	L. A. Delaboue.....	280,141	June 26	1880	.....	23	2468
Blind.....	M. J. Bird.....	285,104	Sept. 18	1168	327	24	1118

## Alphabetical list of inventions—Continued.

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Blind and door spring.....	P. K. O'Lally.....	283,649	Aug. 31	1415	396	24	769
Blind and shutter.....	H. L. Page.....	287,712	Oct. 30	2466	664	25	478
Blind bars and slats. Frictional connection for window.	N. Edwards.....	280,156	June 26	1894	533	23	2470
Blind-fastener.....	A. C. Dunham.....	272,417	Feb. 20	1052	295	23	639
Blind for skylights.....	O. N. Medgarden.....	274,013	Mar. 13	986	270	23	1011
Blind, inside.....	W. Teuteberg.....	289,176	Nov. 27	1724	481	25	833
Blind-slat fastener.....	G. W. Soule.....	272,914	Feb. 27	1699	475	23	759
Blind-slat operator.....	F. Nelson.....	284,222	Sept. 4	85	24	24	919
Blind-slats. Machine for making.....	J. W. Brainard.....	283,372	Aug. 21	1098	309	24	710
Blind slats. Metallic pivot for window.....	B. F. Hall.....	279,379	June 12	971	269	23	2297
Blind-stop.....	G. Beverly.....	273,937	Mar. 13	900	246	23	995
Blind-stop.....	T. M. Brintnall.....	274,881	Mar. 27	2100	583	23	1218
Blind-stop.....	J. Hunt.....	275,492	Apr. 10	824	223	23	1375
Blind-stop.....	L. Tilton.....	277,381	May 8	1073	289	23	1817
Blind-stop.....	C. F. Vandervoort.....	279,111	June 5	632	171	23	2230
Blind support. Window.....	W. W. S. Orbeton.....	272,751	Feb. 20	1472	414	23	713
Blind. Venetian.....	J. S. Smith.....	279,835	June 19	1504	420	23	2395
Blind. Window.....	J. B. Hartman.....	289,832	Dec. 11	575	161	25	994
Blind. Window.....	J. Williams.....	275,557	Apr. 10	902	245	23	1388
Blind. Window.....	J. Williams.....	283,941	Aug. 28	1782	503	24	847
Block:							
See Brake-block. Railway-switch block.							
Building-block. Saw-mill head-block.							
Geometrical block. Seine purse-block.							
Harness-pad block. Snatch-block.							
Head-block. Stereotype-block.							
Paving-block. Toy block.							
Pillow-block. Toy building-block.							
Pulley-block.							
Block-facing machine.....	J. Y. Simons.....	287,478	Oct. 30	2148	584	25	418
Block or brick pressing machine.....	J. Benner.....	289,882	Dec. 11	638	177 178	25	1005
Blocks. Machine for consolidating loose materials into solid.....	J. H. Wagner.....	290,293	Dec. 18	1143	320 321	25	1104
Blocks, &c., out of asphalt, &c. Machine for the manufacture of.....	A. Dietz.....	289,397	Dec. 4	29	9, 10	25	892
Blood, or medical manipulator. Device for increasing the organic action of the.....	J. Rice.....	285,160	Sept. 18	1239	348	24	1130
Blotter.....	L. H. Binkley and T. H. Wright.....	289,608	Dec. 4	294	82, 83	25	939
Blotter.....	J. Q. Davis and N. O. Pyles.....	290,668	Dec. 25	1645	453	25	1197
Blotter, calendar, and rule. Combined.....	W. L. Caldwell.....	282,702	Aug. 7	266	80	24	549
Blower.....	W. S. Sharpneck.....	271,139	Jan. 23	1616	465	23	326
Blower.....	W. H. Wigmore.....	284,698	Sept. 11	665	187	24	1023
Blower.....	J. Woodruff.....	270,271	Jan. 9	524	154	23	113
Blower. Fan.....	C. Hammelmann.....	270,897	Jan. 23	1324	382	23	278
Blower for fire-places. Transparent.....	J. W. Edmonds.....	280,154	June 26	1893	533	23	2470
Blower. Grate.....	C. A. Preston.....	278,736	June 5	77	23	23	2137
Blower. Injector.....	P. H. Grimm.....	282,074	July 31	2190	601	24	405
Blower. Rotary fan.....	W. D. Smith.....	272,595	Feb. 20	1275	356	23	678
Blower. Steam.....	W. McClave.....	281,774	July 24	1815	496	24	335
Blowers, &c. Friction-lock for lever fan.....	J. W. Hiemenz.....	277,487	May 15	1206	324	23	1846
Blue. Manufacture for anthracene.....	H. Brunck.....	274,081	Mar. 13	1070	.....	23	1025
Board:							
See Blackboard. Marble-playing board.							
Bosom-board. Musical-instrument							
Bulletin-board. sounding-board.							
Center-board. Pastry-board.							
Cooling-board. Piano sounding-board.							
Dash-board. Plow mold-board.							
Electric switch-board. Pressing-board.							
Electric switch-board. Stove-board.							
Electric circuit switch-board. Tally-board.							
Electrical switch-board. Telephone switch-board.							
Electrical switch-board. Vehicle dash-board.							
Foot-board. Wash-board.							
Game-board. Water-closet splash-board.							
Ironing-board.							
Boat:							
See Canal-boat. Sectional boat.							
Dumping-boat. Self-hailing boat.							
Folding boat. Stern-wheel boat.							
Life-boat. Submarine boat.							
Outrigger-boat. Torpedo-boat.							
Row-boat. Towing-boat.							
Boat-cover. Detachable.....	J. H. Mansfield.....	277,146	May 8	806	212	23	1770
Boat-detaching apparatus.....	E. J. Hill and J. L. Clark.....	272,253	Feb. 13	827	231	23	506
Boat-detaching apparatus.....	R. Roberts.....	288,862	Nov. 20	1345	369	25	757
Boat-detaching apparatus.....	T. H. Sellers.....	275,529	Apr. 10	870	235	23	1383
Boat hoisting, detaching, and lowering.....	F. Vaughan.....	282,937	Aug. 7	544	154	24	597
Boat-hull.....	T. T. Hodson.....	280,232	Dec. 18	1066	298	25	1091
Boat-knee.....	D. True.....	272,603	Feb. 20	1286	358	23	679
Boat-knee.....	D. True.....	280,884	July 10	673	190	24	126
Boat-knee.....	D. True.....	286,870	Oct. 16	1370	375	25	263
Boat-knee.....	D. True. (Reissue).....	10,270	Jan. 9	917	264	23	188
Boat-knee socket.....	D. True. (Reissue).....	10,345	June 19	1591	445	23	2410
Boat-knees, &c. Joint for.....	J. W. Sanborn.....	287,057	Oct. 23	1618	446	25	312
Boat-outrigger.....	W. E. Bond.....	276,220	Apr. 24	1732	479	23	1547
Boat-plug.....	L. J. Baker.....	277,102	May 8	746	196	23	1759
Boat-plug.....	G. W. Renton.....	275,270	Apr. 3	493	137	23	1310
Boats. Building veneer.....	E. G. Durant.....	272,663	Feb. 20	1362	382	23	693
Boats. Obstruction-indicator for.....	W. R. Ansonge.....	275,974	Apr. 17	1428	394	23	1488
Bobbin.....	G. H. Allen.....	289,794	Dec. 11	527	147	25	985



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Bobbin-spindle and support therefor.....	J. E. Tynan.....	279,674	June 19	1326	368	23	2363
Bobbin-spindle whirl.....	G. Jaquith.....	234,429	Sept. 4	330	92	24	959
Bodies. Method of and appliance for disposing of dead	I. W. Heysinger.....	285,034	Sept. 18	1089	304	24	1105
Boiler:							
See Agricultural boiler. Sectional boiler.							
Base-burning boiler. Sectional safety-boiler.							
Coffee-boiler. Steam-boiler.							
Cooking-boiler. Steam-motor boiler.							
Culinary boiler. Straw-burning boiler.							
Egg-boiler. Tubular boiler.							
Heating-boiler. Vertical multitubular boiler.							
Locomotive-boiler. boiler.							
Return-flue boiler. Wash-boiler.							
Boiler.....	Q. S. Backus.....	270,905	June 26	1596	447	23	2417
Boiler.....	A. P. Cregue.....	290,667	Dec. 25	1643	452	25	1197
Boiler.....	G. C. Morgan.....	280,392	July 3	65	17	24	14
Boiler and other furnaces. Steam.....	O. D. Orvis.....	273,299	Mar. 6	72	20, 21	23	846
Boiler and steam cooker.....	J. C. Edward and J. G. Bisset.....	284,729	Sept. 11	706	198	24	1030
Boiler and steam vacuum-pump. Combined.....	C. L. Riker.....	287,579	Oct. 30	2389	619	25	445
Boiler-cleaner.....	G. A. Chapman.....	273,026	Feb. 27	1328	512	23	781
Boiler-cleaner.....	J. F. Hotchkiss.....	276,410	Apr. 24	1951	548	23	1589
Boiler-cleaner.....	J. F. Hotchkiss.....	276,411	Apr. 24	1982	549	23	1589
Boiler-cleaner.....	J. McGinley.....	286,724	Oct. 16	1192	321	25	231
Boiler-covering.....	H. Armstrong and J. A. Loudon.....	287,994	Nov. 6	262	25	25	553
Boiler-covering.....	H. C. Goodell.....	274,933	Apr. 3	64	17	23	1236
Boiler-explosions. Apparatus to prevent.....	L. Simkins.....	281,803	July 24	1854	507	24	342
Boiler-explosions. Preventing.....	T. C. Fawcett and J. C. Hargreaves.....	282,292	July 31	2468	680	24	451
Boiler-feeder.....	E. Del Valle.....	285,585	Sept. 25	1739	491	24	1237
Boiler fire-box.....	E. P. Bates.....	273,012	Feb. 27	1811	507	23	778
Boiler for generating steam. Compound.....	C. D. Cowan.....	282,276	July 31	2455	676	24	449
Boiler-front.....	N. W. Pratt.....	273,600	Mar. 6	464	125	23	914
Boiler-furnace.....	H. Cowell.....	275,805	Apr. 17	1233	338	23	1452
Boiler-furnace.....	W. A. Greene.....	271,627	Feb. 6	55	15, 16	23	450
Boiler-furnace.....	W. P. Hall.....	283,708	Aug. 21	1495	421	24	784
Boiler-furnace.....	E. W. Vanduzen.....	270,157	Jan. 2	389	113	23	79
Boiler-furnace attachment.....	G. S. Gilbert.....	283,338	Aug. 14	1041	292	24	694
Boiler-furnace grate. Moving.....	D. C. Hill.....	276,691	May 1	202	52	23	1659
Boiler furnace. Steam.....	J. Abell.....	273,421	Mar. 6	232	63	23	873
Boiler furnace. Steam.....	E. Clark.....	282,845	Aug. 7	444	125	24	578
Boiler furnace. Steam.....	F. H. Kane.....	273,099	Feb. 27	1923	538	23	797
Boiler furnace. Steam.....	F. Livet.....	288,079	Nov. 6	359	99	25	569
Boiler furnace. Steam.....	A. Ritter, Jr.....	290,270	Dec. 18	1114	313	25	1099
Boiler furnace. Steam.....	J. G. Sextro.....	276,903	May 1	473	124	23	1709
Boiler furnace. Steam.....	R. L. Slater.....	277,361	May 8	1054	253	23	1814
Boiler furnace. Steam.....	B. Sloper.....	285,366	Sept. 18	1475	415	24	1173
Boiler furnace. Steam.....	B. Topmiller.....	274,854	Mar. 27	2055	573	23	1212
Boiler furnace. Steam.....	E. W. Vanduzen.....	278,637	May 29	2638	721	23	2109
Boiler furnace. Steam.....	C. H. and S. S. Wilson.....	272,504	Feb. 20	1161	325	23	658
Boiler furnaces. Locomotive and other.....	J. A. Gano.....	274,482	Mar. 27	1620	449	23	1135
Boiler furnaces. Locomotive and other.....	J. A. Gano. (Reissue).....	10,396	Oct. 23	2051	557	25	391
Boiler-hoe.....	J. Preston.....	280,951	July 10	763	211	24	140
Boiler or other furnace. Steam.....	C. Gearing.....	276,576	May 1	44	13	23	1635
Boiler safety attachment.....	D. Sullivan.....	275,091	Apr. 3	277	76	23	1274
Boiler setting and furnace. Steam.....	T. R. Butman.....	279,331	June 12	900	252	23	2286
Boiler-tube expander. Conical.....	J. Scully.....	290,273	Dec. 18	1118	315	25	1099
Boiler-tube stopper.....	W. F. Smith.....	277,365	May 8	1057	234	23	1815
Boiler-tubes. Closing.....	E. J. Moore.....	278,998	June 5	468	138	23	2293
Boiler-tubes. Implement for expanding and cutting.....	J. Lobges.....	270,446	Jan. 9	753	221	23	156
Boiler-tubes. Tool for expanding the ends of.....	J. F. Dettmar.....	284,618	Sept. 11	562	159	24	1006
Boiler use. Purifying water for.....	G. B. Dudley.....	283,472	Aug. 21	1215	24	23	731
Boilers. Anti-incrustation attachment for.....	C. C. Fisk.....	285,248	Sept. 18	1338	377	24	1148
Boilers. Apparatus for purifying water for.....	C. Elliot.....	271,821	Feb. 6	286	78	23	491
Boilers. Apparatus for returning and feeding water to.....	T. J. Kieley.....	273,367	Mar. 6	171	47	23	863
Boilers. Making.....	W. L. Brownell.....	280,905	July 10	698	196	24	130
Bolt:							
See Door-bolt. Flour and meal bolt.							
Expanding-bolt. Plow-bolt.							
Flour-bolt. Thill-coupling bolt.							
Bolt.....	B. J. Hardin.....	282,077	July 31	2193	602	24	406
Bolt.....	S. Habbell, Jr.....	274,121	Mar. 20	1131	311	23	1043
Bolt.....	J. N. Spencer and T. H. Dunn.....	284,253	Sept. 4	123	34	24	925
Bolt and nut lock.....	C. Carleton.....	277,408	May 8	1102	296	23	1822
Bolt and nut package.....	S. T. Riker.....	282,370	July 31	2579	708	24	470
Bolt-cutter.....	E. Amelotte.....	285,868	Oct. 2	110	33	25	22
Bolt-cutter.....	A. Blowers.....	275,015	Apr. 3	172	46	23	1255
Bolt-cutter.....	J. H. Kennedy.....	274,499	Mar. 27	1639	456	23	1138
Bolt for chilled mold-boards.....	J. Du Shane.....	274,743	Mar. 27	1926	536	23	1190
Bolt-forging machine.....	O. C. Burdick.....	285,876	Oct. 2	120	35	25	24
Bolt-guard.....	W. Newbold.....	270,972	Jan. 23	1425	411	23	294
Bolt-header.....	B. McKillop.....	290,085	Dec. 11	884	251	25	1050
Bolt-heading machine.....	T. Cooper.....	277,010	May 8	623	163	23	1739
Bolt-heading machine.....	M. G. Wilder.....	282,475	July 31	2711	746	24	493
Bolt-holder and screw-driver. Combined.....	H. Wheeler.....	284,787	Sept. 11	783	218	24	1042
Bolt-lock.....	E. W. Sprague.....	283,725	Aug. 21	1514	427	24	788
Bolt-locking device.....	D. F. Elighton.....	287,795	Nov. 6	9	3	25	508
Bolt-pointing machine.....	W. B. Edwards.....	285,738	Sept. 25	1936	548	24	1261
Bolt-threading die.....	M. D. Luehrs.....	289,674	Dec. 4	373	107	25	953
Bolt-threading machine.....	W. L. Bergen.....	284,168	Sept. 4	10	3	24	900

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & Co.	Vol.	Page.
Bolt-threading machine	P. D. Nicols and T. W. Webb	272,079	Feb. 13	615	167	23	558
Bolts, &c. Air separator and feeder for	R. Wilson	271,389	Jan. 30	1938	561	23	390
Bolts. Expansion-cover for	D. Romaine	272,328	Feb. 13	918	256	23	611
Bolts. Machine for cutting threads on	C. F. Steinmetz	283,680	Aug. 21	1458	410	24	777
Bolts. Press for making	G. H. Webb	284,694	Sept. 11	660	186	24	1022
Bolting-chest	L. B. Kohnle and W. B. Hamilton	283,899	Aug. 28	1726	487	24	836
Bolting-chest conveyer. Cut-off for	L. B. Kohnle and W. B. Hamilton	283,715	Aug. 21	1502	424	24	785
Bolting-machine. Centrifugal	F. Stetter	287,481	Oct. 30	2153	585	25	418
Bolting-reel	J. D. Hurst	271,853	Feb. 6	324	89	23	498
Bolting-reel	E. S. Phillips and S. A. Kealy	274,655	Mar. 27	1828	507	23	1172
Bolting-reel	J. M. Van Slyke	280,692	July 3	425	120	24	76
Bolting-reels. Apparatus for feeding flour to	E. L. Conklin	287,097	Oct. 23	1669	458	25	322
Bolting-regulator	J. E. Fiske	276,169	Apr. 24	1673	462	23	1537
Bone-black. Renewing	R. C. Clark	279,335	June 12	905	253	23	2286
Bone, Zincated	C. S. Lockwood	283,796	Aug. 28	1611	432	24	817
Bonnet. Poke	J. Stern	284,511	Sept. 4	432	123	24	977
Book	E. L. Burwell	285,794	Oct. 2	16	5	25	5
Book	F. Mills and C. H. Knight	289,434	Dec. 4	74	21	25	900
Book adjuster and supporter	C. F. Carlock and C. H. Davids	274,719	Mar. 27	1900	530	23	1185
Book, album, &c	H. Hoppin and A. L. Brown	285,897	Oct. 2	151	42, 43	25	30
Book-back	F. Bowman	281,657	July 17	1651	450	24	300
Book-backs. Device for cutting notches in	D. M. Smyth	276,296	Apr. 24	1825	508	23	1563
Book-backs. Machine for molding	D. J. and J. E. Kane	280,380	July 3	51	14	24	11
Book-backing machine. Roller	E. P. Donnell	276,787	May 1	336	89	23	1684
Book-binder's clamp	R. Doyle	272,864	Feb. 27	1635	457	23	749
Book-binding	W. I. Blackman	286,254	Oct. 9	583	160	25	117
Book-binding	T. J. Cagney	277,456	May 15	1170	314	23	1840
Book-binding	L. R. Goodwin	286,694	Oct. 16	1156	311	25	225
Book-binding	A. J. Megee	281,101	July 10	934	261	24	173
Book. Blank	A. E. Kipp	276,601	May 1	72	20	23	1640
Book. Blank or composition	F. Bowman	286,111	Oct. 2	409	112	25	75
Book. Check or account	J. A. Jackson	290,432	Dec. 18	1334	370	25	1137
Book-clamp	F. E. Halliday	289,252	Nov. 27	1817	502	25	850
Book-clamp	J. N. Wilson	277,096	May 8	740	194	23	1758
Book-clamp and portfolio. Combined	J. W. Eastwood	283,980	Aug. 28	1827	516	24	855
Book-clasp	A. C. Hafely	287,123	Oct. 23	1700	465	25	328
Book-cover	G. W. Hackstadt	289,647	Dec. 4	312	96	25	947
Book-cover	R. H. Welch	270,560	Jan. 9	902	260	23	185
Book-cover protector	E. T. Covell	273,669	Mar. 6	548	146	23	928
Book-cover. Removable	W. B. Blackhall	283,853	Aug. 28	1672	472	24	827
Book-cover. Removable	J. M. Bronson	290,846	Dec. 25	1878	518 519	25	1239
Book-holder	T. A. Crabtree	283,576	Aug. 21	1340	374	24	754
Book-holder	R. M. Lambie	284,495	Aug. 21	1246	350	24	737
Book-holder	I. S. Mudgett	279,767	June 19	1444	405	23	2385
Book-holder	E. J. Wood	290,381	Dec. 18	1256	352	25	1124
Book-holder	C. L. Work	272,008	Feb. 6	518	139	23	530
Book-holding device	A. Pester	273,886	Mar. 13	836	227	23	985
Book. Hymn and music	R. D. Robertson	286,152	Oct. 2	455	124	25	85
Book-lock. Adjustable	M. C. Ogden	284,470	Sept. 4	376	104	24	967
Book-mark	M. A. Webb	288,285	Nov. 13	615	168	25	623
Book-mark. Automatic	E. H. Foote	284,404	Sept. 4	300	84	24	954
Book. Memorandum	J. R. Carter	273,223	Feb. 27	2075	583	23	825
Book. Memorandum	E. A. Hemphill	285,618	Sept. 25	1783	507	24	1235
Book-rest	A. B. Byrkit	289,384	Dec. 4	14	5	25	889
Book-rest	C. F. Haynes	289,652	Dec. 4	348	98	25	948
Book. Sales	C. W. Earnshaw	283,872	Aug. 28	1697	478	24	831
Book. Scrap	E. G. Thorp	278,202	May 22	2069	570	23	2002
Book show-stand. Sample	C. Jackson	270,592	Jan. 16	947	274	23	203
Book-support	A. Bell	290,169	Dec. 11	978	276	25	1068
Book-support	J. Danner	289,394	Dec. 4	26	9	25	892
Book-support	B. Pickering	284,228	Sept. 4	93	25	24	920
Book-sawing machine	B. F. Humphrey	285,133	Sept. 18	1205	338 339 480 481	24	1124
Books. Apparatus for pasting sheets in binding	G. Carlton and D. M. Smyth	276,224	Apr. 24	1736	480 481	23	1548
Boom-stick	F. H. Durell and W. Goldie	276,769	May 1	337	89	23	1685
Boot	T. H. Buckingham	280,443	July 3	133	36	24	25
Boot	B. Getleson	289,525	Dec. 4	193	54	25	920
Boot and shoe	J. Jenkins	283,249	Aug. 14	932	259	24	673
Boot and shoe	O. E. Lewis	283,263	Aug. 14	951	265	24	677
Boot and shoe	J. H. Parker	284,977	Sept. 11	999	281	24	1083
Boot and shoe box	E. T. Cook	288,924	Nov. 20	1419	391	25	771
Boot and shoe box. Revolving	W. F. Irvine	270,437	Jan. 9	744	218	23	154
Boot and shoe box-toe	J. L. Joyce	288,944	Nov. 20	1446	398	25	776
Boot and shoe burnishing machine	C. J. Blakely	270,729	Jan. 16	1121	321	23	235
Boot and shoe burnishing machine	S. A. West	288,532	Nov. 13	939	256	25	678
Boot and shoe button-hole stay	E. Hambluer	288,794	Nov. 20	1269	347	25	743
Boot and shoe channeling machine	T. B. Dill	271,227	Jan. 30	1728	500	23	353
Boot and shoe cleaning and polishing apparatus	R. Austrian	290,386	Dec. 18	1260	353	25	1125
Boot and shoe edge trimmer	H. F. Rooney	280,958	July 10	769	213	24	141
Boot and shoe heel breasting machinery	J. W. Ball and H. Clark	282,255	July 31	2430	668	24	444
Boot and shoe heel burnisher	Z. Beaudry	284,167	Sept. 4	8	3	24	906
Boot and shoe heel-finishing machine	W. Manley	284,566	Sept. 4	491	138 139	24	988
Boot and shoe heel stiffener	T. J. Brandt	283,859	Aug. 28	1680	474	24	828
Boot and shoe heeling machine	J. Sperry	275,535	Apr. 10	876	237	23	1384
Boot and shoe holding jack	G. S. Dalby	282,278	July 31	2456	676	24	449
Boot and shoe indicator	A. Muckenaupt	274,639	Mar. 27	1808	502	23	1169
Boot and shoe indicator	G. T. Woodlief and G. R. Dunn	275,108	Apr. 3	298	82	23	1277
Boot and shoe insole	E. K. Cooley	271,798	Feb. 6	256	71	23	485
Boot and shoe insole	R. H. Trested	284,092	Aug. 28	1986	553	24	882
Boot and shoe jack	P. D. Crull	287,100	Oct. 23	1673	459	25	323
Boot and shoe last	E. S. Kingston	273,108	Feb. 27	1933	542	23	799



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g	Vol.	Page.
Boot and shoe last	F. Packard and N. W. Arnold	270,975	Jan. 23	1427	412	23	294
Boot and shoe lasting-jack or holder	Z. T. French	274,091	Mar. 13	1083	298	23	1027
Boot and shoe lasting machine	J. R. Scott	281,306	July 17	1207	334	24	227
Boot and shoe lasting machine	J. R. Scott	284,906	Sept. 11	915	258	24	1067
Boot and shoe nail	H. R. Adams	275,010	Apr. 3	167	44	23	1254
Boot and shoe nailing machine	G. A. Perkins	289,443	Dec. 4	84	24	25	901
Boot and shoe nailing machine	S. Shepherd	272,486	Feb. 20	1137	319 320	23	654
Boot and shoe pattern	M. J. Ferren	288,417	Nov. 13	798	216	25	655
Boot and shoe. Rubber	F. M. Shepard	288,127	Nov. 6	415	117	25	580
Boot and shoe. Rubber.	C. H. Straight	270,348	Jan. 9	622	184	23	131
Boot and shoe show-box	E. M. Kelly	271,081	Jan. 23	1555	448	23	316
Boot and shoe sole	P. Green and E. P. Duncklee	289,646	Dec. 4	341	96	25	947
Boot and shoe sole cutting machine	H. C. Pease	276,979	May 1	578	152	23	1725
Boot and shoe sole finishing machine	C. R. Wells and B. K. Lewis	275,873	Apr. 17	1316	363	23	1467
Boot and shoe sole plate	F. Wellmann	290,155	Dec. 11	964	272	25	1065
Boot and shoe soles. Machine for trimming, channeling, and grooving	J. Smith	270,498	Jan. 9	812	237	23	169
Boot and shoe suspension-hook	E. E. Ries	283,418	Aug. 21	1146	324	24	720
Boot and shoe tips. Apparatus for skiving.	J. A. Safford	289,145	Nov. 27	1693	470	25	827
Boot and shoe tree	J. H. Schneider	288,185	Nov. 6	483	134	25	591
Boot. Button	J. H. Bemis	278,081	May 22	1905	522	23	1974
Boot-cleaner	M. Lesser	281,893	July 24	1968	538	24	362
Boot. Felt	J. C. Fife	279,482	June 12	1092	301	23	2316
Boot. Felt	E. Waite	285,089	Sept. 18	1152	321	24	1115
Boot-insole	W. H. Wood	278,302	May 22	2212	606 607	23	2026
Boot-jack	J. R. Walker	275,551	Apr. 10	897	243	23	1387
Boot-legs, &c. Machinery for finishing.	L. H. Allen	284,265	Sept. 4	134	30	24	927
Boot or shoe	S. C. Belknap and T. H. Fye	278,308	May 29	2323	611	23	2037
Boot or shoe	G. C. Buch	281,664	July 24	1664	454	24	308
Boot or shoe	H. S. Cushman	279,859	June 19	1536	429	23	2400
Boot or shoe	G. W. Gregory	290,986	Dec. 25	2067	569	25	1269
Boot or shoe	O. E. Lewis	270,595	Jan. 16	951	275	23	203
Boot or shoe	O. E. Lewis	270,596	Jan. 16	951	275	23	203
Boot or shoe	T. P. Mitchell	290,460	Dec. 18	1374	379	25	1144
Boot or shoe	L. E. Moore	275,248	Apr. 3	465	130	23	1306
Boot or shoe	L. F. Norman	289,439	Dec. 4	80	23	25	900
Boot or shoe burnishing apparatus.	C. J. Addy	275,452	Apr. 10	772	207	23	1366
Boot or shoe. Button	E. Lanthier	277,580	May 15	1320	354	23	1864
Boot or shoe clamp	O. T. X. Adams	278,385	May 29	2332	638	23	2056
Boot or shoe counters. Machine for forming	L. Côté	279,717	June 19	1369	382	23	2371
Boot or shoe fastener	B. T. M. Hunley	281,073	July 10	906	253	24	167
Boot or shoe. Felt	E. Waite	279,055	June 5	546	150	23	2216
Boot or shoe heel	S. M. Moschowitz	288,842	Nov. 20	1323	363	25	753
Boot or shoe heel	S. Prior	276,279	Apr. 24	1804	503	23	1560
Boot or shoe heel	S. Wilde	285,194	Sept. 18	1277	359	24	1137
Boot or shoe heel protector	H. K. Forbis	279,559	June 19	1190	329	23	2340
Boot or shoe heel stiffener	E. Andrews	276,550	May 1	7	3	23	1628
Boot or shoe heel stiffener	T. Joyce	277,571	May 15	1309	351	23	1862
Boot or shoe heel stiffeners. Forming	C. Rochette	276,717	May 1	241	61	23	1666
Boot or shoe holding jack	A. B. Jones	279,169	June 12	705	192	23	2253
Boot or shoe insole	J. Hill	275,767	Apr. 10	1178	323	23	1435
Boot or shoe lasting jack or holder	Z. T. French	281,258	July 17	1154	319	24	217
Boot or shoe lasting machine	L. Côté	270,282	Jan. 9	541	159	23	116
Boot or shoe polishing machine	T. J. Pairpoint	274,649	Mar. 27	1821	506	23	1171
Boot or shoe sole	A. A. Brooks	280,791	July 10	573	160	24	108
Boot or shoe sole and upper protector	R. H. Walker	280,264	June 26	2024	569	23	2493
Boot or shoe sole stamp	W. C. Hoar	277,727	May 15	1485	402	23	1893
Boot or shoe soles. Apparatus for cementing the channels of	C. K. Bradford	278,066	May 22	1917	526	23	1976
Boot or shoe tree	J. H. Schneider	270,850	Jan. 16	1262	363	23	261
Boot or shoe uppers for lasting. Mechanism for preparing	O. G. Critchett	289,391	Dec. 4	21	7, 8	25	891
Boot. Rubber	S. M. Oberlander	288,846	Nov. 20	1328	364	25	754
Boot-strap. Metallic	J. L. Thomson	282,240	July 31	2415	664	24	442
Boot-top	H. J. Mahrenholz	275,678	Apr. 10	1059	287	23	1415
Boot-tree	J. P. Pratt	275,411	Apr. 10	718	192	23	1358
Boot-treering machine	J. Warren	289,044	Nov. 27	1375	434 435	25	805
Boots and shoes. Abrading and polishing machine for.	G. W. Coffin	274,440	Mar. 20	1536	423	23	1114
Boots and shoes, and roller-dies therefor. Making rubber	J. A. Olmstead	272,308	Feb. 13	888	249	23	607
Boots and shoes. Heel-plate for rubber	F. Richardson	270,911	Jan. 23	1342	387	23	281
Boots and shoes. Lasting	M. Brock	284,174	Sept. 4	19	5	24	908
Boots and shoes. Manufacture of.	E. H. Buckley	289,808	Dec. 11	543	151	25	988
Boots and shoes. Manufacture of	G. W. Day	284,188	Sept. 4	36	9	24	911
Boots and shoes. Manufacture of	M. R. Ethridge	269,842	Jan. 2	29	9	23	8
Boots and shoes. Manufacture of	S. F. Libby	282,911	Aug. 7	519	145	24	592
Boots and shoes. Manufacture of	E. Maynz	281,709	July 24	1725	468	24	318
Boots and shoes. Spring for the soles and heels of.	G. E. Swan	272,172	Feb. 13	727	201	23	578
Boots and shoes. Spring-heel for	G. E. Swan	288,274	Nov. 13	606	165	25	621
Boots and shoes. Tap-sole for rubber.	G. Watkinson	282,493	July 31	2647	796	24	482
Boots. Machine for blocking the quarters of.	S. Hudson	290,234	Dec. 18	1067	299	25	1091
Boots. Metallic shield for brakemen's	E. Nelson and A. Davis	280,223	June 26	1975	555	23	2484
Boots or shoes. Machine for cutting pegs from.	N. S. Wakefield	281,587	July 17	1555	426	24	285
Boots or shoes. Metal last and jack for	S. Mawhinney	276,059	Apr. 17	1532	421	23	1505
Boots or shoes. Rubber sole and heel for	F. Ephraim	282,710	Aug. 7	295	83	24	551
Boots or shoes. Wooden half-sole for	A. W. C. Cain	273,460	Mar. 6	284	77	23	882
Boots, shoes, or stockings. Machine for manufacturing felt	J. Brandy	277,450	May 15	1161	312	23	1839
Boring and tenoning machine	W. H. Ryan	276,476	Apr. 24	2061	572	23	1603
Boring-bar	L. R. Faught	289,522	Dec. 4	188	53	25	919
Boring-bit	W. W. Brigg	274,711	Mar. 27	1891	527	23	1183

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Boring-bit .....	H. E. Fuller .....	283,705	Aug. 21	1486	418	24	783
Boring-bit. Spoon .....	B. Forstner .....	280,026	June 26	1751	492	23	2444
Boring-brace .....	A. H. Adams .....	282,251	July 31	2426	667	24	444
Boring, drilling, and facing machine .....	W. E. Wild .....	275,103	Apr. 3	292	80, 81	23	1276
Boring-engine. Portable steam .....	A. Noteman .....	273,136	Feb. 27	1968	553	23	806
Boring-machine .....	H. T. Brown .....	288,403	Nov. 13	784	212	25	652
Boring-machine .....	F. H. Drummond and T. Jenkins, Jr. .....	289,817	Dec. 11	554	155	25	990
Boring-machine .....	T. F. and H. F. Hartwich .....	281,871	July 24	1936	529	24	356
Boring-machine .....	T. Hofstatter, Jr. .....	284,850	Sept. 11	550	239	24	1055
Boring-machine .....	R. M. McDaniel .....	290,339	Dec. 18	1202	337	25	1114
Boring machine. Wood .....	J. M. Nash .....	274,030	Mar. 13	992	272	23	1012
Boring machine. Wood .....	M. Sweet .....	289,170	Nov. 27	1720	479	25	832
Boring-mill attachment .....	G. T. Reiss .....	274,517	Mar. 27	1667	463	23	1143
Boring rocks under water. Apparatus for .....	J. T. Jones and J. H. Wild .....	285,628	Sept. 25	1793	510 511	24	1238
Boring-tool .....	J. Wade .....	280,420	July 3	99	26	24	20
Boring tool. Metal .....	J. M. Hanscomb .....	281,687	July 24	1695	461	24	313
Borings. Method of and apparatus for determining the inclination of .....	E. F. MacGeorge .....	270,597	Jan. 16	952	275	23	203
Bosom-board .....	A. P. Ryan .....	287,329	Oct. 23	1961	535	25	375
Bosom-board neckband-shaper .....	C. A. Gilbert .....	277,705	May 15	1462	394	23	1889
Bosom-stretcher and ironing-beard .....	A. C. Gibson .....	276,802	May 1	349	93	23	1687
Bottle .....	S. M. Bixby .....	273,444	Mar. 6	262	71	23	878
Bottle .....	G. S. Fairchild .....	282,974	Aug. 14	589	166	24	612
Bottle and flask stand .....	D. R. Bradley .....	288,617	Nov. 20	1041	287	25	704
Bottle and jar stopper .....	N. Thompson .....	279,291	June 19	1571	440	23	2407
Bottle and jar stopper .....	A. V. Whiteman .....	284,523	Sept. 4	446	126	24	980
Bottle and nipple. Nursing .....	J. A. Morris .....	280,656	July 3	380	106	24	67
Bottle-box .....	J. E. Luscomb .....	271,087	Jan. 23	1500	449	23	317
Bottle. Bung .....	S. P. Connor .....	287,908	Nov. 6	147	43	25	534
Bottle cap. Mustard .....	C. Gulden .....	271,237	Jan. 30	1740	503	23	355
Bottle-capsuling machine .....	F. W. A. Boldt .....	271,304	Jan. 30	1824	529	23	369
Bottle-carrying box .....	J. C. Cary .....	278,504	May 29	2478	676	23	2082
Bottle-case .....	J. Davis .....	281,845	July 24	1908	521	24	351
Bottle-case .....	H. Walton .....	275,552	Apr. 10	898	243	23	13-7
Bottle-cleaning machine .....	A. C. Weaver .....	286,880	Oct. 16	1384	380	25	265
Bottle-covering .....	S. Oakman .....	287,049	Oct. 23	1608	442	25	310
Bottle-emptying device .....	A. E. Rich .....	289,447	Dec. 4	89	25	25	902
Bottle. Feeding .....	J. Thomas .....	275,288	Apr. 3	515	142	23	1314
Bottle-filling apparatus .....	J. D. Roberts .....	279,668	June 19	1315	365	23	2362
Bottle-filling machine .....	E. L. Lloyd .....	279,776	June 19	1434	401	23	2383
Bottle-filling machine .....	W. Pearson .....	280,234	June 26	1088	550	23	2486
Bottle-filling machine .....	H. M. Tubbs and E. T. Swartz .....	288,744	Nov. 20	1209	331	25	732
Bottle for containing aerated liquids .....	H. Codd and D. Rylands .....	270,392	Jan. 9	685	203	23	143
Bottle for milk, &c. .....	A. M. Hurel .....	288,238	Nov. 13	587	155	25	613
Bottle. Ink .....	A. W. Brinkerhoff .....	275,983	Apr. 17	1441	397	23	1490
Bottle. Label .....	G. B. Shepard .....	283,825	Aug. 28	1642	462	24	822
Bottle-lock .....	G. E. Brundage .....	285,385	Sept. 25	1504	423	24	1183
Bottle. Nursing .....	M. Glatsteine .....	279,935	June 26	1637	459	23	2424
Bottle or jar stopper or cover .....	A. V. Whiteman .....	275,101	Apr. 3	290	80	23	1276
Bottle-packing box .....	F. A. Baier .....	278,761	June 5	105	30	23	2141
Bottle-packing box .....	J. C. Schoenthaler .....	276,289	Apr. 24	1816	506	23	1562
Bottle stand. Lock .....	C. W. Hutchins .....	274,608	Mar. 27	1776	493	23	1162
Bottle-stopper .....	H. B. Anderson .....	279,310	June 12	863	240	23	2280
Bottle-stopper .....	M. L. Ballard .....	283,692	Aug. 21	1471	414	24	780
Bottle-stopper .....	C. H. Bennett .....	280,784	July 10	565	158	24	106
Bottle-stopper .....	J. Byrnes .....	282,953	Aug. 14	568	161	24	608
Bottle-stopper .....	J. J. Christie .....	283,569	Aug. 21	1332	371	24	752
Bottle-stopper .....	G. Ducro .....	270,765	Jan. 16	1165	333	23	243
Bottle-stopper .....	C. O. Hammer .....	290,577	Dec. 18	1529	421	25	1171
Bottle-stopper .....	L. S. Hoyt .....	285,132	Sept. 18	1203	338	24	1124
Bottle-stopper .....	C. G. Hutchinson .....	285,488	Sept. 25	1624	456	24	1205
Bottle-stopper .....	F. F. Jewett .....	276,822	May 1	372	99	23	1691
Bottle-stopper .....	A. T. King .....	284,561	Sept. 4	486	137	24	987
Bottle-stopper .....	J. M. Lewin .....	290,297	Dec. 25	1941	535	25	1250
Bottle-stopper .....	E. L. Lloyd .....	279,777	June 19	1435	402	23	2383
Bottle-stopper .....	E. L. Lloyd .....	280,196	June 26	1937	544	23	2478
Bottle-stopper .....	F. H. Lowerre .....	287,141	Oct. 23	1723	472	25	332
Bottle-stopper .....	O. E. Michaelis .....	270,601	Jan. 16	958	278	23	204
Bottle-stopper .....	I. Neef .....	277,847	May 15	1627	443	23	1919
Bottle-stopper .....	S. S. Newton .....	279,418	June 12	1017	282	23	2304
Bottle-stopper .....	S. S. Newton .....	279,419	June 12	1017	282	23	2304
Bottle-stopper .....	S. S. Newton .....	280,503	July 3	207	54	24	37
Bottle-stopper .....	S. S. Newton .....	280,944	July 10	755	210	24	138
Bottle-stopper .....	A. F. Parkhurst .....	289,928	Dec. 11	693	194	25	1015
Bottle-stopper .....	I. N. Peirce .....	271,734	Feb. 6	177	48	23	471
Bottle-stopper .....	G. S. Prior .....	290,192	Dec. 11	1005	283	25	1072
Bottle-stopper .....	W. L. Reorbach .....	272,775	Feb. 20	1501	422	23	718
Bottle-stopper .....	H. E. Spaulding .....	283,432	Aug. 21	1170	329	24	723
Bottle-stopper .....	C. A. Stahlin .....	279,455	June 12	1058	293	23	2311
Bottle-stopper .....	C. A. Stahlin .....	288,885	Nov. 20	1374	379	25	762
Bottle-stopper .....	F. B. Thatcher and J. W. Johnson .....	283,436	Aug. 21	1174	330	24	724
Bottle-stopper .....	J. T. Walker .....	288,521	Nov. 13	926	253	25	676
Bottle-stopper and draft-nozzle .....	P. Henrichs .....	276,816	May 1	365	97	23	1690
Bottle stopper and fastener .....	F. Burns .....	289,215	Nov. 27	1778	493	25	842
Bottle stopper and fastener .....	E. Haas .....	273,356	Mar. 6	154	44	23	860
Bottle stopper and fastening .....	W. H. Bate .....	273,935	Mar. 13	896	245	23	995
Bottle stopper, cap, and label combined .....	W. B. Dean .....	289,814	Dec. 11	551	154	25	9-9
Bottle-stopper fastener .....	B. D. Marks .....	281,199	July 10	1066	294	24	105
Bottle-stopper fastener .....	J. T. Walker .....	287,350	Oct. 23	1987	542	25	3-6
Bottle-stopper fastening .....	H. Kesiey .....	273,159	Feb. 27	1996	561	23	811
Bottle stopper. Mustard .....	J. Gulden .....	276,683	May 1	193	49	23	1657
Bottle-stopper. Pneumatic .....	W. Von Schlieffen .....	288,603	Nov. 13	1025	281 282	25	695



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Bottle-stoppering .....	W. W. Macvay and R. Sykes .....	277,758	May 15	1527	414	23	1901
Bottle-stopping device .....	G. S. Norris .....	272,081	Feb. 13	619	167	23	559
Bottle-stopping device .....	G. S. Norris .....	281,290	July 17	1186	328	24	223
Bottle-stopping machine .....	J. K. Nye .....	273,881	Mar. 13	832	225	23	984
Bottle-washing machine .....	W. Cowles .....	286,394	Oct. 9	774	209 210	25	151
Bottle-washing machine .....	F. B. Seiberlich. (Reissue) .....	10,327	May 15	1656	451	23	1924
Bottle-washing machine .....	F. B. Seiberlich .....	272,484	Feb. 20	1134	319	23	653
Bottle-wrapper .....	C. G. Biedinger .....	275,013	Apr. 3	170	46	23	1255
Bottle-wrapper .....	H. Redlich .....	272,323	Feb. 13	909	255	23	610
Bottle-wrapper and cushion .....	E. O. Berninghaus .....	285,872	Oct. 2	114	34	25	92
Bottle-wrapper. Wooden .....	J. Shellenberger .....	272,910	Feb. 27	1695	474	23	758
Bottles, lamps, &c. Apparatus for filling .....	C. C. Redmond .....	281,396	July 17	1318	364	24	245
Bottles. Head for siphon .....	J. Brown .....	289,063	Nov. 27	1596	442	25	809
Bottles, &c. Packing-box for .....	J. J. Bogard .....	276,218	Apr. 24	1730	479	23	1547
Bottles with aerated beverages. Apparatus for filling .....	A. Albertson .....	282,481	Aug. 7	3	2	24	501
Bottling apparatus. Liquor .....	J. Hunt and B. C. Wilson .....	270,434	Jan. 9	741	218	23	154
Bottling device .....	A. Rigny .....	289,714	Dec. 4	435	122	25	962
Bottling liquids. Device for .....	W. T. Ferro .....	278,661	May 29	2665	729	23	2114
Bottling-machine .....	J. Bryan .....	285,458	Sept. 25	1592	447	24	1199
Bottling-machine .....	H. W. Putnam .....	272,153	Feb. 13	707	194	23	574
Bottling powders. Machine for .....	C. G. Wiltse .....	283,313	Aug. 14	1007	282	24	688
Bottom-support .....	H. W. Shepard .....	272,590	Feb. 20	1269	354	23	676
Bouquet-holder .....	J. Darrach .....	278,514	May 29	2489	680	23	2084
Bow and scarf fastener .....	J. Wilcoxon .....	284,699	Sept. 11	667	187	24	1023
Bow. Cross .....	G. Eger .....	272,418	Feb. 20	1052	295	23	639
Bow. Cross .....	H. G. Lewis .....	289,283	Nov. 27	1857	516	25	858
Bowl. Sugar .....	J. T. Bond .....	275,350	Apr. 10	634	169	23	1343
Bowling-balls. Handle attachment to .....	C. Haussman .....	287,927	Nov. 6	172	49	25	538
Box:							
See Advertising match-	Leather box.						
box.	Letter-box.						
Artist's box.	Locomotive smoke-box.						
Axle-box.	Lunch-box.						
Battery-box.	Match-box.						
Boiler fire-box.	Miter-box.						
Boot and shoe box.	Music-box.						
Boot and shoe show-	Oil-press box.						
box.	Packing-box.						
Bottle-box.	Packing and storing box.						
Bottle-carrying box.	Paper-box.						
Bottle-packing box.	Pepper and salt box.						
Bush-box.	Photographic camera-box.						
Butter-box.	Pitman-box.						
Camera-box.	Post-office box.						
Cartridge-box.	Ribbon-box.						
Check-box.	Salt-box.						
Cigar-box.	Sanding-box.						
Cigarette and match	Service-box.						
box.	Sheet-metal box.						
Core-box.	Show-box.						
Electric-signal box.	Stationery-box.						
Fagot-box.	Steam-engine link-box.						
Fare-box.	Stuffing-box.						
File-box.	Ticket-distributing box.						
Fire-alarm box.	Tobacco-box.						
Folding box.	Toilet-set box.						
Game-box.	Toy money-box.						
Hat show-box.	Wagon-box.						
Journal-box.	Watch-movement box.						
Knife-box.	Weigh-box.						
Box .....	W. H. Atkinson .....	277,401	May 8	1095	294	23	1821
Box .....	H. A. Baker .....	282,483	Aug. 7	5	2	24	502
Box .....	C. W. Hobbs .....	273,278	Mar. 6	40	12	23	841
Box .....	H. A. and A. A. Smith .....	290,130	Dec. 11	937	265	25	1060
Box and package filler .....	C. E. Bolton, F. H. Strieby, and M. Rankin .....	277,540	May 15	1270	340	23	1856
Box-board .....	C. A. Brown, E. B. Denison, and C. D. Brown .....	289,383	Dec. 4	14	.....	25	889
Box-cover .....	W. H. Rohe .....	277,061	May 8	693	180	23	1751
Box-cover attachment .....	B. M. Sahlein .....	290,481	Dec. 18	1400	386	25	1149
Box-covering machine .....	C. H. Manneck and W. Witte .....	278,442	May 29	2403	655 656	23	2068
Box-fastener .....	C. H. Ball .....	290,729	Dec. 25	1732	478	25	1214
Box-fastener .....	T. H. Brown, Jr. ....	287,093	Oct. 23	1665	457	25	321
Box-fastener .....	T. F. Conklin .....	284,615	Sept. 11	559	158	24	1005
Box-fastener .....	T. A. Dennis .....	280,142	June 26	1881	529	23	2468
Box-fastener .....	W. B. Judson .....	274,497	Mar. 27	1637	455	23	1138
Box-fastener .....	F. Klev .....	280,749	July 3	501	142	24	89
Box-fastener .....	J. G. Leffingwell .....	290,992	Dec. 25	2074	571	25	1270
Box-fastener .....	J. Loew .....	288,351	Nov. 13	705	193	25	638
Box-fastener .....	S. and M. E. Martinelli .....	273,863	Mar. 13	811	219	23	981
Box-fastener .....	J. R. Morrison .....	288,097	Nov. 6	383	108	25	574
Box-fastener .....	C. L. Page .....	284,660	Sept. 11	610	172	24	1013
Box-fastener .....	W. W. Randall .....	275,853	Apr. 17	1290	354	23	1462
Box for matches, &c .....	A. L. Hollander .....	270,667	Jan. 16	1042	298	23	220
Box in imitation of a cigar .....	O. Bushnell .....	282,159	July 31	2310	634	24	424
Box-loop .....	J. Watters .....	269,975	Jan. 2	180	52	23	37
Box-loop .....	J. Watters .....	269,976	Jan. 2	180	53	23	38
Box-loop .....	J. Watters .....	269,977	Jan. 2	181	53	23	38
Box-loop .....	J. Watters, Jr. ....	271,170	Jan. 23	1659	477	25	333
Box-matcher machine .....	H. B. Gaus, Jr. ....	288,567	Nov. 13	976	269	25	366
Box material. Machine for trimming .....	F. Myers .....	280,219	June 26	1966	533	23	2483
Box-nailing machine .....	S. Avery .....	270,364	Jan. 9	641	189	23	135

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Box-nailing machine .....	F. W. Blood .....	272,199	Feb. 13	761	{ 209 210 211 }	23	583
Box-nailing machine .....	W. H. Brock .....	285,729	Sept. 25	1921	545	24	1260
Box-nailing machine .....	T. L. Smith and W. S. Doig .....	276,726	May 1	255	65	23	1668
Box-nailing machine .....	J. H. Swift .....	289,941	Dec. 11	704	{ 198 199 }	25	1017
Box-opener .....	T. L. Stanwood .....	278,192	May 22	2050	563	23	1998
Box or case .....	J. Sheehy .....	274,038	Mar. 13	1010	277	23	1015
Box or package .....	S. Van Campen .....	230,619	Dec. 25	1848	511	25	1334
Box-packing press .....	G. W. Soule .....	279,198	June 12	734	201	23	2259
Box-pasting machine .....	G. W. Glazier .....	288,172	Nov. 6	466	130	25	588
Box-patterns. Machine for cutting .....	J. M. Titus .....	272,354	Feb. 13	949	{ 263 264 }	23	616
Box. Self-adjusting .....	M. Pacholder .....	282,359	July 31	2563	704	24	468
Box-trimming machine .....	R. C. Anderson .....	277,100	May 8	743	196	23	1759
Box. Wire-bound .....	J. B. Groot .....	281,264	July 17	1160	320	24	218
Boxes. Die for stamping and embossing .....	W. H. Allen .....	279,118	June 12	646	{ 176 177 }	23	2244
Brace:							
See Axle-spindle brace. Door-brace.							
Bit-brace. Railway-rail brace.							
Boring-brace. Ratchet-brace.							
Buggy-top brace. Vehicle-spring brace.							
Dental jaw-brace.							
Bracelet .....	O. H. Atwood and H. P. Lester .....	279,518	June 19	1141	315	23	2331
Bracelet .....	H. Cockshaw .....	272,829	Feb. 20	1566	440	23	730
Bracelet .....	S. Cottle .....	283,574	Aug. 21	1337	373	24	754
Bracelet .....	J. Hackenberg .....	282,310	July 31	2498	686	24	456
Bracelet .....	J. C. Harrington .....	272,244	Feb. 13	819	228	23	594
Bracelet .....	J. C. Harrington .....	289,531	Dec. 4	198	56	25	921
Bracelet .....	W. Holden .....	281,628	July 17	1612	441	24	294
Bracelet .....	A. Keller .....	281,371	July 17	1290	357	24	241
Bracelet .....	T. King .....	285,041	Sept. 18	1096	306	24	1106
Bracelet .....	F. Kursh and F. S. Feraille .....	273,110	Feb. 27	1935	542	23	800
Bracelet .....	P. Lettré .....	290,590	Dec. 18	1541	424	25	1173
Bracelet .....	J. Moore .....	273,241	Feb. 27	2097	588	23	828
Bracelet .....	G. A. Spicer .....	276,091	Apr. 17	1571	433	23	1511
Bracelet and chain slide .....	J. Etzensperger .....	283,333	Aug. 14	1037	291	24	693
Bracelet and necklet fastening .....	J. M. Banks .....	277,537	May 15	1267	340	23	1856
Bracelet. Band .....	J. Barclay .....	289,371	Dec. 4	2	1	25	887
Bracelet-chain .....	H. M. Herring .....	271,845	Feb. 6	314	86	23	496
Bracelet. Chain .....	A. S. Southwick .....	280,253	June 26	2012	565	23	2491
Bracket:							
See Adjustable bracket. Eaves-trough bracket.							
Awning-bracket. Lamp-bracket.							
Chair, knee, and Picture-bracket.							
truss bracket. Portable bracket.							
Colter-bracket. Pump-handle bracket.							
Curtain-bracket. Reflector-bracket.							
Curtain-fixtured Scaffold-bracket.							
bra ket. Shingling-bracket.							
Curtain-pole bracket. Siding-bracket.							
Dental bracket. Stove-bracket.							
Dental-engine sus- Wall-bracket.							
pension-bracket.							
Bracket .....	L. O. Olson .....	287,853	Nov. 6	73	22	25	520
Bracket-seat .....	O. E. Briggs .....	272,522	Feb. 20	1181	330	23	661
Braiding-machine .....	W. Hedtmann .....	288,236	Nov. 13	550	{ 152 153 154 }	25	613
Braiding-machine .....	J. McCahey .....	275,061	Apr. 3	235	64	23	1266
Braiding-machine .....	E. and E. Rafer .....	278,669	May 29	2675	732	23	2116
Braiding-machine .....	F. L. Veerkamp, C. F. Leopold, and W. Darker .....	277,523	May 15	1246	335	23	1853
Braiding machine. Cord .....	C. E. Barnes and A. C. Winn .....	290,624	Dec. 18	1585	436	25	1180
Braiding-machine stop-motion .....	G. K. Winchester .....	280,109	June 26	1845	520	23	2461
Brake:							
See Air-brake. Locomotive and tender							
Car-brake. brake.							
Car hand-brake. Locomotive and train							
Door-brake. brake.							
Electro-magnetic Locomotive or car brake.							
brake. Locomotive steam-brake.							
Elevator-brake. Mining-machine brake.							
Elevator and dumb- Pressure-brake.							
waiter brake. Railway-brake.							
Elevator safety- Sled-brake.							
brake. Traction-engine brake.							
Hoisting-machine Vehicle-brake.							
brake. Velocipede-brake.							
Locomotive-brake. Wagon-brake.							
Brake .....	E. E. Glover .....	282,452	July 31	2688	737	24	489
Brake-band for hoisting machinery, &c. External	D. H. Merritt .....	282,349	July 31	2555	700	24	465
friction .....							
Brake-beam .....	A. H. McAlpine .....	289,431	Dec. 4	70	20	25	899
Brake-beam. Metallic .....	W. Woodcock .....	276,122	Apr. 17	1615	444	23	1519
Brake-block .....	M. J. Siqueira .....	277,360	May 8	1053	283	23	1814
Brake for winding or hoisting engines .....	W. C. Waters .....	281,810	July 24	1863	509	24	343
Brake-lever .....	J. L. Barker .....	270,174	Jan. 2	407	118	23	83
Brake-lever .....	W. Moore .....	271,099	Jan. 23	1572	452	23	313
Brake-lock .....	C. C. Clay .....	281,232	July 10	1096	303	24	201
Brake-rod coupling .....	E. Ebi .....	276,370	Apr. 24	1931	536	23	1581
Brake-setting apparatus. Electric .....	J. B. Low .....	271,731	Feb. 6	160	44	23	468
Brake-shoe .....	W. M. Abbott .....	277,098	May 8	742	195	23	1758



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr-g.	Vol.	Page.
Brake-shoe.....	H. A. Banning.....	271,207	Jan. 30	1707	495	23	349
Brake-shoe.....	C. E. Gore and J. Eisele.....	270,583	Jan. 16	931	269	23	199
Brake-shoe.....	R. T. King.....	275,830	Apr. 17	1260	346	23	1457
Brake-shoe.....	J. O'Connor.....	284,052	Aug. 28	1935	541	24	873
Brake-shoe.....	D. Prew.....	277,159	May 8	823	216	23	1773
Brake-shoe.....	G. J. Shimer.....	272,911	Feb. 27	1696	475	23	758
Brake-shoe.....	G. B. Simonds.....	289,313	Nov. 27	1888	526	29	864
Brake-shoe.....	J. Timms.....	275,547	Apr. 10	892	241	23	1386
Brake-shoe.....	A. B. Todd.....	283,438	Aug. 21	1177	331	24	724
Brake-shoe.....	W. White.....	277,647	May 15	1306	376	23	1878
Brakes. Automatic stop for draw-bar.....	W. B. Guernsey.....	288,568	Nov. 13	976	269	25	686
Bran-compressor.....	J. L. Kail.....	287,133	Oct. 23	1711	468 469	25	331
Bran, &c. Device for packing.....	J. Elder.....	290,013	Dec. 11	800	225	25	1034
Bran-duster.....	L. S. Hegeboom and F. B. Smith.....	279,387	June 12	981	272 273	23	2298
Bran from wheat. Process of and mechanism for re- moving.....	A. Schwarzwaelder.....	288,669	Nov. 20	1108	304 305	25	715
Bran, &c. Method of and device for preparing and packing.....	W. A. Morrison.....	281,288	July 17	1182	326 327	24	223
Bran or flour packer.....	H. G. Hall.....	279,746	June 19	1401	391	23	2377
Bran or flour packer.....	A. L. Stephens.....	280,771	July 3	541	151	24	95
Bran-packer.....	J. E. Belt.....	279,854	June 19	1528	427	23	2399
Bran, &c. Packing.....	H. Bower.....	282,045	July 31	2151	590	24	398
Bran. Process of and apparatus for packing.....	H. Bower.....	282,046	July 31	2152	590 591	24	398
Bran. Process of and apparatus for packing.....	R. M. Hunter and J. T. Stewart.....	280,478	July 3	180	48	24	33
Branding bottle-corks. Machine for.....	P. Chenet.....	283,567	Aug. 21	1328	371	24	752
Branding device.....	J. S. Smithson.....	278,621	May 29	2616	714	23	2166
Branding-machine.....	V. G. White.....	289,480	Dec. 4	129	37	25	909
Branding-tool.....	J. A. Allen.....	286,366	Oct. 9	742	199	25	145
Bread and meat slicer.....	T. K. Knapp.....	288,451	Nov. 13	842	227 228	25	662
Bread-cutter.....	J. Banks.....	284,798	Sept. 11	791	221	24	1044
Bread-cutter.....	N. Chapman.....	280,796	July 10	577	161	24	108
Bread or cheese cutter.....	A. Jelinek.....	280,480	July 3	183	48	24	34
Breaking-down shovel.....	F. C. Starke and P. J. Crowley.....	271,940	Feb. 6	430	117	23	516
Breakwater.....	E. C. G. Thomas.....	283,683	Aug. 21	1461	411	24	778
Breast-strap fender.....	J. C. Look.....	287,696	Oct. 30	2447	659	25	475
Breast-strap hook.....	G. M. Hubbard.....	271,851	Feb. 6	323	89	23	498
Breast-strap protector.....	P. C. Fritts.....	284,546	Sept. 4	468	133	24	984
Breast-strap slide and hook.....	C. R. Furey.....	284,547	Sept. 4	469	133	24	984
Breastpin.....	H. P. Pruim.....	288,490	Nov. 13	892	242	25	670
Breastpin. Ornamental.....	J. Hoagland.....	279,564	June 19	1195	331	23	2341
Breech-loader.....	W. Gardner.....	281,862	July 24	1926	526	24	354
Breech-loader.....	T. W. Webley and T. Brain.....	275,737	Apr. 10	1127	308 309	23	1427
Breeching-loop and holdback-ring.....	T. H. Joyce.....	285,414	Sept. 25	1539	434	24	1190
Bretzel-cutter.....	T. H. Butler, G. W. Earhart, and W. M. Crawford.....	274,264	Mar. 20	1312	362	23	1076
Bretzel-machine.....	T. H. and M. S. Keller and C. W. Myers.....	277,573	May 15	1311	351 352	23	1863
Bretzel-cutter.....	J. U. Segesser.....	283,522	Aug. 21	1273	356	24	741
Brewers' shavings.....	A. Lachenmeyer.....	273,660	Mar. 13	809	219	23	980
Brick.....	W. Q. Adams.....	270,274	Jan. 9	526	155	23	113
Brick.....	R. F. Robinson.....	285,308	Sept. 18	1404	397	24	1161
Brick and fire-proof lining for furnaces.....	G. Duryee.....	271,437	Jan. 30	2001	21	23	402
Brick and tile kiln.....	J. L. Friend.....	275,477	Apr. 10	807	218 219	23	1372
Brick and tile kiln.....	J. W. Sonders and J. Prutzman.....	289,938	Dec. 11	702	197	25	1016
Brick and tile machine.....	J. C. Anderson.....	276,549	May 1	5	2	23	1627
Brick and tile machine.....	G. Van Winkle.....	276,544	Apr. 24	2145	597	23	1617
Brick and tile machine.....	W. W. Wallace.....	288,894	Nov. 20	1366	382	25	765
Brick and tile machines. Endless chain carrier for.....	F. A. Smith.....	289,039	Nov. 27	1569	433	25	804
Brick and tile molding machinery.....	T. Le Poidevin.....	271,875	Feb. 6	348	97	23	502
Brick. Apparatus for drying green.....	H. Dickson.....	290,323	Dec. 18	1153	331	25	1111
Brick. Apparatus for tempering and preparing clay for making.....	W. W. Winn.....	287,074	Oct. 23	1641	450 451	25	316
Brick. Building.....	J. Lee.....	274,449	Mar. 20	1556	426	23	1118
Brick. Burning.....	C. F. T. Kandeler.....	283,402	Aug. 21	1130	319	24	717
Brick. Composition for fire.....	G. A. Hoffmann, Jr.....	276,041	Apr. 17	1512	221	23	1501
Brick-drying apparatus.....	N. S. Willet.....	280,271	June 26	2034	572	23	2494
Brick finishing or dressing apparatus.....	S. Coutant.....	275,888	Apr. 17	1334	367	23	1470
Brick. Fire.....	W. Batty.....	270,175	Jan. 2	408	22	23	83
Brick. Fire.....	W. S. McKenna.....	274,357	Mar. 20	1431	392	23	1096
Brick-fork.....	E. Dawson.....	276,366	Apr. 24	1924	533	23	1580
Brick. Hardening fire.....	J. Henderson.....	279,161	June 12	698	22	23	2252
Brick-kiln.....	T. B. Anderson.....	290,512	Dec. 18	1444	399	25	1156
Brick-kiln.....	J. H. Beidler.....	278,080	May 22	1904	521	23	1974
Brick-kiln.....	G. F. Cotton.....	287,633	Oct. 30	2363	637	25	458
Brick-kiln.....	J. E. Gamble.....	273,354	Mar. 6	152	42, 43	23	860
Brick-kiln.....	W. N. Graves.....	277,421	May 8	1121	300 301	23	1825
Brick-kiln.....	F. L. Hall.....	287,432	Oct. 30	2090	567 568	25	405
Brick-kiln.....	H. Konhorst.....	288,347	Nov. 13	699	192	25	637
Brick-kiln.....	L. Niehaus.....	290,261	Dec. 18	1104	309	25	1097
Brick-kiln.....	C. D. Page.....	286,728	Oct. 16	1197	322 323	25	232
Brick-kiln.....	C. D. Page.....	286,729	Oct. 16	1199	323	25	233
Brick-kiln.....	J. W. Penfield.....	289,024	Nov. 27	1550	427 428	25	801
Brick-kiln.....	T. S. Smith.....	290,939	Dec. 25	1996	570	25	1259
Brick-machine.....	J. C. Anderson.....	276,991	May 8	599	157	23	1735

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Brick-machine .....	J. C. Anderson .....	276,992	May 8	602	158	23	1735
Brick-machine .....	J. C. Anderson .....	283,366	Aug. 21	1091	307	24	709
Brick-machine .....	W. Andrus .....	286,892	Oct. 16	1399	{ 384 385 }	25	267
Brick-machine .....	H. C. Barker .....	274,700	Mar. 27	1883	{ 534 525 }	23	1182
Brick-machine .....	M. Carroll .....	289,889	Dec. 11	648	181	25	1007
Brick-machine .....	J. Creager .....	284,949	Sept. 11	968	972	24	1077
Brick-machine .....	I. Cullen .....	276,228	Apr. 24	1740	{ 482 483 }	23	1549
Brick-machine .....	W. A. Graham .....	289,769	Dec. 4	490	136	25	971
Brick-machine .....	J. Hodgkinson and F. P. Miller .....	288,337	Nov. 13	685	189	25	635
Brick-machine .....	L. B. Kennedy .....	280,316	June 26	2001	588	23	2505
Brick-machine .....	J. H. Koufes .....	271,873	Feb. 6	346	96	23	501
Brick-machine .....	J. A. Lafler .....	289,422	Dec. 4	60	17	25	897
Brick-machine .....	G. Martin .....	288,649	Nov. 20	1085	298	25	711
Brick-machine .....	J. B. Mowry .....	288,253	Nov. 13	573	159	25	616
Brick-machine .....	W. and A. B. Woodward .....	283,184	Aug. 14	847	{ 237 238 }	24	657
Brick-machine. Dry-pressing .....	H. B. Morrison and G. Willett .....	276,861	May 1	420	112	23	1700
Brick. Machine for pulverizing clay for making .....	W. Andrus .....	276,147	Apr. 24	1647	455	23	1533
Brick-machines. Sand-scraper for .....	C. Chambers, Jr. ....	285,013	Sept. 18	1059	296	24	1100
Brick-machines. Sand-scraper for .....	S. W. Lasor .....	285,943	Sept. 18	1097	306	24	1106
Brick-making machine .....	M. Fitzpatrick .....	272,224	Feb. 13	794	221	23	589
Brick-making machines. Mold and die for .....	A. Ittner .....	288,240	Nov. 13	559	156	25	614
Brick-making machinery .....	C. Chambers, Jr. ....	275,467	Apr. 10	788	{ 211 212 213 214 }	23	1369
Brick. Manufacture of .....	F. W. Meeker .....	287,699	Oct. 30	2450	660	25	476
Brick. Metallic pallet for .....	J. M. Blair .....	279,528	June 19	1156	320	23	2334
Brick-mold .....	A. F. Crowe .....	283,758	Aug. 28	1566	441	24	809
Brick-mold and brick .....	L. Prince .....	278,268	May 22	2156	592	23	2016
Brick-mold bumper and palette-holder combined .....	G. L. Doty .....	284,727	Sept. 11	703	197	24	1029
Brick-molds. Machine for sanding .....	W. Brower .....	290,736	Dec. 25	1744	482	25	1215
Brick-molds. Machine for sanding .....	J. A. Buck .....	284,115	Aug. 28	2018	{ 561 562 }	24	887
Brick-molds. Machine for sanding .....	J. A. Buck .....	290,847	Dec. 25	1879	519	25	1239
Brick-molds. Machine for sanding .....	D. Ralston .....	271,984	Feb. 6	491	132	23	525
Brick-molding machine .....	C. F. Schlickeysen .....	275,715	Apr. 10	1100	301	23	1422
Brick-press .....	J. P. Miller .....	283,802	Aug. 28	1615	454	24	817
Brick-pressing machine .....	G. Carnell .....	283,565	Aug. 21	1326	370	24	751
Brick. Preventing salt-peter-exudations upon facing .....	J. C. Anderson .....	271,591	Feb. 6	8	2	23	442
Brick, tile, &c. Kiln and furnace for burning .....	J. C. Culbertson and W. A. Endaly .....	281,029	July 10	852	{ 236 237 }	24	158
Brick, tile, &c. Ornamentation of .....	J. C. Anderson .....	271,587	Feb. 6	4	—	23	441
Brick, tile, &c. Ornamentation of .....	J. C. Anderson .....	271,590	Feb. 6	7	—	23	442
Bricks, &c. Manufacture of .....	B. Loomis .....	280,837	July 10	622	175	24	116
Bridge .....	W. J. Holman .....	290,034	Dec. 11	846	{ 240 241 }	25	1043
Bridge .....	G. Lindenthal .....	277,039	May 8	664	173	23	1746
Bridge alarm. Draw .....	E. F. Meyer .....	288,470	Nov. 13	868	235	25	666
Bridge-girder. Connected .....	C. E. Emery .....	279,927	June 26	1622	{ 455 456 }	23	2422
Bridge. Suspension .....	T. M. Griffith .....	285,257	Sept. 18	1346	{ 379 380 }	24	1150
Bridge. Truss .....	D. B. Matlock .....	272,568	Feb. 20	1248	348	23	673
Bridge. Truss .....	I. A. Spragne .....	287,974	Nov. 6	232	66	25	548
Bridges and elevated-railway structures. Safety device for .....	J. W. Young .....	282,024	July 24	2120	581	24	387
Bridle .....	L. C. Chase .....	278,882	June 5	283	82	23	2172
Bridle .....	J. G. Heinisch .....	273,077	Feb. 27	1883	529	23	791
Bridle .....	J. J. McCue .....	275,927	Apr. 17	1376	379	23	1478
Bridle .....	L. Peavey and F. Klekenapp .....	274,513	Mar. 27	1660	462	23	1142
Bridle .....	E. Ward .....	289,193	Nov. 27	1752	487	25	837
Bridle and halter. Combined .....	M. F. White and D. G. Sheridan .....	290,826	Dec. 25	1856	513	25	1235
Bridle attachment .....	A. and E. Grossmann .....	273,511	Mar. 6	340	99	23	892
Bridle attachment .....	J. T. Massey .....	278,988	June 5	455	125	23	2201
Bridle-bit .....	T. Brabson .....	274,709	Mar. 27	1890	527	23	1183
Bridle-bit .....	C. A. Chandler .....	290,859	Dec. 25	1893	522	25	1242
Bridle-bit .....	L. S. Longcor .....	279,171	June 12	707	192	23	2254
Bridle-bit .....	M. J. O'Leary .....	274,648	Mar. 27	1821	506	23	1171
Bridle-bit .....	E. E. Sargeant .....	289,452	Dec. 4	94	27	25	903
Bridle-bit .....	C. Scherling .....	290,803	Dec. 25	1827	504	25	1230
Bridle-bit attachment .....	O. Wiener, H. Coates, and S. Wiener .....	285,717	Sept. 25	1906	541	24	1257
Bridle-bit attachment .....	D. C. McCoy .....	278,576	May 29	2559	698	23	2096
Bridle-blind .....	M. L. Hall .....	281,359	July 17	1276	354	24	238
Bridle-blinder .....	D. Kaltenbacher .....	281,080	July 10	913	255	24	168
Bridle-rosette .....	G. Walker .....	279,677	June 19	1329	369	23	2364
Briers. Implement for cutting .....	F. and E. S. P'Pool .....	280,667	July 3	393	110	24	70
Bristle-setting apparatus .....	J. J. C. Smith .....	276,488	Apr. 24	2074	576	23	1606
Bristle-washing machine .....	J. S. White .....	282,940	Aug. 7	548	155	24	598
Broiler .....	W. Hailes .....	224,295	Sept. 4	172	49	24	933
Broiler .....	O. Whyte .....	285,864	Oct. 2	106	31	25	21
Bronzing-machine .....	J. Humphray .....	275,214	Apr. 3	428	117	23	1300
Bronzing-machine .....	H. R. Sillman .....	277,621	May 15	1369	369	23	1872
Broom .....	E. Q. Bowman .....	273,941	Mar. 13	904	247	23	996
Broom .....	C. Douglas .....	283,979	Aug. 28	1826	515	24	855
Broom .....	R. W. Harpor .....	273,984	Mar. 13	948	261	23	1004
Broom .....	J. Lay .....	272,890	Feb. 27	1675	468	23	755
Broom .....	D. B. Turney .....	288,959	Nov. 20	1465	405	25	779
Broom and dust-pan holder .....	S. P. Porter .....	276,462	Apr. 24	2046	568	23	1600
Broom-corn. Cutting and preparing .....	J. B. Beale .....	274,702	Mar. 27	1885	—	23	1182
Broom-handle attachment .....	F. W. Lincoln .....	277,298	May 8	981	263	23	1801



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Broom-holder	E. G. Eyster	279,481	June 12	1091	301	23	2316
Broom holder. Whisk or other	T. H. Doyle	274,471	Mar. 27	1583	434	23	1130
Broom-support	S. W. Barnett	270,624	Jan. 16	982	254	23	209
Broom-support	P. A. Bowen and J. W. Suetterle	290,315	Dec. 18	1172	328	25	1109
Broom-support	J. Groble	281,185	July 10	1048	290	24	192
Broom-support	J. W. Loeper	288,181	Nov. 6	481	133	25	591
Brush	J. F. Bartlett	269,910	Jan. 2	103	31	23	22
Brush	G. Brintzinghoff	290,522	Dec. 18	1458	403	25	1158
Brush	H. E. Fowler	286,804	Oct. 16	1288	349	25	248
Brush	L. Havasy	273,524	Mar. 6	362	96	23	596
Brush	S. K. Hawkins	277,899	May 22	1696	463	23	1938
Brush	D. A. McDonel	273,867	Mar. 13	815	220	23	982
Brush	J. M. Moore	275,932	Apr. 17	1380	380	23	1479
Brush	I. C. Wells	271,960	Feb. 6	452	124	23	520
Brush	J. S. White	282,137	July 31	2288	638	24	420
Brush	J. L. Whiting	271,559	Jan. 30	2154	690	23	428
Brush	H. B. Williams	286,886	Oct. 16	1391	382	25	266
Brush and blacking-box holder. Combined blacking.	E. L. Wood	275,107	Apr. 3	297	82	23	1277
Brush. Automatic fly	D. L. Lockwood	284,867	Sept. 11	869	243	24	1058
Brush-black-boring machine	J. C. Hall and C. A. Mable	284,128	Aug. 28	2035	566	24	890
Brush-blocks. Machine for boring.	W. S. McKinney	276,168	Apr. 24	1693	468	23	1540
Brush. Electric	J. N. Aronson	279,315	June 12	871	242	23	2281
Brush for bronzing, &c	J. F. Sargent	274,978	Apr. 3	122	34	23	1247
Brush for cleaning milk-cans	J. J. Quinn	287,719	Oct. 30	2474	667	25	480
Brush for cleansing water-closets, &c. Flexible.	C. F. Pike	270,979	Jan. 23	1431	413	23	295
Brush. Fountain	J. Stevens	288,598	Nov. 13	1019	280	25	694
Brush-handle	S. B. Stanton	287,187	Oct. 23	1783	489	25	343
Brush-holder	J. and R. Engel	277,471	May 15	1187	319	23	1843
Brush holder. Paint	J. B. Cowley and S. S. Morse	288,692	Nov. 20	1141	314	25	721
Brush holder. Paint	A. T. Edwards	286,405	Oct. 9	789	213	25	153
Brush. Paint	J. C. Mount	272,896	Feb. 27	1681	470	23	756
Brush protector. Paint	H. Dischinger	271,814	Feb. 6	278	77	23	490
Brush. Shoe	J. D. Moore	274,016	Mar. 13	988	271	23	1011
Brush. Upholstery	J. A. Illingworth	275,827	Apr. 17	1258	346	23	1456
Brush. Whitewash	W. H. Sheeler	288,187	Nov. 6	485	135	25	592
Brushes. Machine for milling bone blanks for tooth.	A. C. Estabrook	279,728	June 19	1383	386	23	2373
Brushes. Manufacture of	A. C. Estabrook	278,660	May 29	2664	729	23	2114
Bucket and stool. Combined milk-	A. Woodward	271,291	Jan. 30	1810	525	23	367
Bucket for conveying ensilage, coal, plaster, &c	J. A. Cross	270,756	Jan. 16	1156	331	23	241
Bucket. Milk	C. L. Rogers and G. W. Wolf	287,726	Oct. 30	2482	669	25	482
Bucket. Milk	A. Woodward	271,293	Jan. 30	1811	525	23	367
Bucket. Slop	H. Pound	289,135	Nov. 27	1681	466	25	825
Bucket-washing machine	J. D. Shearman	285,312	Sept. 18	1408	398	24	1162
Bucket. Well	J. Brunny	284,374	Sept. 4	260	72	24	948
Buckle	F. Armstrong	287,081	Oct. 23	1648	452	25	318
Buckle	G. W. Blake	272,197	Feb. 13	758	209	23	583
Buckle	O. P. Borg	287,798	Nov. 6	12	4	25	509
Buckle	W. R. Clough	286,264	Oct. 9	593	162	25	119
Buckle	W. H. Dodd	273,476	Mar. 6	306	83	23	885
Buckle	G. N. Freer	279,237	June 12	774	214	23	2265
Buckle	D. G. Gay	279,148	June 12	685	187	23	2250
Buckle	R. G. Hanford, Jr.	275,204	Apr. 3	418	114	23	1298
Buckle	E. M. Kinne	270,227	Jan. 9	476	140	23	104
Buckle	R. McCloskey and D. J. Coleman	280,319	June 26	2095	589	23	2505
Buckle	W. F. Mitchell	289,684	Dec. 4	387	111	25	955
Buckle	E. L. Packer	279,424	June 12	1022	284	23	2305
Buckle	J. A. Park	272,754	Feb. 20	1474	415	23	713
Buckle	J. A. Park	272,755	Feb. 20	1475	415	23	713
Buckle	J. A. Park	272,756	Feb. 20	1476	415	23	713
Buckle	R. Porter	283,278	Aug. 14	966	269	24	679
Buckle	G. E. Stedman	272,344	Feb. 13	937	260	23	614
Buckle	F. W. Thomas	275,545	Apr. 10	891	241	23	1386
Buckle	J. Thomas	273,636	Mar. 6	507	136	23	921
Buckle	J. Thomas	273,637	Mar. 6	508	136	23	921
Buckle	J. Thomas	274,412	Mar. 20	1498	413	23	1108
Buckle	J. L. Thomson	290,816	Dec. 25	1844	510	25	1233
Buckle and loop. Harness	L. Hartson	281,870	July 24	1935	529	24	356
Buckle and trace-carrier	W. S. Brown	278,501	May 29	2475	675	23	2081
Buckle attachment	G. B. Northrup	272,748	Feb. 20	1469	413	23	712
Buckle for harness, &c	M. E. Simmons	279,028	June 5	510	139	23	2210
Buckle-frames. Making	H. E. Fowler	276,797	May 1	344	92	23	1686
Buckle. Harness	W. C. Agnew	280,991	July 10	805	224	24	148
Buckle. Harness	A. Cadwell	276,223	Apr. 24	1736	460	23	1548
Buckle. Harness	J. Hosack	277,901	May 22	1698	463	23	1938
Buckle. Harness	J. H. Huntress	271,465	Jan. 30	2045	588	23	409
Buckle. Harness	W. C. Kellar and R. R. Ditzel	270,680	Jan. 16	1059	302	23	222
Buckle. Harness	W. E. Minneley	284,467	Sept. 4	373	104	24	967
Buckle. Harness	R. Porter	282,366	July 31	2575	706	24	469
Buckle. Harness	S. S. Sargeant	285,434	Sept. 25	1565	441	24	1194
Buckle. Harness	W. G. Slater	278,054	May 22	1879	514	23	1969
Buckle. Harness	M. E. Zeller	271,564	Jan. 30	2163	623	23	429
Buckle. Rosette	F. Hartman	275,824	Apr. 17	1255	345	23	1456
Buckle. Trace	D. T. Harbison	287,125	Oct. 23	1702	466	25	329
Buckle. Trace	P. Hayes	279,382	June 12	974	270	23	2297
Buckle. Trace	E. G. Latta	283,259	Aug. 14	946	264	24	676
Buckle. Trace	J. O'Brien	288,475	Nov. 13	873	236	25	668
Buckle. Trace	J. Thornton	274,849	Mar. 27	2050	572	23	1211
Buckle. Trace	T. Wadleigh	284,262	Sept. 4	131	36	24	927
Buckle. Trace	J. B. Woolsey	270,534	Jan. 9	869	253	23	180
Buckle. Tug	R. K. Burt	282,267	July 31	2446	673	24	447
Buffer	R. P. Garsed	278,007	May 22	1826	499	23	1959
Buffing and polishing machine	S. Feust	270,294	Jan. 9	554	163	23	118

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Buffing and polishing machine .....	S. Feust .....	272,871	Feb. 27	1644	460	23	750
Buffing-machine .....	G. W. Coffin .....	271,322	Jan. 30	1723	499	23	352
Buffing-machine .....	G. W. Emerson .....	281,355	July 17	1271	353	24	237
Buffing-pad .....	J. L. Cross .....	290,631	Dec. 18	1598	439	25	1182
Buffing-wheel .....	J. R. Abbe .....	277,097	May 8	742	{ 194 195 }	23	1758
Buffing-wheel .....	J. R. Abbe .....	284,705	Sept. 11	673	189	24	1024
Buffing-wheel .....	R. Binns .....	274,456	Mar. 27	1568	429	23	1197
Buggy-bow spring .....	S. McElhanev .....	272,071	Feb. 13	606	164	23	557
Buggy-gearing .....	E. and B. H. Ziegler .....	283,843	Aug. 28	1662	469	24	825
Buggy-seat shifting-rail .....	S. R. Parker and P. P. Deveny .....	280,660	July 3	384	108	24	68
Buggy-top .....	S. N. Lennon .....	288,247	Nov. 13	567	{ 157 158 }	25	615
Buggy-top .....	S. N. Lennon. (Reissue) .....	10,380	Sept. 11	1022	287	24	1037
Buggy-top .....	D. G. Wyeth .....	270,105	Jan. 2	432	195	23	88
Buggy-top brace .....	A. B. Davis .....	286,272	Oct. 9	601	165	25	120
Building block .....	J. A. Crandall .....	270,206	Jan. 9	450	131	23	99
Building block or brick .....	A. Ingalls .....	272,883	Feb. 27	1667	466	23	733
Building block or brick .....	J. L. Smithmeyer .....	279,836	June 19	1504	421	23	2395
Building. Fire-proof .....	W. L. Black .....	273,491	May 29	2462	671	23	2079
Building. Fire-proof .....	W. H. Dolman .....	286,401	Oct. 9	784	212	25	153
Building. Fire-proof .....	P. G. Hubert .....	283,345	Aug. 14	1054	296	24	697
Building-front .....	P. H. Jackson .....	289,105	Nov. 27	1646	{ 456 457 }	25	818
Building. Knockdown or portable .....	L. F. Bronnum .....	271,308	Jan. 30	1828	530	23	370
Building material and preparing the same. Compo- site .....	F. W. Bartlett .....	271,209	Jan. 30	1710	495	23	349
Building. Portable .....	V. W. Blanchard .....	271,776	Feb. 6	228	64, 65	23	480
Building. Rat-proof .....	J. Hicks .....	282,636	Aug. 7	196	57	24	534
Buildings. Mechanism for raising lines to the upper parts of .....	G. O. Daw .....	283,580	Aug. 21	1343	375	24	755
Buildings, ships, &c. Construction of .....	C. L. Staub .....	277,952	May 22	1753	478	23	1946
Bullet and making the same. Patched .....	H. F. Clark .....	286,387	Oct. 9	763	207	25	149
Bulletin-board .....	C. H. Tessy .....	278,630	May 29	2631	719	23	2108
Bundling-machine .....	G. A. White .....	283,049	Aug. 14	687	193	24	629
Bung .....	J. Church .....	275,588	Apr. 10	937	255	23	1394
Bung and bush .....	W. Seng .....	276,902	May 1	472	124	23	1709
Bung and bushing .....	S. R. Thompson. (Reissue) .....	10,368	Aug. 14	1089	305	24	702
Bung and vent tube for kegs .....	B. Schock .....	275,790	Apr. 10	1203	329	23	1439
Bung. Barrel .....	R. J. Flood and J. Richardson .....	270,942	Jan. 23	1382	399	23	288
Bung. Barrel .....	H. Werle .....	273,788	Mar. 13	714	193	23	965
Bung-bush and stamp-protector. Combined .....	P. G. Neisendorfer .....	286,474	Oct. 9	864	234	25	168
Bung-bushes. Machine for threading .....	C. E. Roberts .....	277,160	May 8	823	{ 217 218 }	23	1773
Bung-extractor .....	C. Macher and J. L. Lins .....	287,305	Oct. 23	1934	528	25	370
Bung-extractor .....	B. Notting .....	285,655	Sept. 25	1822	519	24	1243
Bung for beer-barrels .....	A. C. Jameson .....	280,830	July 10	614	{ 171 172 }	24	114
Bung for casks, barrels, &c. ....	W. W. Jackson .....	280,931	July 10	719	206	24	136
Bung for racking-barrels .....	F. Gareis .....	278,039	Feb. 13	566	153	23	550
Bung for the preservation of beer .....	H. Theilmann .....	277,960	May 22	1763	480	23	1948
Bung-hole protector .....	H. Gintz .....	270,050	Jan. 2	261	75	23	53
Bung. Locked .....	G. F. Hildenbrand, W. Klein, and C. Trumper .....	284,848	Sept. 11	848	239	24	1055
Bung-valve for barrels .....	A. E. Witherell and D. B. Clement .....	288,390	Nov. 13	767	207	25	648
Buntline for reefing sails .....	I. A. Storer .....	272,171	Feb. 13	726	200	23	578
Buoy. Oil-discharging .....	J. Shields .....	289,720	Dec. 4	440	133	25	963
Burglar-alarm .....	O. Conrad .....	289,624	Dec. 4	311	87	25	942
Burglar-alarm .....	B. Fay .....	285,023	Sept. 18	1073	300	24	1102
Burglar-alarm .....	H. Ferris .....	286,598	Oct. 16	1030	278	25	1203
Burglar-alarm .....	F. D. Hill .....	284,012	Aug. 28	1892	530	24	865
Burglar-alarm .....	G. M. Pratt .....	290,605	Dec. 18	1565	430	25	1177
Burglar-alarm .....	W. H. Reiff .....	284,950	Sept. 11	1002	282	24	1083
Burglar-alarm .....	W. H. Wright .....	280,002	June 26	1714	480	23	2437
Burglar-alarm and door-bell .....	L. E. Williams .....	279,064	June 5	554	152	23	2218
Burglar-alarm and door-securer. Combined .....	H. M. and C. E. Moore .....	280,501	July 3	206	54	24	37
Burglar-alarm attachment for automatic signaling ap- paratus. Electric .....	W. F. Chester .....	280,578	July 3	291	80, 81	24	52
Burglar-alarm circuit-closer .....	W. C. Fisher .....	279,483	June 12	1093	302	23	2316
Burglar-alarm circuit-closer .....	J. L. Lazelle .....	289,665	Dec. 4	363	{ 102 103 }	25	951
Burglar-alarm. Detonating .....	W. Nohlett .....	287,850	Nov. 6	71	21	25	520
Burglar-alarm. Detonating .....	W. H. Reiff .....	287,722	Oct. 30	2477	668	25	481
Burglar-alarm. Electric .....	O. A. Helman .....	280,472	July 3	175	46	24	32
Burglar-alarm. Electric .....	C. T. Jackson .....	269,862	Jan. 2	49	15	23	12
Burglar-alarm. Electric .....	J. Tomney .....	289,470	Dec. 4	115	34	25	907
Burglar-alarm. Electric .....	J. Tomney .....	289,471	Dec. 4	120	34, 35	25	908
Burglar-alarm. Electric .....	A. Wiswall .....	285,334	Sept. 18	1431	405	24	1166
Burglar-alarm. Ringing .....	T. E. James .....	277,738	May 15	1496	406	23	1895
Burglar-alarm. Ringing .....	A. W. Lawson .....	277,296	May 8	980	263	23	1801
Burial apparatus .....	J. H. Wunderlich .....	289,878	Dec. 11	635	176	25	1004
Burial-case .....	F. C. Goff .....	289,643	Dec. 4	336	94	25	946
Burial-case .....	M. Goff .....	282,072	July 31	2188	601	24	405
Burial-case .....	G. Nierstheimer .....	290,996	Dec. 25	2079	573	25	1271
Burial-case .....	N. Woodruff .....	277,969	May 22	1777	484	23	1950
Burial-case .....	N. Woodruff .....	277,970	May 22	1777	485	23	1950
Burial-case mold .....	C. E. Wilson .....	275,004	Apr. 3	152	42	23	1252
Burial-casket .....	G. W. and S. S. Comee .....	281,024	July 10	844	234	24	156
Burial-casket .....	G. S. Eaton .....	274,575	Mar. 27	1733	481	23	1154
Burial-casket .....	A. Freschl .....	278,929	June 5	389	106	23	2189
Burial-casket .....	W. Hamilton .....	275,201	Apr. 3	415	113	23	1297
Burial-casket .....	D. B. Hiser .....	288,804	Nov. 20	1277	350	25	745
Burial-casket .....	J. Maxwell and H. F. Quint .....	283,002	Aug. 14	631	178	24	619
Burial-casket .....	W. H. Powers and J. H. Walker .....	275,265	Apr. 3	487	135	23	1309



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Burial-casket .....	W. A. Sparks .....	288,189	Nov. 6	487	136	25	592
Burial-casket .....	W. A. Sparks .....	289,783	Dec. 4	508	141	25	974
Burial-casket .....	J. H. Walker .....	276,312	Apr. 24	1848	515	23	1566
Burial-casket catch .....	W. C. Langenau .....	275,503	Apr. 10	837	226	23	1377
Burial-casket catch .....	W. C. Langenau .....	281,277	July 17	1171	323	24	220
Burial-casket fastener .....	S. Reynolds and L. Sander .....	290,931	Dec. 25	1987	548	25	1257
Burial-casket pedestal .....	I. G. Hatcher .....	283,885	Aug. 28	1711	482	24	833
Burial-caskets. Basket for .....	M. L. Johnson .....	275,665	Apr. 10	1046	283	23	1413
Burial-caskets, &c. Lining for .....	J. W. Stansbury and J. M. Hedrick .....	283,526	Aug. 21	1276	.....	24	742
Burial-caskets. Trimming for .....	C. W. Compton .....	285,114	Sept. 18	1183	331	24	1121
Burner:							
See Gas-burner.	Illuminating-burner.						
Gas-lighting burner.	Lamp-burner.						
Gas or oil burner.	Oil-burner.						
Hydrocarbon-burner.	Vapor-burner.						
Burning crude petroleum. Device for .....	R. A. Bury and R. M. Bidelman .....	283,465	Aug. 21	1207	339	24	730
Burning-fluids. Reservoir for .....	A. L. Mack .....	286,211	Oct. 9	527	145	25	107
Burring-machine .....	F. G. Sargent .....	270,988	Jan. 23	1441	415	23	297
Bush-box for spindles .....	H. Heard .....	209,854	Jan. 2	42	13	23	11
Bush for bung holes. Metallic .....	C. H. Brady .....	280,343	July 3	6	2	24	4
Bush for vertical shafts .....	P. Steinmetz and J. Geisinger .....	275,867	Apr. 17	1310	361	23	1466
Bushing. Faucet .....	C. H. Shaw .....	270,559	Jan. 9	901	260	23	125
Bushing for couplings .....	E. Storm .....	270,857	Jan. 16	1268	366	23	263
Bushing for faucets .....	C. H. Brady .....	280,344	July 3	7	3	24	4
Bushing for loose pulleys .....	J. Foschinbaur .....	277,257	May 8	931	250	23	1792
Bushing for sheaves of pulley-blocks .....	J. Cochran .....	282,056	July 31	2165	594	24	401
Bushing for tube-sheets .....	J. Strachan .....	278,625	May 29	2623	716	23	2107
Bushing. Metallic .....	C. Hemje .....	289,654	Dec. 4	350	98	25	949
Bustle .....	C. A. Allen .....	280,553	July 3	259	69	24	47
Bustle .....	T. C. Cassidy .....	290,533	Dec. 18	1473	407	25	1161
Bustle .....	A. Kelley .....	287,029	Oct. 23	1583	436	25	305
Bustle .....	J. R. Rheubottom and F. M. Mack .....	275,710	Apr. 10	1096	299	23	1421
Bustle and corset. Combined .....	M. A. Waterhouse .....	290,505	Dec. 18	1435	397	25	1154
Bustle and hip-pad. Combined .....	C. M. Strong .....	286,562	Oct. 9	977	263	25	188
Butter. Apparatus for manufacturing artificial .....	J. Hobbs .....	271,239	Jan. 30	1741	504	23	355
Butter. Apparatus for manufacturing artificial .....	J. Hobbs .....	271,243	Jan. 30	1745	505	23	356
Butter, &c. Apparatus for treating artificial .....	J. Hobbs .....	271,241	Jan. 30	1743	504	23	355
Butter, &c. Apparatus for treating artificial .....	J. Hobbs .....	271,242	Jan. 30	1744	505	23	356
Butter. Apparatus for treating artificial .....	J. Hobbs .....	271,244	Jan. 30	1746	505	23	356
Butter-box .....	A. Sweat .....	286,157	Oct. 2	461	125	25	85
Butter-case .....	F. Leete and W. C. Wilbur .....	275,225	Apr. 3	441	122	23	1302
Butter holder or jar .....	F. Sibley .....	277,948	May 22	1749	477	23	1945
Butter jar, box, and cover. Glass .....	W. W. Weston .....	289,589	Dec. 4	273	77	25	935
Butter. Making artificial .....	S. H. Cochran .....	235,878	Oct. 2	125	36	25	24
Butter. Manufacture of artificial .....	A. J. Chase .....	286,778	Oct. 16	1256	340	25	243
Butter. Manufacturing artificial .....	J. Hobbs .....	271,240	Jan. 30	1742	504	23	355
Butter-mold .....	D. C. Spitzer .....	285,851	Oct. 2	88	26	25	18
Butter-package .....	H. P. Barber .....	285,950	Oct. 2	221	62	25	42
Butter-package .....	J. C. Brown .....	273,020	Feb. 27	1823	510	23	760
Butter-package .....	J. F. Ellis .....	277,696	May 15	1452	392	23	1837
Butter-package .....	W. H. Roberts .....	276,882	May 1	448	120	23	1705
Butter-package .....	L. Wells .....	284,927	Sept. 11	938	263	24	1071
Butter-package fastening .....	W. H. Roberts .....	286,073	Oct. 2	363	100	25	66
Butter-preserving can .....	A. B. Williams .....	285,332	Sept. 18	1430	404	24	1166
Butter-tub .....	H. F. Coombs .....	289,390	Dec. 4	20	6	25	891
Butter-worker .....	E. F. Del Bondio .....	276,006	Apr. 17	1465	404	23	1494
Butter-working machine .....	A. H. Reid .....	283,142	Aug. 14	794	222	24	647
Butter-working machine .....	J. Wasson and R. T. Hitt .....	286,879	Oct. 16	1383	379	25	205
Button .....	W. C. Ames .....	287,992	Nov. 6	261	74	25	553
Button .....	M. Bray .....	280,788	July 10	569	159	24	107
Button .....	T. J. Close .....	277,005	May 8	618	162	23	1738
Button .....	J. W. Cole .....	277,886	May 22	1680	452	23	1934
Button .....	J. Costello .....	278,314	May 29	2235	613	23	2038
Button .....	J. Costello .....	290,321	Dec. 18	1180	330	25	1110
Button .....	H. Dreyfus .....	277,999	May 22	1816	496	23	1958
Button .....	G. P. Farmer .....	275,619	Apr. 10	989	267	23	1403
Button .....	G. P. Farmer. (Reissue) .....	10,340	June 12	1134	314	23	2323
Button .....	F. Gay .....	283,233	Aug. 14	909	253	24	669
Button .....	R. J. Gilmore .....	283,235	Aug. 14	912	254	24	669
Button .....	C. V. Goddard .....	283,772	Aug. 28	1580	446	24	812
Button .....	L. Goddu .....	289,829	Dec. 11	572	160	25	993
Button .....	L. Goddu .....	289,830	Dec. 11	573	160	25	993
Button .....	J. H. Gregory .....	288,053	Nov. 6	331	93	25	564
Button .....	M. W. Henius .....	270,665	Jan. 16	1039	298	23	219
Button .....	W. Hüger .....	280,623	July 3	344	95	24	61
Button .....	R. H. Isbell .....	278,556	May 29	2538	692	23	2092
Button .....	C. H. Kapp .....	275,218	Apr. 3	433	118	23	1300
Button .....	N. C. Newell .....	273,132	Feb. 27	1963	552	23	806
Button .....	N. C. Newell .....	273,133	Feb. 27	1964	552	23	806
Button .....	N. C. Newell .....	279,002	June 5	471	129	23	2204
Button .....	N. C. Newell .....	290,092	Dec. 11	890	253	25	1051
Button .....	G. T. Pitts .....	285,306	Sept. 18	1401	396	24	1161
Button .....	C. Radcliffe .....	289,138	Nov. 27	1635	468	25	825
Button .....	W. S. Rogers .....	280,767	July 3	531	149	24	94
Button .....	A. H. Savage .....	272,586	Feb. 20	1265	352	23	676
Button .....	S. W. Shorey .....	283,032	Aug. 14	667	188	24	626
Button .....	J. S. Smith .....	272,491	Feb. 20	1146	322	23	655
Button .....	C. S. Snively and W. F. Palmer .....	286,800	Oct. 16	1358	372	25	261
Button .....	E. Wuerfel .....	281,425	July 17	1356	374	24	251
Button and button-fastener .....	C. Erlanger .....	290,409	Dec. 18	1289	362	25	1130
Button and button-fastener .....	A. McKevitt .....	272,736	Feb. 20	1452	407	23	709
Button and fastener .....	C. Daggett .....	272,123	Feb. 13	676	184	23	569
Button and fastener .....	G. W. Prentice .....	290,353	Dec. 18	1219	342	25	1117
Button and glove hook .....	F. B. Bracking .....	289,213	Nov. 27	1777	492	25	842

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Button and necktie-retainer. Combined collar.	L. Stein	283,528	Aug. 21	1278	357	24	742
Button and scarf-ring. Combined collar.	J. H. Race	275,412	Apr. 10	720	192	23	1358
Button-attaching instrument.	P. H. Sweet, Jr.	282,130	July 31	2280	626	24	419
Button. Collar.	J. E. Vanderbilt	271,954	Feb. 6	447	122	23	519
Button. Cuff.	E. F. Pfeuger	290,604	Dec. 18	1565	430	25	1177
Button. Duplex sleeve.	F. E. Williams	277,095	May 8	740	194	23	1758
Button-fastener.	W. J. Ethell and M. D. L. Swank	282,872	Aug. 7	476	134	24	585
Button-fastener.	C. L. Farnsworth.	280,730	July 3	471	134	24	84
Button-fastener.	F. D. Ford	279,560	June 19	1191	330	23	2340
Button-fastener.	R. J. Gilmore.	281,992	July 24	2080	571	24	381
Button-fastener.	H. Howson	286,929	Oct. 16	1445	397	25	275
Button-fastener.	E. Kempshall	282,903	Aug. 7	510	143	24	591
Button-fastener.	J. H. McClure	281,899	July 24	1974	540	24	363
Button-fastener.	A. McKeit	269,870	Jan. 2	56	18	23	13
Button-fastener.	S. L. Pratt	278,734	June 5	75	23	23	2137
Button-fastener.	G. W. Prentice	271,267	Jan. 30	1776	516	23	361
Button-fastener.	G. W. Prentice	272,318	Feb. 13	906	253	23	610
Button-fastener.	G. W. Prentice	278,266	May 22	2154	522	23	2016
Button-fastener.	G. W. Prentice	278,360	May 29	2303	630	23	2051
Button-fastener.	H. Schmoele	272,587	Feb. 20	1266	353	23	676
Button-fastener.	F. A. Smith, Jr.	272,913	Feb. 27	1699	475	23	759
Button-fastener.	F. A. Smith, Jr.	276,638	May 1	116	31	23	1647
Button-fastener.	F. A. Smith, Jr.	277,169	May 8	837	221	23	1775
Button-fastener.	P. H. Sweet, Jr.	275,435	Apr. 10	752	200	23	1363
Button-fastener.	P. H. Sweet, Jr.	290,139	Dec. 11	948	266	25	1062
Button-fastener.	J. F. Thayer	276,645	May 1	125	33	23	1648
Button-fastener.	J. F. Thayer	277,082	May 8	726	190	23	1756
Button-fasteners. Machine for making.	M. M. Zellers.	284,158	Aug. 23	2072	575 } 576 }	24	896
Button-fastening.	J. K. Alters	271,185	Jan. 23	1682	485	23	336
Button-fastening.	A. Hall	274,316	Mar. 20	1377	378	23	1086
Button-fastening.	W. M. Hazel	272,836	Feb. 20	1587	446	23	733
Button-fastening.	E. Ivins and D. Snyder	290,774	Dec. 25	1789	494	25	1224
Button-fastening.	G. W. Prentice	274,376	Mar. 20	1456	399	23	1100
Button-fastening.	G. W. Prentice	283,813	Aug. 28	1630	459	24	819
Button-fastening.	G. W. Prentice	284,978	Sept. 11	1000	282	24	1083
Button-fastening.	F. A. Smith, Jr.	284,912	Sept. 11	925	260	24	1069
Button-fastening.	P. H. Sweet, Jr.	273,405	Mar. 6	214	58	23	870
Button-fastening machine.	A. Hall	286,921	Oct. 16	1436	395	25	274
Button-fastening staple.	J. H. Goodfellow	273,724	Mar. 13	616	166	23	947
Button-fastenings. Implement for setting.	W. E. Hagan	290,680	Dec. 25	1659	458	25	1199
Button-flies. Press-clamp for.	I. Felber	282,711	Aug. 7	296	84	24	551
Button-fly lap and staying-piece. Combined.	D. W. Thompson	276,926	May 1	503	131	23	1713
Button-hole cutter	J. H. Osborne	277,602	May 15	1343	362	23	167
Button-hole cutter and tracer.	A. J. Curtis	278,103	May 22	1936	531	23	1979
Button-hole linings. Machine for making	D. Harris	282,078	July 31	2194	602 } 603 }	24	406
Button-hole linings. Machine for making leather.	C. Dancel	272,376	Feb. 13	979	273 } 274 }	23	622
Button-holes. Making.	J. Ware	278,473	May 29	2439	665	23	2075
Button-hook	G. Clark	277,232	May 8	900	240	23	1786
Button-hook	G. Havell	289,095	Nov. 27	1635	452	25	816
Button-hook	G. L. Witsil	277,181	May 8	848	225	23	1777
Button. Lacing.	G. W. Prentice	287,859	Nov. 6	81	24	25	521
Button-lap and stay-piece for garment-slits. Combined	D. W. Thompson	289,469	Dec. 4	113	34	25	907
Button-machine.	Z. B. Pierce	279,180	June 12	716	195 } 196 }	23	2255
Button. Metallic.	E. N. Foote	274,582	Mar. 27	1746	484	23	1156
Button or stud	I. S. Burke	278,395	May 29	2343	640	23	2058
Button or stud	W. W. Covell	283,864	Aug. 28	1685	476	24	829
Button or stud	J. Moore	278,724	June 5	63	19	23	2135
Button or stud	C. H. Niggeman	281,642	July 17	1626	444	24	296
Button or stud	T. A. Searle	281,404	July 17	1330	368	24	247
Button or stud	T. W. F. Smitten	276,917	May 1	488	128	23	1711
Button or stud.	E. H. Spencer, Jr.	285,080	Sept. 18	1187	317	24	1113
Button or stud. Detachable	S. J. Allen	289,370	Dec. 4	2	1	25	887
Button. Pearl	H. Smith	287,969	Nov. 6	228	65	25	547
Button-pin	M. V. Quinn	286,222	Oct. 9	539	148	25	109
Button-press	G. O. Schmeller	286,079	Oct. 2	369	102	25	68
Button. Separable	D. Humphreys	274,607	Mar. 27	1775	493	23	1162
Button. Separable	T. Jarvis	279,568	June 19	1199	332	23	2341
Button. Separable	R. E. Kelsey and C. H. Shuttleworth.	270,593	Jan. 16	948	274	23	203
Button. Separable	A. McKeit	272,968	Feb. 27	1759	492	23	769
Button. Separable	W. N. Rowe	279,279	June 12	825	229	23	2274
Button. Separable	A. G. Weber	290,614	Dec. 18	1575	433	25	1179
Button-setting apparatus	W. A. Beland	288,401	Nov. 13	782	211	25	651
Button-setting implement.	J. H. Goodfellow	286,537	Oct. 9	943	254	25	182
Button-setting instrument	G. H. Alton	283,453	Aug. 21	1193	335	24	728
Button-setting instrument	J. F. Atwood	285,782	Oct. 2	5	2	25	4
Button-setting instrument	J. H. Goodfellow	288,228	Nov. 13	540	150	25	611
Button-setting instrument	S. L. Pratt	278,735	June 5	76	23	23	2137
Button-setting instrument	S. L. Pratt and A. M. English	287,389	Oct. 23	2032	552	25	387
Button-setting instrument	G. W. Prentice	274,028	Mar. 13	1000	274	23	1013
Button-setting instrument	F. A. Smith, Jr.	280,408	July 3	84	23	24	18
Button-setting instrument	F. A. Smith, Jr.	284,913	Sept. 11	925	260	24	1069
Button-setting instrument	P. H. Sweet, Jr.	274,841	Mar. 27	2040	568	23	1209
Button-setting instrument	J. F. Thayer	272,918	Feb. 27	1703	476	23	759
Button-setting instrument	J. F. Thayer	272,919	Feb. 27	1704	477	23	760
Button-setting instrument	J. F. Thayer	274,053	Mar. 13	1028	281	23	1018
Button-setting machine.	E. D. Welton	284,928	Sept. 11	939	264	24	1071
Button. Shoe.	J. G. Wiggins	280,270	June 26	2033	572	23	2494
Button. Sleeve.	R. E. Brunacci	278,772	June 5	118	33	23	2144
Button. Sleeve.	S. C. Howard	273,844	Mar. 13	723	212	23	976



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Button. Sleeve.....	E. S. Mason.....	281,093	July 10	926	258	24	171
Button. Sleeve or collar.....	S. J. Allen and J. B. Richardson.....	288,964	Nov. 27	1475	409	25	789
Button. Sleeve or collar.....	J. H. Booth.....	286,770	Oct. 16	1246	337	25	241
Button. Sleeve or cuff.....	W. W. Young.....	274,245	Mar. 20	1290	355	23	1072
Button. Sleeve or other.....	J. W. Miller.....	280,214	June 26	1960	552	23	2482
Button-stay.....	D. J. Kelley.....	277,574	May 15	1314	353	23	1863
Buttons, &c. Attaching.....	J. F. Atwood.....	285,781	Oct. 2	4	1	25	3
Buttons. Attaching.....	G. W. Prentice.....	286,732	Oct. 16	1203	324	25	233
Buttons. Attaching.....	G. W. Prentice.....	289,136	Nov. 27	1681	467	25	825
Buttons. Attaching.....	F. A. Smith, Jr.....	286,740	Oct. 16	1211	326	25	235
Buttons. Hand-machine for attaching.....	M. M. Zellers and A. G. Wilkins.....	284,159	Aug. 28	2075	{ 576 577 }	24	896
Buttons. Implement for attaching.....	J. H. Goodfellow.....	290,181	Dec. 11	991	280	25	1070
Buttons. Instrument for attaching.....	P. H. Sweet, Jr.....	288,136	Nov. 6	424	120	25	582
Buttons. Machine for attaching.....	G. H. Alton.....	284,111	Aug. 28	2011	560	24	886
Buttons. Machine for attaching.....	F. A. Smith, Jr.....	286,741	Oct. 16	1211	{ 326 327 }	25	235
Buttons. Machine for attaching.....	P. H. Sweet, Jr.....	274,407	Mar. 20	1493	411	23	1107
Buttons. Machine for attaching.....	A. G. Wilkins.....	282,821	Aug. 7	412	{ 116 117 }	24	573
Buttons. Machine for securing.....	B. C. Young.....	271,183	Jan. 23	1680	484	23	335
Buttons. Manufacture of.....	J. H. Manning.....	286,620	Oct. 16	1060	285	25	209
Buttons. Manufacture of shoe.....	C. E. Bailey and W. R. Talbot.....	273,932	Mar. 13	893	244	23	995
Buttons. Metallic eye for.....	H. C. Luther.....	281,637	July 17	1622	433	24	295
Buttons. Setting-instrument for attaching.....	W. M. Hazel.....	278,012	May 22	1834	500	23	1961
Buttons to fabrics. Instrument for attaching.....	P. H. Sweet, Jr.....	288,135	Nov. 6	423	119	25	582
Buttoner. Glove and shoe.....	S. F. Estell.....	288,700	Nov. 20	1148	316	25	722
Cabbage-cutting machine.....	G. Geyer.....	272,132	Feb. 13	687	187	23	570
Cabinet for type-writers and sewing-machines.....	W. Horrocks.....	281,765	July 24	1802	492	24	332
Cabinet-lock.....	F. W. Mox.....	286,327	Oct. 9	697	186	25	137
Cable carrier. Endless.....	C. W. Crismon and A. F. Whitaker.....	280,295	June 26	2063	580	23	2500
Cable gearing. Endless.....	W. B. Ross.....	283,228	Oct. 9	544	149	25	110
Cable-grip.....	B. F. Carman.....	288,690	Nov. 20	1138	313	25	720
Cable-grip apparatus.....	H. Dods and F. Hinds.....	290,003	Dec. 11	789	222	25	1032
Cable grip, &c. Endless.....	A. Haman.....	287,377	Oct. 23	2018	549	25	385
Cable gripper. Traction.....	A. H. Lighthall.....	274,506	Mar. 27	1649	458	23	1140
Cable roads. Track and switch for.....	S. H. Terry.....	270,510	Jan. 9	838	243	23	173
Cable-stopper.....	O. Lynch.....	276,841	May 1	395	105	23	1695
Cable. Underground.....	W. and T. G. McMahon.....	273,869	Mar. 13	816	221	23	982
Cable. Underground multiple-wire.....	J. F. Martin.....	286,948	Oct. 16	1473	404	25	280
Cable used in propelling cars. Supporting.....	M. Arnheim.....	283,058	Aug. 14	698	196	24	631
Cable-way. Underground.....	A. H. Lighthall.....	274,505	Mar. 27	1647	458	23	1140
Cable ways. Grip for endless.....	L. J. Wing.....	281,815	July 24	1870	511	24	345
Cable ways. Grip or clutch to be used on endless.....	W. A. Gilday and T. M. Heckman.....	289,527	Dec. 4	194	55	25	920
Cable-ways. Transmitting power from.....	S. H. Terry.....	270,509	Jan. 9	836	243	23	173
Cables or conductors. Suspending.....	C. E. Chinnock.....	274,562	Mar. 27	1719	477	23	1152
Cables. Testing lead-covered.....	W. J. McElroy.....	284,137	Aug. 28	2046	{ 568 569 }	24	892
Cables. Testing lead-covered.....	H. Van Hoevenberg.....	284,094	Aug. 28	1987	553	24	882
Caddy or canister.....	G. Lillbridge.....	279,261	June 12	806	223	23	2271
Caisson. Floating.....	P. H. Loud.....	272,722	Feb. 20	1432	402	23	706
Caisson-gate.....	G. F. Schild.....	287,178	Oct. 23	1771	{ 485 486 }	25	341
Cake-beater.....	W. C. Giru.....	290,033	Dec. 11	823	232	25	1038
Cake. Device for ornamenting.....	A. J. Fish.....	279,555	June 19	1187	328	23	2339
Cake-frying device.....	J. M. Andreae.....	280,778	July 10	558	156	24	105
Cake, jumble, and snap machine.....	M. De Tambel.....	278,318	May 29	2238	{ 614 615 }	23	2039
Cakes, &c. Machinery for ornamenting.....	J. H. Mitchell.....	271,898	Feb. 6	374	{ 103 104 }	23	507
Calamine compound.....	B. L. James.....	278,969	June 5	434	.....	23	2197
Calaminizing compound.....	C. M. McCarty.....	283,130	Aug. 14	781	.....	24	646
Calculating device.....	J. S. Duret.....	283,331	Aug. 14	1036	291	24	693
Calculating device.....	C. Rowland.....	284,576	Sept. 4	508	{ 142 143 }	24	990
Calculating-machine.....	C. F. Pidgin and F. H. Leonard, Jr.....	284,755	Sept. 11	736	{ 205 206 490 491 }	24	1035
Calculating-machine.....	I. E. Tallman.....	287,192	Oct. 23	1787	{ 490 491 }	25	344
Calculator. Interest.....	M. Todd.....	271,949	Feb. 6	442	121	23	518
Calculator. Percentage.....	S. J. Tucker and E. F. Kelly.....	280,772	July 3	543	151	24	96
Calendar.....	L. Brauer.....	270,730	Jan. 16	1123	322	23	235
Calendar.....	J. Brenner.....	284,270	Sept. 4	139	39	24	928
Calendar.....	J. Cussons.....	277,411	May 8	1106	297	23	1823
Calendar.....	C. H. Dana, Jr.....	283,215	Aug. 14	887	247	24	665
Calendar.....	W. L. Gorton.....	273,725	Mar. 13	618	166	23	947
Calendar.....	H. S. Hack.....	287,022	Oct. 23	1576	434	25	304
Calendar.....	H. S. Hack.....	288,329	Nov. 13	677	186	25	632
Calendar.....	H. H. Ham, Jr.....	287,221	Oct. 23	1901	520	25	364
Calendar.....	H. W. Kibbe.....	285,138	Sept. 18	1214	341	24	1126
Calendar.....	S. D. Styles.....	289,167	Nov. 27	1716	479	25	831
Calendar.....	L. M. Switzler.....	276,643	May 1	123	33	23	1648
Calendar.....	H. Taylor.....	290,280	Dec. 18	1126	317	25	1101
Calendar. Discal.....	A. B. Freeman and M. F. Richardson.....	290,763	Dec. 25	1776	491	25	1921
Calendar-box. Self-oiling.....	H. L. Behrens.....	282,151	July 31	2302	632	24	422
Calendering-machine.....	M. A. W. Lewis.....	275,676	Apr. 10	1056	287	23	1415
Caliper-gage.....	E. Sauter.....	285,684	Sept. 25	1856	530	24	1249
Calipers.....	G. Amborn, Jr., and E. D. Chaplin.....	277,973	May 22	1720	486	23	1951
Calipers.....	R. H. Brown.....	288,770	Nov. 20	1238	340	25	737
Calipers.....	R. H. Brown.....	288,771	Nov. 20	1239	340	25	737
Calipers.....	R. Crittenden and R. G. Henry.....	278,225	May 22	2096	577	23	2006
Calipers.....	A. Nimmo.....	280,073	June 26	1804	507	23	2453
Calipers.....	O. D. Warfield.....	288,961	Nov. 20	1466	405	25	780
Calipers. Adjusting mechanism for.....	J. J. Byrne.....	279,534	June 19	1162	322	23	2335

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Calipers and dividers .....	W. H. Mitchell .....	286,469	Oct. 9	858	233	25	167
Calipers. Micrometer .....	M. M. Barnes .....	280,339	July 3	2	1	24	3
Calipers. Micrometer .....	L. L. Remacle .....	288,736	Nov. 20	1200	328	25	730
Calipers. Micrometer .....	G. F. Stillman .....	279,038	June 5	522	142	23	2212
Call. Individual .....	J. C. Wilson .....	283,448	Aug. 21	1187	334	24	726
Caloric-engine .....	T. Beesley .....	270,000	Jan. 2	207	60	23	43
Caloric-engine .....	J. Buckett .....	279,326	June 12	891	248 249	23	2284
Caloric from or communicating it to liquids. Rapidly extracting .....	C. Tellier .....	275,437	Apr. 10	756	201 202	23	1363
Cam. Variable .....	W. Jones .....	284,860	Sept. 11	861	242	24	1057
Camel for lightening vessels .....	J. J. Peetz .....	287,156	Oct. 23	1740	477	25	336
Camera: See Photo-micrographic camera. Photographic camera. Wender-camera.							
Camera .....	M. Flammang .....	271,443	Jan. 30	2009	579	23	403
Camera-box .....	W. M. Elrod .....	271,048	Jan. 23	1507	435	23	307
Camera-shutter .....	D. S. Boydston .....	272,117	Feb. 13	670	182	23	568
Camera-stand .....	J. H. Altheide .....	280,776	July 10	555	155	24	105
Camera-stand .....	W. R. Wright .....	277,650	May 15	1403	378	23	1878
Camp-chair .....	G. S. Knapp .....	279,398	June 12	996	276	23	2301
Camp chair and cot .....	W. H. Bakewell .....	280,004	June 26	1717	481	23	2438
Camp-chair. Folding .....	S. C. Hopkins .....	271,246	Jan. 30	1748	506	23	356
Can: See Butter-preserving can. Ink-can. Lamp-filling can. Color-can. Milk-can. Cream-can. Milk and cream can. Creaming-can. Milk and cream trans- Filling-can. porting can. Fluid-can. Oil-can. Fruit-can. Paint-can. Glass-lined metal can. Sheet-metal can. Shipping-can. Hauling-can. Tilting can. Ice-machine can.							
Can .....	M. T. Barrows .....	279,521	June 19	1144	317	23	2332
Can .....	J. A. Frey .....	279,738	June 19	1394	389	23	2375
Can .....	G. W. Lane .....	290,068	Dec. 11	861	245	25	1045
Can .....	L. Richardson .....	281,556	July 17	1517	416	24	279
Can and jacket. Carrying .....	C. Kivitts .....	281,374	July 17	1292	358	24	241
Can and making the same .....	E. Norton .....	277,920	May 22	1716	469	23	1941
Can-body blanks. Machine for cutting .....	G. T. Pillings .....	288,733	Nov. 20	1197	326 327 328	25	729
Can-capping machine .....	C. R. Merriam .....	278,251	May 22	2128	586	23	2012
Can-ending machine .....	E. Norton and J. G. Hodgson .....	274,363	Mar. 20	1440	395 396	23	1097
Can-filler .....	J. P. Sheppard .....	274,039	Mar. 13	1011	277	23	1015
Can-filling apparatus .....	A. Rockfellow .....	287,725	Oct. 30	2480	669	25	481
Can-filling machine .....	H. C. Baxter and H. R. Stickney .....	284,998	Sept. 18	1036	291	24	1096
Can-filling machine .....	G. W. Brown and H. Lambert .....	289,807	Dec. 11	541	151	25	987
Can-filling machine .....	J. Colbert .....	286,782	Oct. 16	1261	341	25	243
Can-filling machine .....	M. Jensen .....	281,767	July 24	1804	492 493	24	333
Can-filling machine .....	L. H. Smith .....	280,684	July 3	413	116 117	24	74
Can-filling machine .....	L. H. Smith .....	289,155	Nov. 27	1705	473 474	25	828
Can-filling machine .....	L. H. Smith .....	289,156	Nov. 27	1706	474	25	829
Can-heading machine .....	W. E. Vincent .....	274,863	Mar. 27	2075	577	23	1214
Can heads and bodies. Machine for forming the joints between .....	R. C. Anderson .....	280,908	Jan. 2	101	30	23	21
Can-holder .....	E. Ivey and A. Uren .....	283,112	Aug. 14	764	215	24	643
Can-opener .....	W. D. Lewis .....	289,019	Dec. 11	687	192	25	1013
Can-opener .....	J. Rath .....	280,241	June 26	1998	562	23	2488
Can-opener .....	J. McWilliams .....	280,495	July 3	199	52	24	36
Can-opener .....	O. R. Webster .....	278,379	May 29	2325	636	23	2055
Can-opener .....	C. White .....	273,416	Mar. 6	227	61	23	573
Can-opener and corkerew. Combined .....	S. H. Chilcote .....	283,967	Aug. 28	1812	512	24	853
Can-opener. Combination .....	H. Hartman .....	278,951	June 5	415	113	23	2194
Can, pump, and measure. Combined .....	B. F. Myers .....	275,934	Apr. 17	1383	380	23	1479
Can-testing machine .....	E. Norton and J. G. Hodgson .....	287,048	Oct. 23	1606	441 442	25	310
Can-top. Removable .....	C. J. Grainger .....	290,985	Dec. 25	2067	569	25	1269
Can-washing machine .....	V. Barker .....	282,434	July 31	2664	730 731	24	485
Cans. Closing .....	T. G. F. Dolby .....	284,398	Sept. 4	293	82	24	953
Cans. Device for handling fruit .....	W. Gregg .....	274,591	Mar. 27	1753	487	23	1158
Cans. Machine for putting tops and bottoms on .....	J. G. Jones .....	271,660	Feb. 6	333	92	23	499
Cans. Stopper for the feeding-holes of .....	C. H. Shaw .....	273,400	Mar. 6	209	56	23	869
Canal-boat. Steam .....	J. Pons .....	282,923	Aug. 7	529	150	24	594
Canals, flumes, and water-ways. Apparatus for regulating the flow and delivery of water through .....	J. Emerson .....	275,371	Apr. 10	660	176 177	23	1347
Candelabrum .....	F. A. Kittell .....	282,458	July 31	2694	740	24	490
Candies, &c. Manufacture of .....	A. Neuhausen .....	271,259	Jan. 30	1766	512	23	359
Candies. Process of and apparatus for the manufacture of dipped .....	J. P. A. Williams .....	279,209	June 12	744	204	23	2260
Candle .....	G. H. Kirk .....	276,602	May 1	72	20	23	1640
Candle. Argand .....	J. B. Rodman and J. D. Bingham .....	284,486	Sept. 4	396	111	24	971
Candle-holder .....	C. Keibel .....	273,103	Feb. 27	1928	540	23	798
Candle-machine .....	C. L. Werk .....	284,785	Sept. 11	781	217	24	1042
Candle-mold .....	J. Brélivet .....	280,566	July 3	274	75	24	49
Candle-mold gage .....	G. P. Vicken .....	282,133	July 31	2284	627	24	419



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Candle-molding machine	W. H. Haney	272,876	Feb. 27	1651	462	23	751
Candles. Machine for manufacturing	A. A. Royce	269,885	Jan. 2	71	22	23	16
Candlestick	C. B. Tuckfield	283,536	Aug. 21	1284	359	24	744
Candlestick. Miner's	J. Jones	270,316	Jan. 9	577	170	23	123
Candlestick. Miner's	J. C. Martin	275,057	Apr. 3	229	62	23	1365
Candlestick. Miner's	C. Pateneau	289,702	Dec. 4	424	118	25	960
Candy-cooler	J. H. Roberts	289,550	Dec. 11	611	170	25	1000
Candy. Crystallizing-pan for rock	C. Santer	272,905	Feb. 27	1690	473	23	757
Candy-cutting machine	B. Parker	270,468	Jan. 9	730	228	23	162
Candy-beater	T. Burkhard	287,621	Oct. 30	2350	634	25	456
Candy-machine	W. L. Yancey	286,567	Oct. 9	984	264	25	189
Candy. Manufacture of	C. W. Hellenbrand	272,252	Feb. 13	896	230	23	596
Candy. Manufacture of	L. T. Yoder	289,488	Dec. 4	146	40	25	912
Candy. Method of and machine for creaming	J. Kreischer	282,535	Aug. 7	72	21	24	513
Cane and camp-chair. Combined	S. N. McGaughey	280,843	July 10	631	177	24	117
Cane and fan combined	W. Verbeck	285,530	Sept. 25	1676	471	24	1215
Cane and pipe-case. Combined	J. P. Weaver	275,100	Apr. 3	290	80	23	1276
Cane. Electric	A. and A. Roovers	287,170	Oct. 23	1760	483	25	339
Cane-juice evaporator	F. Cook	280,293	June 26	2059	579	23	2499
Cane-juice evaporator and furnace	F. Cook	276,161	Apr. 24	1663	459	23	1535
Cane. Machine for crushing and disintegrating sugar	A. Ferron	279,235	June 12	773	460	23	2265
Cane-mill	C. D. Armstrong	273,432	Mar. 6	249	67	23	876
Cane-mill	D. L. Davis	273,472	Mar. 6	301	82	23	885
Cane-mill	A. J. Manny	282,339	July 31	2541	696	24	463
Cane-mill	W. S. Reeder	290,472	Dec. 18	1388	383	25	1147
Cane-mill	J. F. Wood	280,705	July 3	440	126	24	78
Cane mill. Sugar	H. B. Stevens	270,502	Jan. 9	819	239	23	170
Cane stripper and header	L. H. Coburn and E. D. Thompson	287,240	Oct. 23	1857	508	25	355
Canister	C. M. Symonds	277,630	May 15	1379	372	23	1874
Canning apparatus	R. Wheeler	270,529	Jan. 9	864	251	23	179
Canning green corn	G. M. Baker	273,436	Mar. 6	252	23	877	
Canning machine. Vegetable and fruit	T. P. Fletcher	276,380	Apr. 24	1942	538	23	1583
Canning press	L. Hamlin	275,906	Apr. 17	1352	372	23	1473
Cannon. Breech-loading	A. Dickerman	279,639	June 19	1279	355	23	2356
Cannon. Breech-loading	B. B. Hotchkiss	270,589	Jan. 16	938	271	23	201
Cannon. Breech-loading	B. B. Hotchkiss	270,590	Jan. 16	942	272	23	202
Cannon. Breech-loading	B. B. Hotchkiss	270,953	Jan. 23	1397	403	23	290
Cannon. Pneumatic	D. M. Mefford	279,965	June 26	1671	469	23	2430
Canoe	J. S. Stephenson	281,316	July 17	1225	339	24	229
Canopy for folding steamer-chairs	F. G. Johnson and J. H. Hayward	270,224	Jan. 9	474	139	23	103
Canopy-standard for vehicles	O. Unzicker	270,517	Jan. 9	849	247	23	176
Cant-hook	J. Carpenter	283,203	Aug. 14	875	244	24	663
Cant-hook	H. C. A., and J. H. Peavey. (Reissue.)	10,336	June 5	635	172	23	2231
Canteen	C. G. Jordon	273,097	Feb. 27	1921	538	23	797
Canteen	J. S. Pilger and G. H. Knight	275,697	Apr. 10	1079	295	23	1419
Cap	W. E. Wood	290,621	Dec. 18	1582	435	25	1180
Cap for firing explosive charges	G. Frennd	289,768	Dec. 4	490	136	25	971
Cap. Traveling	H. H. Snow	271,529	Jan. 30	2120	610	23	422
Cape and hood. Combined	M. Seiler	276,720	May 1	245	62	23	1666
Capstan	E. E. Furney	290,029	Dec. 11	817	230	25	1037
Capsule-machine	F. A. Hubel	290,583	Dec. 18	1534	422	25	1172
Capsule-machine	F. A. Hubel and H. H. Taylor. (Reissue.)	10,316	Apr. 17	1645	453	23	1524
Capsule-machine	C. F. Purdie	276,280	Apr. 24	1804	503	23	1560
Capsule-machine	C. F. Purdie	276,281	Apr. 24	1806	503	23	1560
Capsule-machine	C. F. Purdie	276,282	Apr. 24	1807	503	23	1560
Capsule-machine	C. F. Purdie	289,780	Dec. 4	504	140	25	974
Capsule-machine	H. H. Taylor	275,092	Apr. 3	279	76	23	1274
Capsule-machine	H. H. Taylor	276,094	Apr. 17	1576	434	23	1512
Capsule-stripper	L. J. Wohlrich	270,716	Jan. 16	1105	316	23	231
Car	J. P. C. Foster	276,017	Apr. 17	1479	408	23	1496
Car and apparatus for transporting the same. Dumping.	J. J. Clarke	274,439	Mar. 20	1534	423	23	1114
Car and vessel signal	O. C. Knipe	271,581	Jan. 30	2179	627	23	432
Car-blind	A. Roelofs	275,712	Apr. 10	1098	300	23	1422
Car-braces. Gage for cutting	C. Mattice	284,035	Aug. 28	1917	536	24	870
Car-brake	W. H. Adams	271,206	Jan. 30	1707	495	23	349
Car-brake	H. Barratt	288,398	Nov. 13	778	210	25	650
Car-brake	B. Bennett	271,773	Feb. 6	235	63	23	479
Car-brake	J. Bettis	270,002	Jan. 2	210	61	23	43
Car-brake	G. M. Brill	286,773	Oct. 16	1251	338	25	242
Car-brake	E. R. Bristol	270,732	Jan. 16	1125	322	23	235
Car-brake	E. R. Bristol	281,445	July 17	1387	381	24	257
Car-brake	W. Brumble	289,970	Dec. 11	742	210	25	1024
Car-brake	E. M. Buckley and A. Jackson	273,345	Mar. 6	130	38	23	857
Car-brake	M. M. Clark	279,914	June 26	1607	452	23	2419
Car-brake	W. Clayton	289,982	Dec. 11	750	214	25	1027
Car-brake	J. M. De Witt	274,738	Mar. 27	1918	535	23	1188
Car-brake	E. Foakes	273,053	Feb. 27	1860	522	23	787
Car-brake	P. R. Frey	277,476	May 15	1193	320	23	1844
Car-brake	C. S. Gerritson	270,300	Jan. 9	550	165	23	119
Car-brake	H. M. Glines	282,714	Aug. 7	298	84	24	551
Car-brake	A. G. Hamm and H. W. Eisenbise	272,241	Feb. 13	814	227	23	593
Car-brake	A. E. Harris	277,274	May 8	949	254	23	1796

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Car-brake	L. H. Hébert	284,201	Sept. 4	56	15, 16	24	914
Car-brake	G. Heidel	275,650	Apr. 10	1028	277	23	1410
Car-brake	T. Hersee	270,798	Jan. 16	1201	347	23	250
Car-brake	H. Heyd	289,534	Dec. 4	203	57	25	922
Car-brake	E. Katzenmayer	287,293	Oct. 23	1919	524	25	367
Car-brake	E. Katzenmayer	287,294	Oct. 23	1920	525	25	367
Car-brake	E. Katzenmayer	287,295	Oct. 23	1922	525	25	368
Car-brake	A. D. Kilborn and W. F. Smith	270,440	Jan. 9	747	219	23	155
Car-brake	A. A. Lambrigger	290,588	Dec. 18	1539	424	25	1173
Car-brake	C. Lederer and F. X. Marks	281,085	July 10	917	256	24	169
Car-brake	E. W. Lippincott	280,640	July 3	363	101	24	64
Car-brake	J. Lytle	277,587	May 15	1326	356	23	1865
Car-brake	J. F. Mallinckrodt	273,566	Mar. 6	426	114	23	907
Car-brake	J. F. Mallinckrodt	273,567	Mar. 6	427	114	23	907
Car-brake	J. F. Mallinckrodt (Reissue)	10,318	Apr. 24	2152	599	23	1619
Car-brake	A. H. Marden	270,962	Jan. 23	1410	466	23	292
Car-brake	H. McCalip and M. M. Nye	289,921	Dec. 11	688	192	25	1014
Car-brake	C. A. Millener	275,930	Apr. 17	1379	379	23	1478
Car-brake	J. D. Miller	282,748	Aug. 7	332	95	24	558
Car-brake	H. Mooers	274,015	Mar. 13	987	271	23	1011
Car-brake	J. O'Donnell	289,128	Nov. 27	1674	464	25	823
Car-brake	J. B. O'Donnell	275,513	Apr. 10	849	230	23	1379
Car-brake	H. S. Parmelee	273,762	Mar. 13	683	183	23	959
Car-brake	J. C. Patterson	271,111	Jan. 23	1584	456	23	320
Car-brake	J. C. Patterson	285,507	Sept. 25	1647	463	24	1209
Car-brake	J. H. Pitard	282,222	July 31	2393	658	24	435
Car-brake	G. F. Renouf	279,018	June 5	495	134	23	2207
Car-brake	J. W. Rice	280,244	June 26	2002	563	23	2489
Car-brake	A. C. Roland and A. Harper	274,144	Mar. 20	1155	318	23	1047
Car-brake	J. G. Schiller	282,672	Aug. 7	235	68	24	540
Car-brake	G. A. Small	289,314	Nov. 27	1889	526	25	865
Car-brake	C. W. Smith	278,616	May 29	2610	711	23	2104
Car-brake	O. Spiess	280,255	June 26	2014	566	23	2491
Car-brake	E. T. Stone	272,348	Feb. 13	941	261	23	615
Car-brake	B. L. Stowe	272,096	Feb. 13	637	173	23	562
Car-brake	B. L. Stowe	272,098	Feb. 13	643	174	23	563
Car-brake	S. H. Terry	270,507	Jan. 9	826	175	23	171
Car-brake	D. Torrey	276,931	May 1	512	133	23	1714
Car-brake	D. Torrey	276,932	May 1	515	134	23	1715
Car-brake	D. Torrey	276,933	May 1	519	135	23	1715
Car-brake	D. Torrey	276,934	May 1	521	135	23	1716
Car-brake	D. Torrey	276,935	May 1	522	135	23	1716
Car-brake	D. Torrey	276,936	May 1	525	136	23	1716
Car-brake	D. Torrey	276,937	May 1	526	136	23	1716
Car-brake	D. Torrey	276,938	May 1	528	137	23	1717
Car-brake	D. Torrey	287,889	Nov. 6	123	36	25	529
Car-brake	W. C. Travis	287,395	Oct. 23	2042	555	25	3159
Car-brake	W. B. Turner	278,833	June 5	214	63, 64	23	2129
Car-brake	D. Van Der Linden	289,943	Dec. 11	707	200	25	1018
Car-brake	B. Van Wie and J. Taylor	289,474	Dec. 4	124	35	25	908
Car-brake	S. P. Weller, S. Wance, and G. Roesch	274,869	Mar. 27	2084	579	23	1216
Car-brake	C. D. Whiting	286,353	Oct. 9	727	195	25	142
Car-brake	W. P. Widdifield	277,436	May 8	1138	307	23	1828
Car-brake	W. A. Wilde	283,446	Aug. 21	1184	333	24	726
Car-brake	L. Wilkerson	290,379	Dec. 18	1252	351	25	1123
Car brake and starter	C. E. Davison	270,286	Jan. 9	544	160	23	116
Car brake and starter	A. S. Dickinson	283,219	Aug. 14	891	248	24	666
Car brake and starter	E. B. West	279,999	June 26	1710	479	23	2437
Car-brake. Automatic	A. J. Berg	288,298	Nov. 13	629	172	25	625
Car-brake. Automatic	E. M. Buckley and A. Jackson	273,344	Mar. 6	137	38	23	857
Car-brake. Automatic	J. David	279,136	June 12	668	184	23	2248
Car-brake. Automatic	S. S. Fuller and R. Salvadge	286,127	Oct. 2	424	116	25	79
Car-brake. Automatic	W. B. Guernsey	288,569	Nov. 13	978	269	25	686
Car-brake. Automatic	W. B. Guernsey	289,091	Nov. 27	1628	451	25	815
Car-brake. Automatic	G. Heidel	274,767	Mar. 27	1960	545	23	1195
Car-brake. Automatic	D. J. Macpherson	288,461	Nov. 13	854	231	25	664
Car-brake. Automatic	J. D. Meenan	288,719	Nov. 20	1182	323	25	726
Car-brake. Automatic	C. V. Rote	274,388	Mar. 20	1467	403	23	1102
Car-brake. Automatic	C. V. Rote	274,389	Mar. 20	1469	403	23	1103
Car-brake. Automatic	G. T. Smallwood, Jr.	284,766	Sept. 11	751	208	24	1037
Car-brake. Automatic	B. F. Smith	274,043	Mar. 13	1014	278	23	1016
Car-brake. Automatic	B. L. Stowe	272,097	Feb. 13	639	173	23	562
Car-brake. Automatic	D. Torrey	276,930	May 1	509	132	23	1714
Car-brake. Automatic	W. B. Turner	278,834	June 5	216	64	23	2160
Car-brake. Automatic	W. B. Turner	278,835	June 5	219	65	23	2160
Car-brake. Automatic	C. Van Dusen	284,690	Sept. 11	653	184	24	1021
Car-brake. Automatic	H. S. Webster	290,723	Dec. 25	1724	475	25	1212
Car brake-beam. Railway	W. Woodcock	270,871	Jan. 16	1286	370	23	265
Car-brake. Electric	D. J. Macpherson	273,565	Mar. 6	424	113	23	907



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Car-brake. Electrical .....	A. S. Parsons .....	270,248	Jan. 9	499	147	23	108
Car-brake. Electro-magnetic .....	R. Kampfe .....	290,689	Dec. 25	1673	461	25	1302
Car-brake. Electro-magnetic .....	H. S. Park .....	274,023	Mar. 13	995	273	23	1012
Car-brake. Fluid-pressure .....	H. Barratt .....	283,368	Aug. 21	1095	308	24	709
Car-brake hanger .....	J. Rhoads .....	290,356	Dec. 13	1223	343	23	1118
Car-brake. Railway steam .....	F. B. Walker and J. Lauder .....	278,297	May 22	2205	605	23	2025
Car-brake rod .....	M. Van Tassel .....	271,351	Jan. 30	1931	558	23	388
Car-brake shoe .....	H. A. Banning .....	274,896	Apr. 3	7	2	23	1228
Car-brakes. Automatic take-up for .....	D. Torrey .....	276,929	May 1	508	132	23	1714
Car-buffer .....	C. Browning .....	273,665	Mar. 6	543	145	23	927
Car-buffer .....	A. Gallinant .....	278,328	May 29	2256	618	23	2042
Car-buffer .....	J. T. Schaffer .....	278,606	May 29	2593	708	23	2101
Car. Cable-railway .....	C. W. Rasmusen .....	289,139	Nov. 27	1686	468	25	825
Car. Cinder .....	J. L. Boyer .....	280,903	July 10	695	195	24	129
Car. Cinder .....	F. W. Gordon .....	274,587	Mar. 27	1752	486	23	1158
Car. Cinder .....	W. Kelly .....	274,786	Mar. 27	1982	551	23	1199
Car. Coal .....	D. Hoyt .....	272,550	Feb. 20	1211	339	23	667
Car. Coal .....	J. A. Millholland .....	282,751	Aug. 7	335	95, 96	24	559
Car. Construction .....	L. K. Jewett .....	279,950	June 26	1654	464	23	2427
Car-coupling .....	W. Adams .....	270,171	Jan. 2	405	118	23	82
Car-coupling .....	W. L. Albright .....	271,674	Feb. 6	106	28	23	458
Car-coupling .....	J. W. Alexander .....	272,339	Feb. 20	1025	287	23	635
Car-coupling .....	M. R. Allen .....	288,754	Nov. 20	1221	334	25	734
Car-coupling .....	T. H. Ambrose .....	279,307	June 12	859	238	23	2280
Car-coupling .....	N. Ambuchl .....	271,394	Jan. 30	1944	562	23	391
Car-coupling .....	I. Andrews .....	273,700	Mar. 13	593	159	23	943
Car-coupling .....	C. E. Appell .....	279,312	June 12	866	241	23	2281
Car-coupling .....	S. B. Archer .....	283,845	Aug. 28	1664	470	24	825
Car-coupling .....	A. H. Armstrong .....	274,893	Apr. 3	4	1	23	1227
Car-coupling .....	F. Attock .....	287,082	Oct. 23	1649	453	25	318
Car-coupling .....	A. D. and C. M. Atwood .....	284,797	Sept. 11	791	220	24	1044
Car-coupling .....	A. W. Avery .....	283,743	Aug. 28	1541	436	24	804
Car-coupling .....	W. C. Barber .....	273,438	Mar. 6	255	69	23	877
Car-coupling .....	N. Barr .....	277,828	May 15	1603	438	23	1915
Car-coupling .....	J. Barrett .....	279,317	June 12	875	243	23	2282
Car-coupling .....	J. S. Bayley .....	278,764	June 5	107	31	23	2142
Car-coupling .....	G. W. Bedbury .....	269,999	Jan. 2	206	59	23	43
Car-coupling .....	W. K. Berry .....	286,578	Oct. 16	1002	271	25	198
Car-coupling .....	W. B. Bessey .....	285,787	Oct. 2	9	3	25	4
Car-coupling .....	J. N. Best .....	279,121	June 12	650	177	23	2244
Car-coupling .....	R. Bigney .....	275,880	Apr. 17	1326	365	23	1469
Car-coupling .....	R. Bigney .....	286,992	Oct. 23	1534	423	25	236
Car-coupling .....	J. Billups .....	270,374	Jan. 9	658	193	23	138
Car-coupling .....	B. Bird .....	273,339	Mar. 6	128	36	23	855
Car-coupling .....	K. S. Blanchard .....	285,789	Oct. 2	11	3	25	4
Car-coupling .....	L. I. Bodenhamer .....	279,217	June 12	751	207	23	2262
Car-coupling .....	L. I. Bodenhamer and W. E. Ashley .....	289,611	Dec. 4	298	83	25	940
Car-coupling .....	H. C. Bradley .....	279,321	June 12	884	245	23	2283
Car-coupling .....	E. R. Brown .....	277,674	May 15	1428	385	23	1883
Car-coupling .....	J. Brown .....	287,415	Oct. 30	2070	563	25	402
Car-coupling .....	W. V. Brown and T. S. Poole .....	287,619	Oct. 30	2348	633	25	455
Car-coupling .....	C. Browning. (Reissue) .....	10,291	Feb. 27	2098	588	23	828
Car-coupling .....	C. Browning .....	273,343	Mar. 6	134	38	23	856
Car-coupling .....	C. Browning .....	273,664	Mar. 6	539	145	23	926
Car-coupling .....	W. Brumble .....	285,221	Sept. 18	1307	360	24	1142
Car-coupling .....	W. I. Byard .....	282,438	July 31	2672	732	24	487
Car-coupling .....	T. F. Byron .....	277,677	May 15	1431	386	23	1883
Car-coupling .....	B. Cade .....	272,643	Feb. 20	1339	376	23	690
Car-coupling .....	G. A. Cage .....	279,332	June 12	903	252	23	2286
Car-coupling .....	E. D. Cain .....	273,949	Mar. 13	911	249	23	997
Car-coupling .....	N. Campbell .....	275,138	Apr. 3	341	94	23	1285
Car-coupling .....	C. E. Carr .....	290,317	Dec. 18	1174	329	25	1109
Car-coupling .....	E. S. Carter .....	270,014	Jan. 2	222	64	23	46
Car-coupling .....	E. S. Carter .....	273,950	Mar. 13	912	249	23	997
Car-coupling .....	W. Carter and H. T. Woods .....	286,175	Oct. 9	484	134	25	101
Car-coupling .....	A. W. Case .....	273,464	Mar. 6	288	79	23	883
Car-coupling .....	A. W. Case .....	278,880	June 5	281	81	23	2171
Car-coupling .....	W. H. Castle .....	280,449	July 3	139	37, 38	24	26
Car-coupling .....	S. M. Cate and C. O. Smith .....	279,911	June 26	1601	449	23	2418
Car-coupling .....	G. L. Chamberlin .....	274,106	Mar. 20	1109	306	23	1039
Car-coupling .....	J. P. Champion .....	285,228	Sept. 18	1315	371	24	1144
Car-coupling .....	A. J. Chapel .....	289,617	Dec. 4	304	85	25	941
Car-coupling .....	N. J. Cheeney .....	281,974	July 24	2062	565	24	378
Car-coupling .....	C. Clarke .....	286,999	Oct. 23	1541	425	25	297
Car-coupling .....	G. A. Cline .....	270,390	Jan. 9	682	202	23	142
Car-coupling .....	B. W. Cloak .....	274,908	Apr. 3	20	6	23	1230
Car-coupling .....	D. W. Coburn .....	275,150	Apr. 3	352	97	23	1287
Car-coupling .....	J. Cochran, Jr. .....	289,228	Nov. 27	1792	496	25	845
Car-coupling .....	J. W. Cole .....	275,754	Apr. 10	1158	318	23	1432
Car-coupling .....	G. S. Conover .....	273,818	Mar. 13	753	204	23	971
Car-coupling .....	D. P. Cory .....	289,985	Dec. 11	762	215	25	1028
Car-coupling .....	G. and M. J. Costolo and A. Johnson .....	288,925	Nov. 20	1419	391	25	772
Car-coupling .....	N. P. Cowell .....	278,403	May 29	2353	643	23	2059
Car-coupling .....	W. Crandell .....	271,685	Feb. 6	121	33	23	461
Car-coupling .....	G. W. Cross .....	286,271	Oct. 9	601	165	25	120
Car-coupling .....	F. B. Cunningham .....	288,928	Nov. 20	1422	392	25	772
Car-coupling .....	C. B. Cutler .....	274,569	Mar. 27	1727	480	23	1153
Car-coupling .....	O. S. Dale and A. Barnes .....	276,005	Apr. 17	1464	404	23	1494
Car-coupling .....	J. T. Dalton .....	280,898	Dec. 11	650	184	25	1009
Car-coupling .....	J. B. Davis .....	280,016	June 26	1734	486	23	2441
Car-coupling .....	L. Davis, Jr. .....	271,609	Feb. 6	32	8	23	446
Car-coupling .....	L. Davis, Jr. .....	277,466	May 15	1182	317	23	1843

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Car-coupling	W. De Cew	274,180	Mar. 20	1202	331	23	1056
Car-coupling	C. C. Delano	277,242	May 8	913	245	23	1789
Car-coupling	J. H. Depew	279,229	June 12	766	212	23	2264
Car-coupling	J. E. Dickerson	276,229	Apr. 24	1743	433	23	1549
Car-coupling	W. H. Diehl	273,475	Mar. 6	304	82	23	885
Car-coupling	G. P. Dougherty	273,481	Mar. 6	310	94	23	886
Car-coupling	M. J. Dougherty	290,005	Dec. 11	791	222	25	1033
Car-coupling	R. H. Dowling	281,983	July 24	2071	568	24	379
Car-coupling	J. B. Draper	287,110	Oct. 23	1687	462	25	320
Car-coupling	W. E. Drew	277,690	May 15	1446	390	23	1686
Car-coupling	J. M. Dulaney and T. Owens	271,045	Jan. 23	1504	434	23	307
Car-coupling	F. L. Eager	270,032	Jan. 2	241	70	23	50
Car-coupling	F. L. Eager	282,616	Aug. 7	170	51	24	530
Car-coupling	C. C. Eber	281,251	July 17	1144	316	24	215
Car-coupling	J. Elder	270,768	Jan. 16	1168	334	23	243
Car-coupling	A. C. Ellis	285,473	Sept. 25	1608	452	24	1202
Car-coupling	C. B. Emerson	289,399	Dec. 4	33	10	25	893
Car-coupling	W. Emmett	278,693	June 5	22	6	23	2128
Car-coupling	E. C. Eyl	275,177	Apr. 3	381	105	23	1292
Car-coupling	C. M. Ezell	273,045	Feb. 27	1851	518	23	756
Car-coupling	J. Fashing	276,168	Apr. 24	1672	461	23	1536
Car-coupling	C. W. Ferguson	281,479	July 17	1432	391 392	24	264
Car-coupling	S. J. Filson	274,749	Mar. 27	1936	539	23	1191
Car-coupling	A. Fischer	275,814	Apr. 17	1244	342	23	1454
Car-coupling	B. A. Fisher	285,247	Sept. 18	1337	376	24	1148
Car-coupling	W. L. Fisher	283,991	Aug. 28	1841	519	24	858
Car-coupling	W. W. Fitch	277,698	May 15	1453	392	23	1888
Car-coupling	J. H. Flood and H. F. Knoder	288,789	Nov. 20	1263	346	25	742
Car-coupling	C. J. Fortson	287,270	Oct. 23	1886	516	25	361
Car-coupling	J. C. Fowler	277,701	May 15	1456	393	23	1888
Car-coupling	H. Fraser	270,215	Jan. 9	465	135	23	102
Car-coupling	W. F. Freeman	278,789	June 5	154	45	23	2148
Car-coupling	A. Fulton	277,837	May 15	1616	441	23	1917
Car-coupling	J. P. Gaines	270,412	Jan. 9	706	209	23	148
Car-coupling	E. C. Galentine	279,485	June 12	1095	302	23	2316
Car-coupling	J. B. Garrett	284,624	Sept. 11	568	161	24	1006
Car-coupling	T. Gates	287,759	Oct. 30	2530	682	25	490
Car-coupling	A. J. George and T. B. Turpin	290,569	Dec. 18	1522	419	25	1170
Car-coupling	J. Goettel and E. T. Slayten	276,025	Apr. 17	1492	410	23	1498
Car-coupling	E. N. Gifford	287,017	Oct. 23	1568	432 433	25	302
Car-coupling	F. Gilbert	285,253	Sept. 18	1342	378	24	1149
Car-coupling	W. J. Gossett	278,235	May 22	2110	581	23	2009
Car-coupling	E. S. Graver	272,680	Feb. 20	1380	388	23	696
Car-coupling	R. E. Gray	289,407	Dec. 4	41	12	25	894
Car-coupling	A. B. Groff and A. E. Strayer	289,522	Dec. 4	197	55	25	921
Car-coupling	H. Gross	276,681	May 1	189	49	23	1656
Car-coupling	D. W. Haines and A. D. Hankerson	270,057	Jan. 2	272	79	23	56
Car-coupling	N. Halsted	272,430	Feb. 20	1067	301	23	641
Car-coupling	J. E. L. Harbold	286,198	Oct. 9	512	141	25	105
Car-coupling	T. Harding	274,764	Mar. 27	1955	544	23	1195
Car-coupling	J. H. Harrod	288,999	Nov. 27	1513	418 419	25	795
Car-coupling	B. W. Harry and J. C. Kieffer	277,275	May 8	950	255	23	1796
Car-coupling	S. J. Harry	273,357	Mar. 6	155	44	23	861
Car-coupling	J. V. Hartman and A. Wetzel, Jr.	288,797	Nov. 20	1271	348	25	743
Car-coupling	C. C. Haskin	288,800	Nov. 20	1274	349	25	744
Car-coupling	L. Hatfield	272,135	Feb. 13	691	188 189	23	571
Car-coupling	C. L. Hathaway	285,616	Sept. 25	1780	506	24	1235
Car-coupling	H. E. Hawk	278,334	May 29	2270	621	23	2044
Car-coupling	H. E. Hawk	280,743	July 3	491	139	24	87
Car-coupling	W. A. and C. S. Hawkins	272,435	Feb. 20	1072	302	23	642
Car-coupling	W. H. Heavenin	279,752	June 19	1408	393	23	2378
Car-coupling	L. G. Hedlund	286,001	Oct. 2	272	76	25	51
Car-coupling	J. Heffner and W. Kelly	277,723	May 15	1480	400	23	1892
Car-coupling	C. Hendricks	285,262	Sept. 18	1354	382	24	1152
Car-coupling	L. Herrman	285,813	Oct. 2	39	13	25	9
Car-coupling	L. Herrman and J. B. Lavin	278,014	May 22	1837	501	23	1961
Car-coupling	E. M. Hobbs	287,934	Nov. 6	182	52	25	539
Car-coupling	I. Holland	289,002	Nov. 27	1517	420	25	796
Car-coupling	J. W. Hollis	269,857	Jan. 2	45	14	23	11
Car-coupling	L. A. Houghtaling	271,850	Feb. 6	321	89	23	497
Car-coupling	A. B. House	284,205	Sept. 4	62	17	24	915
Car-coupling	T. B. Howe	273,736	Mar. 13	641	171	23	952
Car-coupling	I. N. Hoyt	281,271	July 17	1165	322	24	219
Car-coupling	R. R. Hunt	282,896	Aug. 7	505	142	21	590
Car-coupling	M. Hunter	290,330	Dec. 18	1193	334	25	1113
Car-coupling	C. A. Huth	279,763	June 19	1419	396	23	2380
Car-coupling	E. Ingram	286,444	Oct. 9	833	226	25	162
Car-coupling	M. Jacobs	276,183	Apr. 24	1688	466	23	1539
Car-coupling	T. H. James	287,130	Oct. 23	1708	468	25	330
Car-coupling	C. P. Johnson and S. T. Walkley	275,662	Apr. 10	1041	281	23	1412
Car-coupling	C. P. Johnson and S. T. Walkley	275,663	Apr. 10	1042	282	23	1412
Car-coupling	A. Johnston	288,816	Nov. 20	1292	354	25	747
Car-coupling	H. L. Johnstone	286,307	Oct. 9	668	178	25	131
Car-coupling	S. R. Jones	282,732	Aug. 7	316	90	24	555
Car-coupling	D. P. Kahl	290,060	Dec. 11	853	242	25	1044
Car-coupling	I. I. Keely	276,141	Apr. 17	1636	451	23	1523
Car-coupling	H. M. Keith	284,436	Sept. 4	337	94	24	960
Car-coupling	H. Keller	273,104	Feb. 27	1930	541	23	799
Car-coupling	E. Kirk	282,734	Aug. 7	318	91	24	556
Car-coupling	J. R. Kirksey	290,243	Dec. 18	1077	301	25	1093



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Car-coupling	I. Kling	285,758	Sept. 25	1960	555	24	1265
Car-coupling	G. W. Knapp	280,381	July 3	51	14	24	11
Car-coupling	H. Kroblen	272,840	Feb. 20	1601	448	23	735
Car-coupling	D. Kunkel, Sr.	276,977	May 1	577	151	23	1725
Car-coupling	J. P. Lancaster	271,085	Jan. 23	1559	449	23	316
Car-coupling	C. J. Langenbach	285,042	Sept. 18	1096	306	24	1106
Car-coupling	F. G. Lawrence	272,712	Feb. 20	1420	398	23	703
Car-coupling	J. Learmonth	282,910	Aug. 7	518	145	24	592
Car-coupling	A. Lehmann	288,074	Nov. 6	352	98	25	567
Car-coupling	A. Lenhart	286,207	Oct. 9	522	144	25	107
Car-coupling	F. H. Leonard and S. D. Snow	285,419	Sept. 25	1549	436	24	1191
Car-coupling	G. Lighthiser	284,644	Sept. 11	591	167	24	1010
Car-coupling	T. D. Lobb	285,634	Sept. 25	1801	513	24	1239
Car-coupling	A. C. Long	281,535	July 17	1493	410	24	275
Car-coupling	J. C. Look	272,386	Feb. 13	1004	281	23	625
Car-coupling	J. C. Look	277,300	May 8	983	264	23	1801
Car-coupling	W. H. Lucan	279,654	June 19	1297	360	23	2359
Car-coupling	C. Luther	287,385	Oct. 23	2028	551	25	387
Car-coupling	E. B. Magnus	272,285	Feb. 13	868	243	23	603
Car-coupling	A. B. Mahon	288,083	Nov. 6	364	101	25	570
Car-coupling	C. E. Mark	275,054	Apr. 3	222	61	23	1264
Car-coupling	C. E. Mark	278,573	May 29	2556	697	23	2095
Car-coupling	G. Maulick	281,094	July 10	927	259	24	171
Car-coupling	D. C. McCallum	279,658	June 19	1303	362	23	2360
Car-coupling	W. McConway	281,901	July 24	1976	541	24	363
Car-coupling	M. E. McDonald	286,622	Oct. 16	1063	286	25	209
Car-coupling	J. S. McGraw	272,294	Feb. 13	875	245	23	605
Car-coupling	W. J. McLean	277,915	May 22	1711	467	23	1940
Car-coupling	J. K. McLeod	289,681	Dec. 4	382	110	25	954
Car-coupling	C. W. McMillen	273,574	Mar. 6	435	117	23	909
Car-coupling	J. E. McMurtrey, I. Williams, and F. E. Okie.	287,455	Oct. 30	2119	575	25	411
Car-coupling	G. E. Medley	275,839	Apr. 17	1274	350	23	1459
Car-coupling	I. J. Merrick	285,913	Oct. 2	170	48	25	33
Car-coupling	P. E. Merrihew	274,511	Mar. 27	1658	461	23	1141
Car-coupling	P. E. Merrihew, M. C. and E. F. Poland.	290,086	Dec. 11	885	251	25	1050
Car-coupling	G. and W. H. Merrill	272,299	Feb. 13	880	246	23	605
Car-coupling	M. H. Merrill	290,452	Dec. 18	1361	376	25	1142
Car-coupling	B. F. Metz	271,501	Jan. 30	2087	600	23	416
Car-coupling	F. Miller	281,779	July 24	1822	497 498	24	336
Car-coupling	J. D. Miller	274,808	Mar. 27	2005	558	23	1203
Car-coupling	S. H. Milligan	271,896	Feb. 6	371	103	23	506
Car-coupling	J. C. Mitchell	285,145	Sept. 18	1223	344	24	1127
Car-coupling	H. Moon	279,416	June 12	1014	281 282	23	2304
Car-coupling	T. R. Morgan, G. Ruf, and D. Davis.	286,054	Oct. 2	337	93	25	62
Car-coupling	R. T. Morrison, Jr.	287,702	Oct. 30	2453	600	25	476
Car-coupling	O. P. Mossgrove	280,502	July 3	206	54	24	37
Car-coupling	S. P. Moulton	277,918	May 22	1713	468	23	1941
Car-coupling	A. Muller	287,771	Oct. 30	2550	686	25	494
Car-coupling	C. F. A. Neitzel	274,645	Mar. 27	1816	504	23	1170
Car-coupling	W. W. Newcomb	274,960	Apr. 3	102	28	23	1242
Car-coupling	W. B. Nichols	278,728	June 5	67	21	23	2136
Car-coupling	C. P. Nicolson	277,051	May 8	681	178	23	1749
Car-coupling	C. Niekrenz	287,849	Nov. 6	70	21	25	520
Car-coupling	G. W. Norton	284,974	Sept. 11	995	281	24	1082
Car-coupling	W. Nunamaker	277,152	May 8	813	214	23	1772
Car-coupling	T. B. Nutting	277,773	May 15	1545	420	23	1905
Car-coupling	J. K. Nyce and I. C. Hunsicker	289,357	Nov. 27	1947	541	25	875
Car-coupling	J. O'Connor	282,009	July 24	2099	576	24	384
Car-coupling	J. J. O'Connor and R. M. White	271,106	Jan. 23	1580	454	23	320
Car-coupling	T. C. O'Donovan	290,097	Dec. 11	893	254	25	1051
Car-coupling	A. T. Odell and J. H. Cordell	289,852	Dec. 11	603	168	25	999
Car-coupling	A. K. Owen	270,103	Jan. 2	317	93	23	64
Car-coupling	L. W. and D. Page	288,258	Nov. 13	583	161	25	618
Car-coupling	H. A. Palmer	286,480	Oct. 9	871	236	25	169
Car-coupling	P. F. Panabaker	280,949	July 10	760	211	24	139
Car-coupling	A. Park	288,105	Nov. 6	391	110	25	575
Car-coupling	R. T. Payne	286,061	Oct. 2	346	96, 97	25	64
Car-coupling	J. G. Peace and E. B. Sankey	284,886	Sept. 11	889	250	24	1063
Car-coupling	C. H. Pelton	269,956	Jan. 2	159	46	23	34
Car-coupling	M. Peters, Jr.	270,694	Jan. 16	1079	310	23	226
Car-coupling	J. F. E. Phillips	286,635	Oct. 16	1078	290	25	211
Car-coupling	R. Powell	283,920	Aug. 28	1750	494	24	841
Car-coupling	J. F. Pryor	279,800	June 19	1463	410	23	2388
Car-coupling	J. J. Pursley	271,655	Feb. 6	83	23	23	455
Car-coupling	M. Ralph, Sr.	284,896	Sept. 11	898	253	24	1064
Car-coupling	F. A. Ray	275,943	Apr. 17	1394	384	23	1481
Car-coupling	J. V. Reams and A. C. Majors	287,860	Nov. 6	81	24, 25	25	522
Car-coupling	A. J. Redman	284,898	Sept. 11	900	254	24	1065
Car-coupling	J. Rhule	278,598	May 20	2583	705	23	2100
Car-coupling	A. Rice	271,272	Jan. 30	1782	518	23	362
Car-coupling	J. F. Rice	285,080	Sept. 25	1850	529	24	1248
Car-coupling	F. H. Richards	284,902	Sept. 11	904	255 256	24	1066
Car-coupling	W. N. Richards	272,979	Feb. 27	1773	496	23	771
Car-coupling	E. M. Richardson	269,883	Jan. 2	69	21	23	16
Car-coupling	J. Rigby and S. S. McHugh	276,848	Oct. 16	1347	369	25	259
Car-coupling	J. J. Roberts	271,990	Feb. 6	498	134	23	526
Car-coupling	A. W. Robinson	280,516	July 3	218	58	24	39
Car-coupling	F. H. Rudd	289,782	Dec. 4	507	140	25	974
Car-coupling	D. J. Rumbough and J. S. Brandt	273,896	Mar. 13	846	229	23	987

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volum.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Car-coupling	W. D. Sandwich	275,948	Apr. 17	1398	385	23	1482
Car-coupling	C. H. Schaaff	278,605	May 29	2591	{ 707 708 }	23	2101
Car-coupling	A. T. Schultz	273,167	Feb. 27	2004	564	23	812
Car-coupling	S. H. Scott and G. J. Talmage	279,281	June 12	826	229	23	2275
Car-coupling	C. P. Searles	286,080	Oct. 2	371	103	25	68
Car-coupling	H. K. Sebring	275,717	Apr. 10	1105	302	23	1423
Car-coupling	J. W. Sheaffer	288,502	Nov. 13	905	247	25	673
Car-coupling	H. L. Shireman	290,276	Dec. 18	1122	315	25	1100
Car-coupling	G. C. Short and W. L. Roe	286,492	Oct. 9	885	239	25	171
Car-coupling	J. Showalter	273,903	Mar. 13	853	231	23	988
Car-coupling	V. Shreve	288,504	Nov. 13	907	248	25	673
Car-coupling	J. H. Simpson and J. T. Wilson	275,720	Apr. 10	1108	{ 303 304 }	23	1423
Car-coupling	J. H. Simpson and J. T. Wilson	275,721	Apr. 10	1110	304	23	1424
Car-coupling	J. G. Slater	275,428	Apr. 10	745	198	23	1362
Car-coupling	F. Sloat	281,935	July 24	2014	551	24	370
Car-coupling	E. S. Smith	277,363	May 8	1056	284	23	1814
Car-coupling	J. W. Snyder	288,270	Nov. 13	602	164	25	620
Car-coupling	D. E. Southwick	280,254	June 26	2013	566	23	2491
Car-coupling	T. Sparks	281,155	July 10	1003	281	24	184
Car-coupling	L. and G. P. Stebbins	273,907	Mar. 13	858	233	23	959
Car-coupling	M. L. Sterling	285,701	Sept. 25	1878	535	24	1233
Car-coupling	A. A. Stetson	282,397	July 31	2609	717	24	476
Car-coupling	F. Stitzel	283,681	Aug. 21	1459	411	24	777
Car-coupling	A. Story	275,870	Apr. 17	1313	362	23	1466
Car-coupling	I. L. Stover	279,201	June 12	737	202	23	2259
Car-coupling	M. E. Swart	290,656	Dec. 18	1624	446	25	1187
Car-coupling	B. Taylor	289,172	Nov. 27	1721	480	25	532
Car-coupling	B. F. Teal	279,614	June 19	1248	346	23	2350
Car-coupling	A. T. Teall, Jr.	288,600	Nov. 13	1022	{ 280 281 }	25	695
Car-coupling	J. M. Terry	275,438	Apr. 10	757	202	23	1363
Car-coupling	W. S. Thayer	286,745	Oct. 16	1218	329	25	236
Car-coupling	J. Thigpen	277,379	May 8	1070	288	23	1817
Car-coupling	R. G. Thompson	274,847	Mar. 27	2046	570	23	1211
Car-coupling	W. H. Thurmond	289,729	Dec. 4	451	126	25	965
Car-coupling	E. H. C. Tompkins	287,483	Oct. 30	2155	586	25	419
Car-coupling	C. W. Townsend	284,260	Sept. 4	129	36	24	926
Car-coupling	J. G. Treuear	271,951	Feb. 6	444	121	23	519
Car-coupling	S. D. Trenholm	285,181	Sept. 18	1264	355	24	1134
Car-coupling	C. B. and J. Tucker	271,379	Jan. 30	1928	557	23	387
Car-coupling	S. G. A. Urquhart	279,675	June 19	1327	{ 368 369 }	23	2363
Car-coupling	C. Van Deusen	278,838	June 5	225	66	23	2162
Car-coupling	W. T. Van Dorn	271,553	Jan. 30	2148	618	23	427
Car-coupling	J. D. Vance	279,845	June 19	1518	425	23	2397
Car-coupling	G. W. Vunk	274,422	Mar. 20	1514	416	23	1110
Car-coupling	E. F. Walker	287,070	Oct. 23	1635	449	25	316
Car-coupling	W. R. Wallace	277,635	May 15	1382	373	23	1875
Car-coupling	J. H. Ward	273,326	Mar. 6	112	32	23	853
Car-coupling	J. S. Waugh	288,527	Nov. 13	933	255	25	677
Car-coupling	A. S. Way and J. W. Lutz	270,865	Jan. 16	1277	396	23	264
Car-coupling	E. Webber	270,523	Jan. 9	855	249	23	177
Car-coupling	C. Weik, Jr.	279,059	June 5	549	151	23	2217
Car-coupling	J. W. White	284,108	Aug. 28	2006	558	24	885
Car-coupling	W. H. White and H. F. Ruddell	287,749	Oct. 30	2517	678	25	487
Car-coupling	L. P. Whiting	276,205	Apr. 24	1716	475	23	1544
Car-coupling	B. F. Whitney	275,306	Apr. 3	539	147	23	1318
Car-coupling	J. A. Whittemore	289,049	Nov. 27	1581	436	25	806
Car-coupling	G. W. Whittington	276,110	Apr. 17	1597	441	23	1516
Car-coupling	L. Wilkerson	271,179	Jan. 23	1672	481	23	334
Car-coupling	J. L. Williams	284,937	Sept. 11	953	267	24	1074
Car-coupling	J. Wood	279,303	June 12	856	237	23	2279
Car-coupling	F. Woodward	284,789	Sept. 11	785	218	24	1042
Car-coupling	J. T. Wright	272,009	Feb. 6	519	139	23	530
Car-coupling	N. R. Zimmerman	277,823	May 15	1597	437	23	1914
Car-coupling	C. H. Zimmerman	285,722	Sept. 25	1911	542	24	1258
Car coupling and buffer	C. C. and C. Balderston	287,084	Oct. 23	1632	453	25	319
Car-coupling, Automatic	M. Kennedy	285,906	Oct. 2	163	46, 47	25	32
Car-coupling link	J. Bridge	275,460	Apr. 10	781	209	23	1368
Car-coupling link	J. W. Purslow	273,148	Feb. 27	1982	557	23	809
Car-coupling link	F. Sweetland	278,626	May 29	2624	716	23	2107
Car coupling-link, Railway	A. Hackett	289,530	Dec. 4	197	56	25	921
Car-coupling pins, Manufacturing	J. White	273,417	Mar. 6	228	62	23	873
Car deflector, Railway passenger	A. W. Brunkerhoff	286,381	Oct. 9	756	204	25	148
Car-door	C. W. Collier	274,107	Mar. 20	1111	306	23	1039
Car-door	C. C. Kilts	273,290	Mar. 6	55	16	23	844
Car-door	A. B. King	271,337	Jan. 30	1869	542	23	377
Car-door	J. L. Wagner and J. Seath	280,537	July 3	242	65	24	43
Car-door	J. L. Wagner and J. Seath	288,190	Nov. 6	488	136	25	592
Car-door	A. W. Zimmerman	281,170	July 10	1021	286	24	187
Car door and attachment, Grain	C. C. Duffy	278,895	June 5	298	86	23	2174
Car-door and fastening	W. P. Senour	278,611	May 29	2599	709	23	2103
Car-door catch, Grain	D. F. Van Liew	278,377	May 29	2323	635	23	2054
Car-door fastener	S. L. Doney	281,246	July 17	1135	312	24	214
Car-door fastener	A. W. Zimmerman	282,598	Aug. 7	119	45	24	527
Car-door fastening	R. H. Briggs and J. H. Dougherty	281,174	July 10	1026	287	24	188
Car-door fastening	E. J. Brooks	270,874	Jan. 16	1288	{ 371 372 }	23	266
Car-door fastening	J. B. Calkins	271,415	Jan. 30	1971	569	23	396
Car-door fastening	W. P. Jackson	276,592	May 1	63	18	23	1638
Car-door fastening	J. Scanlan	269,963	Jan. 2	168	49	23	35
Car-door fastening	W. Scharnweber	270,252	Jan. 9	504	148	23	109



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Car-door fastening. Freight.	W. J. Carey	278,092	May 22	1923	528	23	1977
Car door. Freight.	B. F. Teal	276,644	May 1	124	33	23	1648
Car door. Freight.	H. N. Frentress	288,565	Nov. 13	974	268	25	685
Car door. Grain.	W. J. Arndt	271,677	Feb. 6	109	29	23	459
Car door. Grain.	B. H. Gatton	289,247	Nov. 27	1812	501	25	849
Car door. Grain.	F. L. Kirkbride	279,255	June 12	796	220	23	2269
Car door. Grain.	D. D. Miles	272,455	Feb. 20	1096	309	23	646
Car door. Grain.	F. Pond	289,445	Dec. 4	86	24, 25	25	902
Car door. Grain.	B. F. Teal	280,688	July 3	420	118	24	75
Car door. Grain.	J. J. Treat	280,972	July 10	786	218	24	144
Car door. Grain.	W. S. Voorhis and G. H. Houser	275,735	Apr. 10	1125	308	23	1426
Car door. Grain.	E. M. Wilcox	275,448	Apr. 10	768	204	23	1365
Car door. Grain.	E. Prescott	275,852	Apr. 17	1289	354	23	1461
Car door lock	J. H. Fisher	279,732	June 19	1388	387	23	2374
Car door lock	J. H. Fisher	288,988	Nov. 27	1502	416	25	794
Car door lock. Freight.	H. G. H. Reed	276,283	Apr. 24	1808	504	23	1560
Car-door mechanism. Grain.	J. A. Hagau	285,258	Sept. 18	1349	380	24	1151
Car-door mechanism. Street.	F. B. Brownell	286,257	Oct. 9	585	160	25	117
Car-door. Sliding.	E. Y. Moore	286,470	Oct. 9	860	233	25	167
Car-door track	W. Scarfo	283,151	Aug. 14	805	225	24	649
Car doors. Weather and fire strip for box-	G. B. Nichols	279,490	June 12	1018	283	23	2304
Car draft attachment. Street.	J. P. Messer	279,784	June 19	1441	404	23	2384
Car draw-bar.	C. Alkin	271,585	Feb. 6	2	1	23	441
Car draw-bar	H. Burkhardt	271,216	Jan. 30	1717	497	23	351
Car draw-bar.	H. Rust	287,966	Nov. 6	224	63	25	546
Car draw-bar. Railway.	S. P. Tallman	280,414	July 3	92	25	24	19
Car draw-gear. Railway.	G. J. Johnson and E. H. Thomas	290,241	Dec. 18	1076	301	25	1093
Car-dumper	T. B. Wire	280,430	July 3	115	31	24	22
Car. Dumping.	A. Beckert and W. E. Ludlow	288,760	Nov. 20	1228	335	25	735
Car. Dumping.	N. W. Condict, Jr	275,357	Apr. 10	640	171	23	1344
Car. Dumping.	C. C. Dufly	279,361	June 12	938	262	23	2292
Car. Dumping.	W. Fallon	287,650	Oct. 30	2383	643	25	462
Car. Dumping.	L. Fitzsimmons	273,051	Feb. 27	1857	521	23	787
Car. Dumping.	J. H. Gartside	280,735	July 3	480	136	24	85
Car. Dumping.	J. T. Goodwin	287,663	Oct. 30	2398	646	25	466
Car. Dumping.	L. Hetfield	280,621	July 3	339	95	24	60
Car. Dumping.	S. D. King	278,343	May 29	2282	624	23	2047
Car. Dumping.	C. La Cosse	274,890	Mar. 27	2108	586	23	1220
Car. Dumping.	C. Rohne and J. Moenke	277,350	May 8	1042	279	23	1812
Car. Dumping.	J. Smith and J. P. Rhodes	275,532	Apr. 10	873	236	23	1383
Car. Dumping.	M. Van Wormer	284,691	Sept. 11	655	184	24	1021
Car. Dumping.	G. J. Wheelock	290,298	Dec. 18	1147	322	25	1104
Car dust-guard. Railway.	W. H. Pettiner and J. L. Colcord	273,595	Mar. 6	459	123	23	913
Car electrical-circuit coupler. Railway.	P. C. Ricketts	281,730	July 24	1755	476	24	323
Car fender. Railway.	R. T. Bishop	276,999	May 8	611	160	23	1737
Car for elevated railways	E. S. Watson	288,193	Nov. 6	493	137	25	593
Car for locomotives. Electrical pilot.	S. H. Knapp and A. E. Adams	280,046	June 26	1776	498	23	2448
Car for railway-trains. Signal.	J. Schofield	280,523	July 3	226	60	24	40
Car. Freight.	A. Goodrich	288,792	Nov. 20	1267	347	25	743
Car. Freight.	N. H. Greene	283,340	Aug. 14	1043	293	24	695
Car. Freight.	A. Grundy	286,197	Oct. 9	512	141	25	105
Car gate. Railway.	W. W. Rosenfield	288,494	Nov. 13	896	244	25	671
Car-guard	J. Craig	285,975	Oct. 2	245	69, 70	25	47
Car guard-gate.	A. Du Bois	269,839	Jan. 2	25	8	23	7
Car guard. Street.	R. J. Good	277,564	May 15	1300	349	23	1861
Car. Hand.	J. D. Billings	270,375	Jan. 9	659	193	23	138
Car. Hand.	R. H. Johnson	270,678	Jan. 16	1056	302	23	222
Car. Hand.	E. B. Linsley	270,320	Jan. 9	585	172	23	124
Car. Hand.	E. B. Linsley	271,720	Feb. 6	158	44	23	468
Car. Hand.	G. S. Sheffield. (Reissue)	10,303	Apr. 3	616	166	23	1330
Car. Hand.	W. J. Willits	269,906	Jan. 2	98	29, 30	23	21
Car hand-brake	T. Hunt	279,565	June 19	1196	331	23	2341
Car-heater	W. M. Fuller	274,753	Mar. 27	1941	540	23	1192
Car-heater	R. Steel	277,626	May 15	1374	370	23	1873
Car heater and ventilator. Safety.	W. F. Condon	277,546	May 15	1276	342	23	1858
Car heater. Street.	W. D. Nelson	270,553	Jan. 9	893	258	23	184
Car-heating and fire-extinguishing apparatus	E. W. Smith	284,682	Sept. 11	643	181	24	1019
Car-heating apparatus	I. Shirsper	281,801	July 24	1853	506	24	341
Car heating, ventilating, and draft-regulating apparatus. Railway.	J. Spear	286,341	Oct. 9	714	191	25	139
Car-journal lubricator	S. L. Wiegand	282,594	Aug. 7	145	43	24	526
Car label-holder	R. S. Coulter	270,283	Jan. 9	542	159	23	116
Car-label holder. Freight.	A. D. Penfold	676,980	May 1	581	152	23	1725
Car. Mining.	G. Olsen	270,689	Jan. 16	1071	307	23	224
Car-motor. Spring	G. Stites, R. Steel, and S. Austin	271,151	Jan. 23	1629	468	23	328
Car motor. Street.	O. R. Erwin	270,938	Jan. 23	1374	306	23	226
Car-mover	J. Spengler	285,698	Sept. 25	1876	534	24	1252
Car or other seats	H. B. Cobb	277,115	May 8	763	201	23	1763
Car. Passenger.	E. Chesterman	269,917	Jan. 2	110	33	23	23
Car. Passenger.	A. Longstreet	275,397	Apr. 10	703	188	23	1355
Car-platform	W. F. Brown and C. L. Haight	289,614	Dec. 4	301	84	25	940
Car platform. Railway.	S. M. Beery	290,516	Dec. 18	1451	401	25	1157
Car-platforms. Safety-gate for	E. L. Tevis	289,726	Dec. 4	448	125	25	964
Car propulsion. Street.	R. F. Bridewell	279,325	June 12	890	247	23	2284
Car. Railway.	C. F. Annan	279,311	June 12	864	241	23	2280

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Car. Railway.....	S. K. Bayley.....	284,362	Sept. 4	248	69	24	946
Car. Railway.....	W. Hubbard.....	282,324	July 31	2522	{ 691 692 }	24	460
Car. Railway.....	E. B. Meatyard.....	274,805	Mar. 27	2001	{ 556 557 }	23	1293
Car. Railway.....	J. Parkinson.....	279,791	June 19	1450	406	23	2326
Car. Railway.....	J. W. Post.....	285,675	Sept. 25	1844	527	24	1247
Car. Railway.....	N. Wheeler.....	273,415	Mar. 6	226	61	23	872
Car. Railway.....	J. E. White.....	273,922	Mar. 13	879	{ 239 240 }	23	992
Car. Railway.....	T. L. Wilson.....	277,819	May 15	1591	435	23	1913
Car. Railway.....	T. L. Wilson.....	282,827	Aug. 7	420	118	24	574
Car. Railway.....	W. H. H. Young.....	280,280	June 26	2044	575	23	2496
Car. Railway hand.....	J. C. Perkins.....	290,703	Dec. 25	1693	466	25	1205
Car-replacer.....	J. T. Fosdick.....	287,528	Oct. 30	2208	599	25	430
Car-replacer.....	M. Herrens.....	283,784	Aug. 25	1598	451	24	814
Car-replacer.....	A. Reed.....	284,758	Sept. 11	743	206	24	1036
Car-replacer.....	W. Toombs.....	287,738	Oct. 30	2504	674	25	485
Car-roof.....	A. P. Le Gros.....	280,635	July 3	358	99	24	63
Car-roof.....	J. Walter.....	286,877	Oct. 16	1381	379	25	264
Car-roof. Railway.....	W. A. Mutfeldt.....	284,141	Aug. 23	2053	570	24	893
Car-roofing.....	W. H. Paige.....	287,459	Oct. 30	2123	576	25	412
Car-roofing. Freight.....	J. C. Wands.....	280,976	July 10	791	220	24	145
Car safety-bridge. Railway.....	A. B. Smith.....	289,866	Dec. 11	619	172	25	1002
Car safety-fender.....	P. H. Ceoney.....	290,746	Dec. 25	1755	485	25	1217
Car-seat.....	H. B. Cobb.....	277,114	May 8	762	{ 200 201 }	23	1762
Car-seat.....	W. H. Paulding and B. J. Maybeck.....	281,129	July 10	975	{ 272 273 }	24	179
Car-seat.....	A. J. E. Radio.....	285,678	Sept. 25	1848	528	24	1248
Car-seat.....	A. M. Richards and E. Dinsley.....	285,433	Sept. 25	1564	440	24	1194
Car-seat attachment.....	P. W. Morris.....	290,344	Dec. 18	1208	338	25	1116
Car-seat head-rest.....	W. B. Taylor.....	283,533	Aug. 21	1282	359	24	543
Car seat. Railway.....	S. S. Black.....	287,999	Nov. 6	269	76	25	554
Car seat. Street.....	W. Don.....	287,644	Oct. 30	2372	640	25	460
Car-seat ticket-holder.....	C. S. Macann.....	274,621	Mar. 27	1738	497	23	1164
Car seats. Head-rest and attachment for railway.....	H. D. Wilson.....	272,395	Feb. 13	1015	284	23	627
Car-shifter.....	W. H. Lind.....	289,006	Nov. 27	1523	421	25	797
Car-signal.....	G. H. Cormack.....	290,540	Dec. 18	1480	409	25	1162
Car-signal.....	R. P. Garsed.....	276,801	May 1	348	93	23	1687
Car-signal.....	L. C. Huber.....	280,179	June 26	1916	538	23	2474
Car-signal.....	J. A. Miller.....	271,348	Jan. 30	1889	547	23	381
Car-signal.....	W. H. Rushforth.....	282,569	Aug. 7	115	34	24	520
Car-signal.....	W. H. Rushforth.....	282,570	Aug. 7	116	35	24	520
Car-signal.....	I. W. Stemen.....	285,173	Sept. 18	1256	352	24	1133
Car-signal.....	S. Thompson and W. E. Farrell.....	278,831	June 5	210	62	23	2159
Car-signal. Electro-magnetic.....	J. W. Marley.....	271,882	Feb. 6	355	99	23	503
Car signal-light. Railway.....	A. A. Bissell.....	278,213	May 22	2083	574	23	2004
Car-signal. Revolving.....	A. A. Bissell.....	285,380	Sept. 25	1497	421	24	1183
Car-signal. Revolving.....	L. W. Schooner and J. Afflerbach.....	279,821	June 19	1485	416	23	2391
Car. Sleeping.....	L. Creighton.....	288,926	Nov. 20	1420	391	25	772
Car. Sleeping.....	H. Guillaume.....	284,733	Sept. 11	710	199	24	1031
Car. Sleeping.....	H. S. Hale.....	285,890	Oct. 2	141	40, 41	25	28
Car. Sleeping.....	H. S. Hale.....	289,346	Nov. 27	1934	537	25	873
Car. Sleeping.....	E. P. Kellogg.....	279,954	June 26	1658	{ 465 466 }	23	2427
Car. Sleeping.....	H. M. Neff.....	275,935	Apr. 17	1383	381	23	1479
Car. Sleeping.....	W. H. Paige.....	288,361	Nov. 13	716	196	25	640
Car. Sleeping.....	W. H. Paulding.....	272,580	Feb. 20	1259	351	23	675
Car. Sleeping.....	J. A. Sleicher.....	273,620	Mar. 6	486	131	23	917
Car. Sleeping.....	J. A. Sleicher.....	281,409	July 17	1338	370	24	249
Car. Sleeping.....	J. A. Sleicher.....	281,410	July 17	1338	370	24	249
Car. Sleeping.....	W. H. Wigmore.....	274,689	Mar. 27	1868	{ 520 521 }	23	1179
Car-spring.....	S. A. Bemis.....	284,713	Sept. 11	685	193	24	1026
Car-spring.....	J. B. N. Berry.....	279,907	June 26	1598	448	23	2418
Car-spring.....	E. Clif.....	283,078	Aug. 14	720	202	24	635
Car-spring.....	N. H. Davis.....	287,638	Oct. 30	2368	639	25	459
Car-spring.....	N. H. Davis.....	287,639	Oct. 30	2369	639	25	459
Car-spring.....	N. H. Davis.....	287,640	Oct. 30	2369	639	25	460
Car-spring.....	W. P. Hansell.....	273,837	Mar. 13	773	209	23	974
Car-spring.....	C. C. Hebbard.....	290,582	Dec. 18	1534	422	25	1172
Car-spring.....	T. J. Mayall.....	286,042	Oct. 2	323	90	25	59
Car-spring.....	A. Stroh.....	270,349	Jan. 9	623	184	23	131
Car-spring support.....	W. Den.....	288,779	Nov. 20	1245	342	25	739
Car-starter.....	A. F. Clark.....	274,463	Mar. 27	1575	{ 431 432 }	23	1128
Car-starter.....	H. Clark.....	280,450	July 3	140	38	24	26
Car-starter.....	H. Clark.....	288,016	Nov. 6	291	82	25	557
Car-starter.....	W. B. Cleveland.....	281,975	July 24	2063	565	24	378
Car-starter.....	J. G. Crate and J. F. Morell.....	284,948	Sept. 11	966	{ 271 272 }	24	1076
Car-starter.....	W. H. Harrison.....	271,066	Jan. 23	1532	442	23	312
Car-starter.....	L. W. Hewett and S. J. Leonard.....	275,211	Apr. 3	425	{ 116 117 }	23	1299
Car-starter.....	L. W. Hewett and T. Millen.....	280,744	July 3	492	139	24	87
Car-starter.....	A. W. Smith.....	271,661	Feb. 6	91	25	23	456
Car-starter.....	T. Soefbeer.....	274,389	Mar. 20	1485	408	23	1103
Car-starter.....	J. A. True and E. Smith.....	290,720	Dec. 25	1721	475	25	1212
Car-starter.....	E. Utz.....	279,049	June 5	537	146	23	2215
Car-starter.....	E. Utz and T. Sprick.....	272,358	Feb. 13	957	{ 266 267 }	23	617
Car-starter.....	C. P. Warnick.....	278,378	May 29	2324	636	23	2054
Car starter and brake.....	C. T. Brown.....	277,863	May 15	1646	449	23	1923



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Car starter and brake	W. G. Stitt, J. Lowbridge, and A. Rosenkranz.	288,678	Nov. 20	1123	309	25	717
Car steam-heater. Railway	N. Slingland.	284,250	Sept. 4	120	32, 33	24	925
Car-step	A. Cameron and C. E. Russell	280,129	June 26	1865	526	23	2465
Car-step	T. B. Howe.	274,197	Mar. 20	1220	336	23	1059
Car-step	H. C. Reagan, Jr.	273,155	Feb. 27	1988	560	23	810
Car-step	H. S. Wolfe.	290,957	Dec. 25	2018	557	25	1262
Car-step. Street	E. J. J. Townsend.	280,883	July 10	672	189	24	126
Car-steps, &c. Device for lighting	G. W. Hunt.	278,141	May 22	1989	547	23	1988
Car. Stock	A. V. Anderson.	269,988	Jan. 2	194	56	23	40
Car. Stock	E. B. Brown.	288,405	Nov. 13	786	{ 212 213 }	25	652
Car. Stock	G. D. Burton.	284,116	Aug. 28	2021	562	24	888
Car. Stock	G. D. Burton and J. M. Holden.	274,458	Mar. 27	1570	430	23	1128
Car. Stock	A. Chapman.	275,995	Apr. 17	1456	401	23	1493
Car. Stock	A. W. Clifford.	284,819	Sept. 11	814	227	24	1048
Car. Stock	I. H. and C. Dahlman.	282,706	Aug. 7	291	82	24	550
Car. Stock	J. Dixey.	279,358	June 12	933	261	23	2291
Car. Stock	J. C. Foster.	271,695	Feb. 6	133	36, 37	23	463
Car. Stock	M. H. Gilbert.	274,585	Mar. 27	1748	485	23	1157
Car. Stock	H. C. Hicks.	279,162	June 12	698	190	23	2252
Car. Stock	H. C. Hicks.	281,067	July 10	897	249	24	166
Car. Stock	H. C. Hicks.	288,335	Nov. 13	683	138	25	634
Car. Stock	B. P. Joiner.	276,595	May 1	66	18	23	1639
Car. Stock	E. Kohler.	275,221	Apr. 3	435	119	23	1301
Car. Stock	H. A. Lewis.	276,053	Apr. 17	1524	419	23	1303
Car. Stock	W. Martin.	273,570	Mar. 6	431	116	23	908
Car. Stock	A. C. Mather.	272,451	Feb. 20	1000	308	23	645
Car. Stock	S. Pavey.	273,141	Feb. 27	1974	555	23	808
Car. Stock	S. P. Tallman.	274,991	Apr. 3	137	39	23	1249
Car. Stock	S. P. Tallman.	288,680	Nov. 20	1125	310	25	718
Car. Stock	M. H. Walker.	288,663	Nov. 20	1129	311	25	718
Car. Stock	J. C. Weaver.	284,103	Aug. 28	1999	{ 556 557 }	24	884
Car. Stock	J. K. Weber.	283,441	Aug. 21	1179	331	24	725
Car. Stock	S. C. Wiser.	274,240	Mar. 20	1285	354	23	1071
Car. Suspension railway	D. Query.	277,783	May 15	1553	423	23	1906
Car-switching system. Street	T. B. Estep.	260,300	June 26	2073	584	23	2502
Car-tracker	S. J. Stewart.	275,728	Apr. 10	1119	306	23	1425
Car-unloader. Grain	J. H. Chase.	277,460	May 15	1175	315	23	1841
Car-unloading apparatus	V. D. Simar and J. Dale.	282,125	July 31	2274	624	24	418
Car-ventilation	W. Bedell.	280,783	July 10	563	158	24	106
Car-ventilator	F. P. Abercrombie.	272,371	Feb. 13	972	271	23	621
Car-ventilator	J. M. J. A. P. D'Aragon.	280,722	July 3	459	{ 131 132 }	24	82
Car-ventilator	S. C. Hill, S. D. Webb, and R. M. Odell.	282,889	Aug. 7	496	139	24	588
Car-ventilator	O. H. Jones.	277,903	May 22	1699	464	23	1938
Car-ventilator	J. Walker.	274,063	Mar. 13	1044	288	23	1021
Car-ventilator. Railway	E. H. Mott.	270,603	Jan. 16	960	278	23	205
Car-wheel	R. N. Allen. (Reissue)	10,306	Apr. 10	1208	331	23	1440
Car-wheel	M. O. Baldwin.	276,211	Apr. 24	1723	477	23	1546
Car-wheel	H. M. Boies.	290,518	Dec. 18	1454	402	25	1158
Car-wheel	D. Connell.	287,629	Oct. 30	2358	636	25	457
Car-wheel	W. B. Dixon.	286,183	Oct. 9	497	137	25	103
Car-wheel	W. R. Jenkins, Jr.	276,047	Apr. 17	1518	418	23	1502
Car-wheel	A. Keil.	290,434	Dec. 18	1338	370	25	1137
Car-wheel	E. J. Kelly.	288,817	Nov. 20	1294	354	25	747
Car-wheel	J. T. Leighton.	284,028	Aug. 28	1909	535	24	869
Car-wheel	W. I. Lindsay.	284,448	Sept. 4	351	97	24	963
Car-wheel	E. B. Meatyard and J. Whyte.	283,631	Aug. 21	1395	391	24	765
Car-wheel	P. E. Merrihew.	288,469	Nov. 13	867	234	25	666
Car-wheel	J. R. Morgan.	278,726	June 5	66	20	23	2136
Car-wheel	W. H. Paige.	274,218	Mar. 20	1255	346	23	1065
Car-wheel	D. W. Reese.	289,712	Dec. 4	434	121	25	962
Car-wheel	D. W. Reese.	289,713	Dec. 4	435	121	25	962
Car-wheel	E. K. Richter.	289,142	Nov. 27	1688	469	25	826
Car-wheel	L. A. Roby and S. T. Wellman.	284,330	Sept. 4	211	59	24	940
Car-wheel	R. M. Smith.	272,342	Feb. 13	935	260	23	614
Car-wheel	W. W. Snow.	276,727	May 1	257	65	23	1668
Car-wheel	T. Thirber.	287,688	Nov. 6	120	36	25	529
Car-wheel	N. Washburn.	279,466	June 12	1070	296	23	2313
Car-wheel	S. T. Wellman.	271,286	Jan. 30	1805	523	23	366
Car-wheel	J. M. Whiting.	282,593	Aug. 7	144	43	24	526
Car-wheel	W. J. Willis.	280,702	July 3	438	125	24	78
Car-wheel	H. G. Yates.	278,843	June 5	232	68	23	2163
Car wheel and axle	J. Findlay.	285,984	Oct. 2	254	72	25	49
Car wheel and axle	M. Jordan.	269,942	Jan. 2	146	42	23	30
Car wheel and axle	A. Keil.	290,435	Dec. 18	1339	371	25	1138
Car wheel and brake. Electro-magnetic	H. M. Beidler.	284,365	Sept. 4	251	70	24	947
Car-wheel boring and truing machine	W. P. Barclay.	271,680	Feb. 6	112	31	23	459
Car-wheel boring and truing machine	J. H. Gowan.	285,123	Sept. 18	1191	334	24	1122
Car-wheel boring and truing machine. Chilled	W. P. Barclay.	283,367	Aug. 21	1093	{ 307 308 }	24	709
Car-wheel chill	J. N. Barr.	279,520	June 19	1143	316	23	2332
Car-wheel chill	W. Wilmington.	270,869	Jan. 16	1284	370	23	265
Car-wheel chill	W. Wilmington.	282,825	Aug. 7	418	118	24	574
Car-wheel chill. Contracting	J. N. Barr.	288,969	Nov. 27	1479	410	25	789
Car-wheel-cleaning device	P. H. Griffin.	270,306	Jan. 9	567	166	23	121
Car-wheel guard	J. Stephenson.	283,298	Aug. 14	989	{ 276 277 }	24	684
Car wheel-guard. Railway	J. Jacobs.	277,490	May 15	1212	325	23	1847
Car-wheel lubricator	J. Stephenson.	285,082	Sept. 18	1139	318	24	1113
Car-wheel tires. Device for manufacturing	J. A. Facer and A. Schaub.	271,823	Feb. 6	288	79	23	492

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Car-wheel-truing machine.....	J. H. Gowan.....	297,762	Oct. 30	2537	683	25	491
Car-wheels. Machine for grinding.....	A. W. McIntyre.....	288,717	Nov. 20	1167	{ 320 321 }	25	725
Car-window deflector.....	H. B. Mears.....	272,738	Feb. 20	1453	408	23	710
Car window-ventilator. Railway.....	H. H. Reynolds.....	275,271	Apr. 3	494	137	23	1310
Car windows. Sash-holder for street.....	I. N. W. Sherman.....	277,793	May 15	1564	426	23	1908
Cars. Baggage-rack for railway.....	H. C. Hart.....	282,887	Aug. 7	493	139	24	587
Cars by electricity. Propelling.....	J. R. Finney.....	285,353	Sept. 18	1454	410	24	1169
Cars. Curtain-bracket for sleeping.....	J. H. Doerr and W. H. Wigmore.....	275,164	Apr. 3	366	101	23	1289
Cars. Device for loading cattle on railway.....	H. C. Hawley and J. I. Davis.....	274,192	Mar. 20	1214	334	23	1058
Cars. Device for unloading platform.....	G. P. Merrill.....	279,578	June 19	1210	335	23	2343
Cars from one track to another. Transferring.....	W. Wharton, Jr.....	282,815	Aug. 7	405	114	24	572
Cars. Guard attachment for city-railway.....	J. Stephenson.....	284,254	Sept. 4	124	34	24	925
Cars. Heating railway.....	M. Hurly.....	289,265	Nov. 27	1832	505	25	853
Cars. Lumber-door for railway box.....	G. B. Nichols.....	290,395	July 3	67	18	24	14
Cars. Machine for unloading railway.....	A. Hall.....	279,868	June 19	1546	432	23	2402
Cars. Method of and apparatus for heating.....	J. Mason.....	271,885	Feb. 6	358	99	23	503
Cars on cable railways. Operating.....	J. Jochum.....	288,815	Nov. 20	1291	354	25	747
Cars on curves. Moving street.....	N. A. Fisher.....	289,904	Dec. 11	669	186	25	1010
Cars. Plow for unloading.....	J. McNeill.....	287,698	Oct. 30	2449	{ 659 660 }	25	475
Cars. Side bearing for railway.....	S. D. King.....	273,693	Mar. 6	582	155	23	933
Cars. Ventilating.....	W. Scott.....	290,710	Dec. 25	1709	470	25	1209
Carbon.....	W. C. Beckwith.....	290,336	Dec. 25	1866	515	25	1237
Carbon-black. Machine for the manufacture of.....	W. Falconer.....	277,472	May 15	1188	319	23	1843
Carbon conductors. Apparatus for treating.....	E. Weston.....	289,327	Nov. 27	1913	532	25	869
Carbon filaments. Apparatus for treating.....	C. G. Perkins.....	287,318	Oct. 23	1950	532	25	373
Carbon plates. Apparatus for making.....	E. J. Molera and J. C. Cebrian.....	278,355	May 29	2297	628	23	2049
Carbon plates. Manufacture of porous.....	C. H. Koyl.....	279,400	June 12	998	.....	23	2301
Carbon rod or stick and mechanism for making the same.....	C. F. Brush.....	274,904	Apr. 3	15	4	23	1220
Carbonating apparatus.....	W. J. Cunningham.....	290,749	Dec. 25	1763	486	25	1219
Carbonizing-mold.....	T. A. Edison.....	287,522	Oct. 30	2200	598	25	428
Carbonizing. Mold for.....	T. A. Edison.....	274,291	Mar. 20	1348	371	23	1081
Carboy-hanger.....	E. L. Darnet.....	270,183	Jan. 2	417	121	23	85
Carboy holder. Acid.....	C. S. Joslin.....	273,098	Feb. 27	1922	538	23	797
Carboy-stand.....	C. T. Armstrong.....	272,512	Feb. 20	1171	327	23	659
Carboy support. Acid.....	A. D. Puffer.....	280,860	July 10	646	182	24	120
Carboys and other vessels. Handle for.....	F. A. Howard.....	283,785	Aug. 28	1599	452	24	815
Carbureting apparatus.....	C. A. Paquelin. (Reissue).....	10,358	July 17	1653	450	24	300
Carbureting apparatus. Gas.....	N. A. Ransom.....	275,268	Apr. 3	490	136	23	1309
Carburetor.....	T. J. Brough.....	284,373	Sept. 4	259	72	24	948
Carburetor.....	C. F. Copeland.....	274,176	Mar. 20	1198	336	23	1055
Carburetor.....	C. F. Copeland.....	288,632	Nov. 20	1050	289	25	706
Carburetor.....	L. F. Mills.....	281,108	July 10	940	{ 263 264 }	24	174
Carburetor.....	I. W. Shaler.....	278,281	May 22	2170	598	23	2018
Carburetor.....	J. H. Saunderson.....	288,868	Nov. 20	1351	371	25	758
Carburetor. Metrical.....	W. M. Jackson.....	280,746	July 3	496	140	24	88
Card-board. Ornamental.....	C. S. Plummer.....	289,444	Dec. 4	85	24	25	901
Card-cylinder and making the same.....	W. P. Maxfield.....	273,573	Mar. 6	434	117	23	909
Card for book-marks and for advertising mediums.....	L. S. Samuel.....	289,566	Dec. 4	246	69	25	930
Card-gilding machine.....	C. A. Wright.....	290,303	Dec. 18	1154	{ 323 324 }	25	1105
Card-grinder.....	C. B. and O. B. Parker.....	277,604	May 15	1347	363	23	1868
Card-grinding machine.....	C. B. and O. B. Parker and B. P. Grover.....	286,633	Oct. 16	1074	289	25	211
Card-grinding machine.....	B. S. Roy.....	276,884	May 1	449	{ 120 121 }	23	1705
Card-grinding machine.....	C. Schreiber.....	278,608	May 29	2596	708	23	2102
Card-grinding roll.....	D. Bateman.....	269,821	Jan. 2	2	1	23	3
Card-holder.....	P. Ruffani.....	286,332	Oct. 9	704	187	25	138
Card or sample holder.....	F. L. Cutter.....	275,601	Apr. 10	958	260	23	1398
Card or ticket holder.....	W. H. Soper.....	274,400	Mar. 20	1486	409	23	1106
Card. Ornamental.....	J. Lane.....	279,490	June 12	1099	304	23	2317
Card. Picture.....	C. Schwartz.....	286,642	Oct. 16	1084	292	25	212
Card. Playing.....	A. Dougherty.....	278,412	May 29	2364	646	23	2061
Card-scoring machine.....	R. P. Strachan and G. Henshaw.....	289,162	Nov. 27	1711	476	25	830
Card-setting machines. Oscillating cutter for.....	A. Arnold.....	284,161	Sept. 4	1	1	24	905
Card-support.....	J. W. Carter, Jr.....	272,120	Feb. 13	672	183	23	568
Card-support.....	W. Hagelberg.....	278,941	June 5	400	110	23	2192
Card table and counter combined.....	B. W. Morris and N. Weaver.....	280,655	July 3	379	106	24	67
Card-teeth. Machine for setting.....	J. J. Hoey.....	271,460	Jan. 30	2038	{ 586 587 }	23	408
Cards and samples. Device for exhibiting.....	H. Cole.....	277,681	May 15	1436	387	23	1884
Cards or tickets for creating value. Machine for manipulating.....	C. L. Campbell and M. T. Martin.....	290,395	Dec. 18	1274	358	25	1127
Cards, pictures, and transparencies. Producing ornamental.....	C. H. Muhrman.....	271,505	Jan. 30	2092	.....	23	417
Carding-cylinder.....	J. H. Leather.....	285,631	Sept. 25	1798	512	24	1238
Carding-cylinder.....	H. L. Moulton.....	273,878	Mar. 13	829	225	23	984
Carding-engines. Feeding mechanism for.....	J. F. Gebhart.....	285,608	Sept. 25	1770	{ 501 502 }	24	1333
Carding-engines. Mechanism for stripping the top-flats of.....	H. Woodman.....	280,774	July 3	545	132	24	96
Carding-engines. Mechanism for vibrating the fly or doffer combs of.....	B. A. Dobson.....	280,805	July 10	586	{ 163 164 }	24	110
Carding-engines. Weighing apparatus for.....	J. F. Gebhart.....	273,980	Mar. 13	945	260	23	1004
Carding-machine.....	R. F. Barker.....	287,405	Oct. 30	2060	560	25	400
Carding-machine.....	J. Potter.....	280,238	June 26	1995	561	23	2488
Carding-machine.....	J. Potter.....	286,065	Oct. 2	352	98	25	65
Carding-machine.....	W. E. Whitehead.....	270,715	Jan. 16	1104	316	23	231
Carding-machine.....	W. E. Whitehead.....	271,558	Jan. 30	2152	620	23	427
Carding-machine.....	W. E. Whitehead.....	275,447	Apr. 10	767	204	23	1365



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Carding-machine feeding mechanism	T. E. Ainley	288,686	Nov. 20	1133	{ 311 312 }	25	719
Carding-machine feeding mechanism	S. Driver	290,758	Dec. 25	1772	459	25	1291
Carding-machines, &c. Coiler for	R. Tatham	271,155	Jan. 23	1635	471	23	329
Carding-machines. Lap-feeding device for	R. Wilde	290,378	Dec. 18	1251	351	25	1123
Carpenter's gage	W. F. Berry	273,440	Mar. 6	257	69	23	877
Carpet	E. Berliner	284,268	Sept. 4	137	39	24	938
Carpet-beater	A. List and O. Kunath	273,293	Mar. 6	64	19	23	845
Carpet-beating machine	H. W. Bates	276,656	May 1	144	37	23	1651
Carpet-beating machine	G. F. Ricker	274,224	Mar. 20	1361	348	23	1067
Carpet-beating machine	J. Spaulding	276,494	Apr. 24	2082	578	23	1607
Carpet-cleaner	J. L. Leach	286,832	Oct. 16	1323	361	25	255
Carpet-cleaner	W. P. Miller	288,720	Nov. 20	1182	323	25	726
Carpet-cleaner	S. B. Ryder	286,965	Oct. 16	1493	410	25	283
Carpet-cleaning apparatus	W. Bowman and E. Hunscher	271,406	Jan. 30	1902	567	23	394
Carpet-exhibitor	A. Peterson	280,855	July 10	642	181	24	119
Carpet-fastener	C. E. Allen	287,990	Nov. 6	259	74	25	552
Carpet-fastener	W. R. Johns	284,637	Sept. 11	583	164	24	1009
Carpet-fastener	E. J. Lewis	277,143	May 8	804	211	23	1770
Carpet-fastener	L. A. Nickerson and J. L. Dufrane	287,388	Oct. 23	2031	552	25	387
Carpet-lining	S. Bird and S. Pember	286,765	Oct. 16	1241	336	25	240
Carpet-lining	G. H. Chinnock and J. G. Stephens	277,832	May 15	1608	439	23	1916
Carpet-lining, &c.	L. P. Jenks	271,075	Jan. 23	1546	445	23	314
Carpet-lining	J. H. Wingfield	276,118	Apr. 17	1611	444	23	1518
Carpet-linings. Machine for folding	T. H. Farnham	270,940	Jan. 23	1380	399	23	287
Carpet-stretcher	S. Amick	290,308	Dec. 18	1163	326	25	1107
Carpet-stretcher	W. F. Ashcroft	270,720	Jan. 16	1110	317	23	232
Carpet-stretcher	H. W. Bowen	288,301	Nov. 13	633	173	25	626
Carpet-stretcher	J. P. Curry	286,788	Oct. 16	1268	343	25	245
Carpet-stretcher	W. H. Drew	277,015	May 8	628	165	23	1740
Carpet-stretcher	E. Hofmann	276,406	Apr. 24	1976	547	23	1588
Carpet-stretcher	A. J. Kennedy	286,708	Oct. 16	1173	315	25	228
Carpet-stretcher	J. Lindsay	289,007	Nov. 27	1523	421	25	797
Carpet-stretcher	J. W. McKinnon	272,295	Feb. 13	876	245	23	605
Carpet-stretcher	G. Mulligan	273,130	Feb. 27	1958	550	23	805
Carpet-stretcher	J. Peterman and S. Smith	272,468	Feb. 20	1111	314	23	649
Carpet-stretcher	R. O. Robinson	283,818	Aug. 28	1636	461	24	820
Carpet-stretcher	H. Segur	290,274	Dec. 18	1119	315	25	1100
Carpet-stretcher	J. S. Sherman	285,313	Sept. 18	1469	398	24	1162
Carpet-stretcher	H. S. Wing	283,053	Aug. 14	692	194	24	630
Carpet-stretcher and tack-driver. Combined	A. H. Morris and N. Finck	287,562	Oct. 30	2251	611	25	438
Carpet-sweeper	M. R. Bissell	272,022	Feb. 13	546	148	23	547
Carpet-sweeper	M. R. Bissell	285,000	Sept. 18	1043	292	24	1096
Carpet-sweeper	W. S. Carter	282,957	Aug. 14	572	162	24	609
Carpet-sweeper	W. H. Castle	277,229	May 8	897	239	23	1786
Carpet-sweeper	G. W. Gates	284,833	Sept. 11	827	231	24	1051
Carpet-sweeper	G. W. Gates	285,745	Sept. 25	1948	551	24	1263
Carpet-sweeper	D. R. Nichols	288,590	Nov. 13	1009	278	25	693
Carpet-sweeper	V. H. Snook	271,284	Jan. 30	1801	522	23	365
Carpet-sweeper	B. R. Stevens	276,495	Apr. 24	2084	579	23	1607
Carpet-sweeper	G. W. Zeigler	280,435	July 3	123	33	24	23
Carpet-sweeper	G. W. Zeigler	283,318	Aug. 14	1012	{ 233 234 }	24	689
Carpets. Apparatus for laying and stretching	A. B. Yoder and A. Schwenk	282,596	Aug. 7	147	44	24	526
Carpets. Name-plate for marking	J. H. Vandeverter	290,151	Dec 11	939	271	25	1064
Carriage	J. S. G. F. Hörcher	288,081	July 31	2199	604	24	407
Carriage-apron	G. E. Spare	273,180	Feb. 27	2018	567	23	815
Carriage-body hanger	J. Bowser	282,436	July 31	2670	732	24	486
Carriage-boot	T. Hawley	279,944	June 26	1648	462	23	2426
Carriage-boot	T. Hawley	279,945	June 26	1649	462	23	2426
Carriage-bow	S. N. Castle	272,374	Feb. 13	976	273	23	622
Carriage-bow socket	C. S. Rathbun and S. F. Selby	283,022	Aug. 14	658	185	24	624
Carriage-button	P. Shocker and A. H. Shepard	283,076	Aug. 21	1451	408	24	776
Carriage. Child's	H. F. Brooks	276,955	May 1	553	144	23	1721
Carriage. Child's	G. W. Bryan	281,832	July 24	1888	515	24	348
Carriage. Child's	J. A. Crandall	280,454	July 3	146	39	24	27
Carriage. Child's	J. F. Downing	286,186	Oct. 9	500	138	25	103
Carriage. Child's	C. A. Goessmann	269,928	Jan. 2	124	37	23	26
Carriage. Child's	C. Pfeffer	290,704	Dec. 25	1693	466	25	1206
Carriage. Child's	H. M. Richardson. (Reissue)	10,363	Aug. 7	556	157	24	600
Carriage. Child's	G. P. Steinbach	270,612	Jan. 16	971	280	23	207
Carriage. Child's	C. S. Stowbridge	285,935	Oct. 2	203	57	25	39
Carriage. Child's	C. H. Wentworth	283,939	Aug. 28	1779	{ 502 503 }	24	847
Carriage. Child's	E. A. Wood	270,561	Jan. 9	903	261	23	166
Carriage-clip	W. H. Cooper	283,976	Aug. 28	1823	515	24	855
Carriage-coupling	R. G. Wood	282,142	July 31	2291	629	24	421
Carriage-curtain fastener	G. L. Crandall. (Reissue)	10,301	Apr. 3	615	165	23	1330
Carriage-curtain fastener	W. E. Curtis	289,991	Dec. 11	773	217	25	1029
Carriage-curtain fastener	S. C. Meckel	278,989	June 5	456	125	23	2201
Carriage-curtain fastening	W. Leggett	273,745	Mar. 13	651	173	23	954
Carriage-curtain fastening	J. Logan	280,382	July 3	54	14	24	12
Carriage-curtain fastening	W. Welker	285,090	Sept. 18	1153	321	24	1115
Carriage-curtain fastenings. Nail for	F. Hanson	273,729	Mar. 13	635	169	23	951
Carriage-curtain knob-patch fastener	A. S. Parker	274,137	Mar. 20	1149	316	23	1046
Carriage-curtain lights. Frame for	J. Watters	277,388	May 8	1082	290	23	1819
Carriage-curtain loop	F. A. Neider	276,269	Apr. 24	1790	498	23	1557
Carriage-curtain or covering	E. W. Harral	280,309	June 26	2082	587	23	2503
Carriage-curtain strap-fastening	F. A. Neider	282,354	July 31	2563	702	24	467
Carriage-curtain window	F. A. Neider	282,355	July 31	2564	702	24	467
Carriage-door	G. Lova	275,398	Apr. 10	704	158	23	1355
Carriage-door flap	J. J. Doyle	285,240	Sept. 18	1430	375	24	1147
Carriage-doors. Device for opening and closing	H. W. Yonley	282,597	Aug. 7	148	44	24	526
Carriage-driving detector	F. S. Twombly	280,535	July 3	238	64	24	43

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. G.	Vol.	Page.
Carriage. Folding baby-.....	F. Meyer.....	276,853	May 1	410	109	23	1698
Carriage-gearing.....	A. S. Carleton.....	281,667	July 24	1668	455	24	309
Carriage-iron.....	J. B. Birdsell.....	279,527	June 19	1155	320	23	2334
Carriage-jack.....	A. J. Church.....	257,625	Oct. 30	2354	635	25	456
Carriage-jack.....	E. Myrick.....	276,268	Apr. 24	1789	497	23	1557
Carriage-jack.....	A. O. Scott.....	282,573	Aug. 7	120	35	24	521
Carriage. Jump-seat.....	O. Morrill.....	274,633	Mar. 27	1800	500	23	1167
Carriage. Jump-seat.....	O. Morrill.....	278,583	May 29	2563	700	23	2097
Carriage jump-seat.....	H. P. Wells.....	255,450	Sept. 25	1581	445	24	1197
Carriage or wagon jack.....	W. Hillman.....	288,057	Nov. 6	334	94	25	564
Carriage register. Wheel-.....	J. E. Tarbox.....	256,743	Oct. 16	1214	327	25	235
Carriage running-gear.....	G. W. Earle and G. S. Strall.....	276,011	Apr. 17	1473	406	23	1495
Carriage seat.....	C. Haas.....	272,381	Feb. 13	995	277	23	624
Carriage seat.....	F. D. McDowell.....	274,131	Mar. 20	1143	315	23	1045
Carriage seat.....	F. W. Pendergast.....	280,509	July 3	213	56	24	38
Carriage-spring.....	J. J. Fetzner.....	289,078	Nov. 27	1616	447	25	813
Carriage-spring.....	T. D. Lines.....	287,303	Oct. 23	1932	528	25	369
Carriage-spring.....	W. Van Anden.....	271,953	Feb. 6	445	122	23	519
Carriage-spring.....	W. Van Anden.....	290,502	Dec. 18	1425	395	25	1153
Carriage-springs. Die for making.....	R. S. Hunzeker.....	285,623	Sept. 25	1788	508	24	1247
Carriage standard. Child's.....	C. C. Egerton.....	278,000	May 22	1817	496	23	1958
Carriage-step.....	F. A. Sawyer.....	257,870	Nov. 6	100	29, 30	25	525
Carriage-step pads. Die for forming.....	D. F. Southwick.....	277,853	May 15	1635	445	23	1921
Carriage-top.....	H. M. Bowden.....	287,499	Oct. 30	2174	500	25	422
Carriage-top.....	W. Clucas.....	273,959	Mar. 13	921	253	23	999
Carriage-top.....	D. Conboy.....	277,116	May 8	765	201	23	1763
Carriage-top.....	W. Hodge.....	270,220	Jan. 9	470	138	23	102
Carriage-top.....	W. Hodge.....	274,496	Mar. 27	1636	455	23	1138
Carriage-top.....	R. L. Keith.....	283,895	Aug. 28	1723	486	24	835
Carriage-top.....	W. B. Sales.....	273,766	Mar. 13	690	185	23	960
Carriage-top.....	L. Schmetzer.....	272,779	Feb. 20	1505	424	23	719
Carriage-top.....	L. Schmetzer.....	276,288	Apr. 24	1815	505	23	1561
Carriage-top-bow support.....	J. P. Whitman.....	272,814	Feb. 20	1531	435	23	727
Carriage-top. Child's.....	J. N. Hazelp.....	276,035	Apr. 17	1504	414	23	1500
Carriage-top. Folding.....	R. E. Ellis.....	283,873	Aug. 28	1698	475	24	831
Carriage-top joint.....	W. H. Thompson.....	290,144	Dec. 11	952	269	25	1063
Carriage-top lock. Landau-.....	O. S. Osborn.....	290,349	Dec. 18	1214	340	25	1117
Carriage-top-prop.....	G. L. Artz.....	283,553	Aug. 21	1306	366	24	748
Carriage-top prop.....	A. S. Parker.....	269,878	Jan. 2	64	20	23	15
Carriage-top prop.....	W. F. Stuart.....	278,060	May 22	1884	511	23	1970
Carriage-top prop-block.....	H. A. Thorpe and R. H. Pfaff.....	286,239	Oct. 9	558	153	25	113
Carriage-top props. Locking the nuts of.....	G. L. Crandal.....	281,344	July 17	1256	349	24	235
Carriage-top setter.....	J. Stoodly.....	273,187	Feb. 27	2023	569	23	816
Carriage-top standard.....	G. M. Bechtel.....	278,676	June 5	2	1	23	2125
Carriage-top standard.....	T. W. Porter.....	285,070	Sept. 18	1127	315	24	1111
Carriage-top standard.....	J. T. Walker.....	283,690	Aug. 21	1468	414	24	779
Carriage-tops. Cap or shield for buckle-straps of.....	G. W. Traphagan.....	290,289	Dec. 18	1138	319	25	1103
Carriage-tops. Jointed brace for.....	B. Taylor.....	281,944	July 24	2024	554	24	372
Carriage-way. Wire.....	G. R. Elliott.....	276,529	Apr. 24	2122	592	23	1615
Carriage-wheel lock.....	W. B. Bain.....	288,154	Nov. 6	443	124	25	585
Carriage-window cushion.....	I. H. Mulford.....	271,900	Feb. 6	380	105	23	507
Carriage-wrench.....	D. True.....	271,549	Jan. 30	2143	616	23	426
Carriage-wrench.....	D. True.....	279,993	June 26	1701	477	23	2435
Carriages. Canopy-holder for children's.....	G. D. Paul.....	290,103	Dec. 11	900	256	25	1053
Carriages. Canopy-holder for children's.....	A. G. Snell.....	281,311	July 17	1213	336	24	228
Carriages. Canopy-support for children's.....	J. F. Butler and U. McClinchie.....	275,582	Apr. 10	930	253	23	1393
Carriages. Equalizer for spring.....	O. F. Lowe.....	278,984	June 5	450	123	23	2200
Carriages. Umbrella for children's.....	C. D. Foster.....	288,703	Nov. 20	1153	317	25	722
Carrier.....							
See Baby-carrier.....	Hoisting-carrier.....						
Cable carrier.....	Hoisting machinery carrier.....						
Cash-carrier.....	rier.....						
Cash and bundle carrier.....	Milk or cream carrier.....						
carrier.....	Package-carrier.....						
Cash and parcel carrier.....	Parcel-carrier.....						
rier.....	Rein-carrier.....						
Cash or parcel carrier.....	Sewing-machine shuttle-carrier.....						
rier.....							
Coal and ore carrier.....	Shaft-carrier.....						
Egg-carrier.....	Sheaf-carrier.....						
Endless-chain carrier.....	Straw-carrier.....						
rier.....	Thrashing-machine straw-carrier.....						
Game-carrier.....	rier.....						
Harvester bundle-carrier.....	Thill-carrier.....						
rier.....	Trace-carrier.....						
Hay-carrier.....	Trunk-carrier.....						
Carrying system.....	Z. S. Holbrook.....	282,319	July 31	2509	689	24	457
Carrying system.....	Z. S. Holbrook.....	282,893	Aug. 7	500	{ 140 } { 141 }	24	589
Cart. Driving.....	E. Hutson and E. Squires.....	271,710	Feb. 6	147	41	23	466
Cart. Dumping.....	T. Hill.....	283,604	Aug. 21	1366	362	24	759
Cart. Dumping.....	W. Longbridge.....	270,905	Jan. 23	1334	385	23	280
Cart. Road.....	N. P. Anderson.....	268,965	Nov. 27	1476	409	25	769
Cart. Road.....	T. F. Conklin.....	271,223	Jan. 30	1724	499	23	352
Cart. Road.....	J. M. Hiller.....	288,336	Nov. 13	685	188	25	634
Cart. Road.....	A. Hitt.....	288,805	Nov. 20	1278	350	25	745
Cart. Road.....	H. L. Kingsley.....	284,132	Aug. 28	2038	567	24	891
Cart. Road.....	J. Weiler.....	285,189	Sept. 18	1273	358	24	1136
Cart-spring.....	G. Walter.....	270,164	Jan. 2	397	115	23	81
Cart-wheel.....	C. Dégrange.....	283,567	Aug. 28	1690	477	24	830
Cartridge.....	T. Baker and W. M. Scott.....	271,565	Jan. 30	2163	623	23	429
Cartridge.....	L. G. Knowles.....	283,898	Aug. 28	1725	487	24	835
Cartridge.....	J. H. McLean.....	282,550	Aug. 7	91	27	24	516
Cartridge.....	E. A. Monfort.....	276,451	Apr. 24	2033	564	23	1599



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Cartridge and wiper .....	F. C. Taylor .....	270,616	Jan. 16	974	281	23	207
Cartridge. Blasting .....	S. R. Divine .....	289,764	Dec. 4	487	.....	25	971
Cartridge. Blasting .....	G. A. Schneebeli .....	273,399	Mar. 6	208	56	23	869
Cartridge-box .....	D. T. Mulvey .....	280,067	June 26	1798	505	23	2452
Cartridge-capping machine .....	W. Lorenz .....	274,618	Mar. 27	1785	496 497	23	1164
Cartridge-case for needle-guns .....	A. N. Gavard and H. Millon .....	276,022	Apr. 17	1490	410	23	1498
Cartridge-case. Paper .....	T. L. Sturtevant .....	270,996	Jan. 23	1452	418	23	299
Cartridge-closing machine .....	C. S. Leet and W. H. Northall .....	287,693	Oct. 30	2438	656	25	474
Cartridge-crimper .....	H. A. A. Thorn .....	290,370	Dec. 18	1238	349	25	1121
Cartridge-extractor for breech-loading guns .....	P. and C. G. Tissier .....	289,787	Dec. 4	513	142	25	975
Cartridge-feed case .....	H. A. Lewis .....	283,122	Aug. 14	773	218	24	645
Cartridge implement .....	W. W. Christmas and F. B. Jonas .....	290,973	Dec. 25	2052	565	25	1267
Cartridge implement .....	E. R. Darling .....	272,215	Feb. 13	779	216	23	586
Cartridge implement .....	E. R. Darling. (Reissue) .....	10,421	Dec. 11	1099	284	25	1073
Cartridge implement .....	D. W. McBrayer .....	290,594	Dec. 18	1546	495	25	1174
Cartridge implement .....	C. H. Smith and L. E. Hansberry .....	290,127	Dec. 11	933	265	25	1059
Cartridge-loading implement .....	J. E. Langdon .....	272,141	Feb. 13	695	190	23	572
Cartridge-loading machine .....	L. Keller .....	272,060	Feb. 13	593	160	23	555
Cartridge-loading machine .....	A. P. La Plant .....	283,791	Aug. 28	1605	453	24	816
Cartridge-loading machine .....	J. L. Mott, Jr .....	283,804	Aug. 28	1616	455	24	817
Cartridge-loading machine .....	J. B. Richardson .....	288,740	Nov. 20	1204	399 330	25	731
Cartridge-loading machine .....	F. A. Winter .....	289,592	Dec. 4	276	77, 78	25	936
Cartridge-loading mechanism .....	J. F. Masters .....	284,874	Sept. 11	878	246	24	1060
Cartridge-loading mechanism .....	W. R. Livermore and A. H. Russell .....	278,980	June 5	445	122	23	2199
Cartridge-pouch .....	O. D. Collins .....	287,504	Nov. 6	18	6	25	510
Cartridge-primer .....	J. H. Bullard .....	278,394	May 29	2342	640	23	2057
Cartridge-primer. Blasting .....	A. Frothingham .....	273,270	Mar. 6	31	10	23	840
Cartridge-reloading tool .....	T. H. Logan .....	281,636	July 17	1620	433	24	295
Cartridge-shell .....	P. O. Kessler .....	283,118	Aug. 14	770	217	24	644
Cartridge-shell .....	H. G. Piffard .....	272,581	Feb. 20	1260	351	23	675
Cartridge-shell blanks. Feeding .....	P. Trinkaus .....	285,182	Sept. 18	1266	355	24	1135
Cartridge-shell extractor .....	C. S. Leet .....	282,997	Aug. 14	625	177	24	618
Cartridge-shells. Implement for capping and uncapping .....	H. F. Mann .....	288,950	Nov. 20	1452	401	25	777
Cartridge-shells into tubes. Machine for feeding metallic .....	W. Mason .....	271,886	Feb. 6	359	100	23	504
Cartridge-shells. Machine for capping .....	J. Orentt and C. R. Richards .....	279,497	June 12	1110	306	23	2319
Cartridge-shells. Machine for heading .....	A. C. Hobbs .....	273,734	Mar. 13	639	170	23	952
Cartridge-shells. Machine for making metallic .....	J. H. Ring and J. A. Bradshaw .....	286,151	Oct. 2	453	123	25	84
Cartridge-shells. Machine for setting primers in .....	A. Dickerman .....	270,288	Jan. 9	547	161	23	117
Cartridge-wad retainer .....	J. T. Walker .....	289,191	Nov. 27	1749	486	25	837
Cartridge. Water-proof .....	P. Barbe .....	273,934	Mar. 13	895	245	23	995
Cartridges. Can for holding blasting .....	C. C. White .....	287,785	Oct. 30	2566	690	25	497
Cartridges. Charge retainer and concentrator for .....	R. W. Morgan .....	287,151	Oct. 23	1734	475	25	335
Cartridges. Holder for packing .....	J. Gardner .....	285,992	Oct. 2	261	74	25	50
Cartridges. Machine for greasing .....	E. Parker .....	286,059	Oct. 2	343	96	25	63
Cartridges. Preparing blasting .....	S. R. Divine and A. C. Rand .....	289,761	Dec. 4	484	136	25	971
Cartridges. Tubular package for blasting .....	N. H. Heft .....	278,957	June 5	424	116	23	2196
Carving-fork .....	C. L. Butler .....	278,398	May 29	2346	641	23	2058
Carving-fork guard .....	W. A. C. Oaks .....	277,052	May 8	683	178	23	1749
Carving-fork guard .....	S. S. Ward .....	279,056	June 5	546	150	23	2216
Carving-fork guard .....	G. H. Warren .....	279,294	June 12	842	233	23	2277
Case:							
See Banker's case. Lunch-case.							
Blacking-case. Map-case.							
Bottle-case. Map and chart case.							
Burial-case. Musicdealer's furnishing-case.							
Butter-case. case.							
Cartridge-case. Musical-instrument case.							
Cartridge-packing case. Organ-case.							
Cell-case. Packing-case.							
Clarinet-case. Paper card-case.							
Clock-case. Pencil-case.							
Cornice-packing case. Piano-case.							
Document and file case. Pocket-case.							
Draining-case. Sewing and dressing case.							
Dressing-case. Sewing-machine case.							
Egg cell-case. Sheave-case.							
Extension-case. Shipping-case.							
Eye-glass-case. Shot-case.							
Eye-glass and spectacle case. Show-case.							
File-case. Show and storage case.							
Fishing-tackle case. Show packing-case.							
Fruit-jar-heating case. Spectacle-case.							
Gun-case. Spool-case.							
Ink-case. Telescopic case.							
Leather case. Ticket-case.							
Lock-case. Toilet-case.							
	Toilet-paper pocket-case.						
	Toilet-set case.						
	Type-case.						
	Watch-case.						
	Writing-case.						
Cash and bundle carrier .....	C. D. Read and E. Dawson .....	280,863	July 10	652	184	24	121
Cash and bundle conveyer. Combined .....	R. F. Jones .....	274,000	Mar. 13	970	266	23	1008
Cash and parcel carrier .....	G. R. Elliott .....	278,658	May 29	2662	728	23	2113
Cash and parcel carrier .....	G. R. Elliott .....	278,659	May 29	2663	729	23	2113
Cash and parcel carrier and track for the same .....	G. B. and J. C. Coram .....	286,592	Oct. 16	1019	277	25	202
Cash and parcel carrier. Automatic .....	C. Grant, Jr .....	287,278	Oct. 23	1898	519	25	364
Cash and parcel carrier for store-service .....	G. R. Elliott .....	283,087	Aug. 14	729	204	24	637

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Cash and parcel carriers. Track for.....	G. P. Walker.....	282,416	July 31	2637	{ 723 724 }	24	481
Cash and parcel carriers. Track for.....	G. P. Walker.....	282,417	July 31	2639	{ 724 724 }	24	481
Cash and parcel carriers. Track for.....	G. P. Walker.....	282,418	July 31	2641	{ 724 725 }	24	481
Cash and parcel carriers. Track for.....	G. P. Walker.....	282,419	July 31	2643	725	24	482
Cash and parcel carrying railway.....	H. A. Baker.....	285,374	Sept. 25	1488	419	24	1181
Cash and parcel carrying system.....	M. Clark.....	290,175	Dec. 11	984	278	25	1069
Cash-box system. Automatic.....	J. C. Martin.....	276,441	Apr. 24	2016	560	23	1596
Cash-box system. Automatic.....	J. C. Martin.....	284,456	Sept. 4	360	100	24	965
Cash-car.....	E. P. Osgood.....	290,190	Dec. 11	1002	282	25	1072
Cash-car system.....	B. A. Osgood.....	283,917	Aug. 28	1746	493	24	840
Cash-carrier.....	C. B. Allaire and C. M. Johnson.....	286,571	Oct. 16	993	269	25	197
Cash-carrier.....	G. A. Badger.....	279,688	June 19	1340	372	23	2366
Cash-carrier.....	H. A. Baker.....	280,003	June 26	1715	480	23	2438
Cash-carrier.....	H. A. Baker.....	285,375	Sept. 25	1489	420	24	1182
Cash-carrier.....	A. W. Bodell.....	278,767	June 5	111	31, 32	23	2142
Cash-carrier.....	O. H. Hewlett and C. A. Needham.....	273,841	Mar. 13	778	211	23	975
Cash-carrier.....	R. A. McCarty and C. M. Johnson.....	283,912	Aug. 28	1741	492	24	839
Cash-carrier.....	T. F. McGann.....	283,007	Aug. 14	636	180	24	620
Cash-carrier.....	D. C. Stover.....	270,261	Jan. 9	514	151	23	111
Cash-carrier.....	E. A. Thissell.....	286,504	Oct. 9	904	244	25	174
Cash-carrier.....	G. P. Walker.....	282,420	July 31	2644	725	24	482
Cash-carrier.....	G. P. Walker.....	282,421	July 31	2645	725	24	482
Cash-carrier. Automatic.....	J. W. Flagg.....	274,302	Mar. 20	1361	373	23	1083
Cash-carrier. Automatic.....	J. W. Flagg.....	277,892	May 22	1668	400	23	1936
Cash-carrier. Automatic.....	J. W. Flagg.....	283,768	Aug. 28	1575	445	24	811
Cash-carrier. Automatic.....	Z. S. Holbrook.....	282,320	July 31	2511	690	24	458
Cash-carrier. Automatic.....	Z. S. Holbrook.....	282,321	July 31	2516	690	24	459
Cash-carrier. Automatic.....	W. S. Lamson.....	284,563	Sept. 11	865	242	24	1057
Cash-carrier systems. Stop or brake mechanism and wire-support for.....	J. R. H. Hinton.....	286,133	Oct. 2	432	118	25	80
Cash-carriers. Drop-cradle and elevator for.....	J. C. Coram.....	278,510	May 29	2484	678	23	2083
Cash-railway.....	G. Willett.....	273,211	Feb. 27	2060	579	23	822
Cash-register.....	F. M. Tague and J. T. Power.....	283,531	Aug. 21	1380	358	24	743
Cash register and indicator.....	J. Ritty and J. Birch.....	271,363	Jan. 30	1911	553	23	385
Cash-transmitter. Pneumatic.....	H. Gazaille.....	279,090	June 5	586	160	23	2223
Cask.....	C. L. Crum.....	276,364	Apr. 24	1922	533	23	1579
Cask. Beer.....	H. C. Eber.....	289,632	Dec. 4	321	89	25	944
Casket-lid catch.....	E. R. Sargent.....	272,333	Feb. 13	926	257	23	613
Casket ornament.....	W. M. Smith.....	270,496	Jan. 9	810	236	23	168
Casket-rest.....	J. Carroll.....	279,706	June 19	1359	379	23	2369
Castanet.....	O. F. Westphal.....	273,414	Mar. 6	225	61	23	872
Castanet.....	E. T. Zeltner and F. Schenk.....	283,550	Aug. 21	1363	364	24	748
Caster.....	W. W. Box.....	275,126	Apr. 3	327	91	23	1282
Caster.....	C. N. Brady and J. E. Ratchiffe.....	290,967	Dec. 25	2041	561	25	1365
Caster.....	G. Custer.....	270,758	Jan. 16	1158	331	23	241
Caster.....	S. Ferris.....	280,164	June 26	1901	535	23	2471
Caster.....	J. A. Keller.....	285,491	Sept. 25	1628	457	24	1206
Caster.....	H. McDonald.....	282,099	July 31	2223	611	24	410
Caster.....	H. Ogborn.....	273,298	Mar. 6	71	20	23	846
Caster.....	O. F. Paepke.....	270,605	Jan. 16	965	279	23	206
Caster.....	O. Pederson. (Reissue).....	10,331	May 22	2224	609	23	2028
Caster.....	O. Pederson. (Reissue).....	10,332	May 22	2225	609	23	2028
Caster.....	H. M. Ritter.....	282,777	Aug. 7	364	103	24	564
Caster.....	S. Vanstone.....	277,522	May 15	1245	334	23	1853
Caster attachment to rockers.....	W. C. Ranney.....	287,721	Oct. 30	2476	667	25	480
Caster. Combined salt and pepper.....	J. E. Lonergan and H. K. Farrell.....	275,231	Apr. 3	449	124	23	1303
Caster. Cruet.....	H. J. Smith.....	284,499	Sept. 4	416	118	24	974
Caster for roller-skates and furniture.....	O. E. Wait.....	281,324	July 17	1234	341	24	231
Caster for trucks, &c.....	C. E. Hasenpflug.....	288,633	Nov. 20	1064	293	25	708
Caster frame. Table.....	O. F. Bacon.....	285,544	Sept. 25	1691	477	24	1218
Caster. Furniture.....	D. C. Meehan.....	285,912	Oct. 2	169	48	25	33
Caster. Furniture.....	O. Pederson. (Reissue).....	10,304	Apr. 3	618	166	23	1330
Caster. Furniture.....	O. Pederson. (Reissue).....	10,305	Apr. 3	619	166	23	1330
Caster. Furniture.....	C. Stengel.....	277,954	May 22	1757	479	23	1947
Caster. Glass.....	D. C. Ripley.....	289,027	Nov. 27	1554	428	25	802
Caster. Revolving glass.....	H. Semple and A. P. Ayling.....	290,804	Dec. 25	1828	505	25	1230
Caster. Spring.....	C. H. Roberts and C. J. Stevens.....	281,299	July 17	1199	331	24	226
Caster. Table.....	C. V. Fuller.....	280,304	June 26	2077	585	23	2502
Caster. Trunk.....	N. Kitt and J. Schmadel.....	279,397	June 12	995	276	23	2301
Caster. Trunk.....	S. M. Michelson.....	280,061	June 26	1789	502	23	2451
Caster. Trunk.....	A. V. Romodika.....	289,716	Dec. 4	437	122	25	963
Caster-wheel.....	A. D. Garretson.....	282,626	Aug. 7	185	54	24	532
Casting a plate for decorative printing, &c.....	J. F. Earhart.....	282,866	Aug. 7	471	.....	24	584
Casting apparatus. Soft-metal.....	R. J. Howdon.....	286,825	Oct. 16	1316	359	25	254
Casting attachment for open-hearth steel-melting furnaces.....	C. M. Ryder.....	277,850	May 15	1630	444	23	1920
Casting brass and other metals.....	H. A. Rowland.....	272,088	Feb. 13	628	171	23	560
Casting building-blocks. Mold for.....	J. J. Schillinger.....	277,791	May 15	1502	{ 425 426 }	23	1908
Casting car-wheels.....	W. Wilmington.....	273,658	Mar. 6	532	143	23	925
Casting car-wheels.....	W. Wilmington.....	281,422	July 17	1353	373	24	251
Casting car-wheels.....	W. Wilmington.....	283,311	Aug. 14	1004	281	24	687
Casting car-wheels.....	W. Wilmington.....	289,741	Dec. 4	464	131	25	968
Casting copper. Apparatus for.....	W. F. Durfee and T. Egleston.....	287,646	Oct. 30	2375	{ 640 641 }	25	461
Casting. Divided.....	J. Yocum, Jr.....	279,069	June 5	559	154	23	2219
Casting hollow chilled rolls. Apparatus for.....	J. M. Case.....	275,992	Apr. 17	1452	400	23	1492
Casting hollow ware.....	J. B. Harker.....	272,044	Feb. 13	573	155	23	551
Casting-mold.....	J. W. Galvin.....	284,407	Sept. 4	304	85	24	955
Casting pipe of plastic material. Mold for.....	D. H. Dorsett.....	284,191	Sept. 4	39	11, 12	24	911
Casting printers' rollers. Apparatus for.....	C. W. Crutsinger.....	274,728	Mar. 27	1907	533	23	1157



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Drig.	Vol.	Page.
Casting. Sand-core for .....	J. Houston .....	283,344	Aug. 14	1053	296	24	697
Casting shaft-couplings. Apparatus for .....	W. Tucker .....	272,800	Feb. 20	1532	431	23	724
Casting steel. Core for .....	J. A. Herrick .....	282,518	Aug. 7	50	15	24	509
Casting steel ingots having iron centers. Method of and mold for .....	J. Pedder .....	278,593	May 29	2577	704	23	2098
Casting stereotype-plates .....	C. Baechler .....	278,652	May 29	2655	726	23	2112
Casting vices. Metal mold for .....	W. E. Snediker .....	280,769	July 3	533	149	24	94
Castings. Annealing chilled and other iron .....	E. Jenkins, A. Law, and W. Price .....	282,728	Aug. 7	313	.....	24	555
Castings. Facing for foundry- .....	O. E. Weatherhead .....	272,808	Feb. 20	1543	.....	23	726
Castings. Flask for producing chilled .....	J. A. Parks .....	278,174	May 22	2030	558	23	1905
Castings. Machine for making molds for .....	E. Thomas .....	282,588	Aug. 7	138	41	24	524
Castings. Making molds for steel .....	B. F. Watkins .....	281,212	July 10	1083	.....	24	198
Castings. Making steel .....	W. Hainsworth .....	284,004	Aug. 28	1881	528	24	863
Castings. Manufacture of steel .....	G. W. Francis .....	276,018	Apr. 17	1482	.....	23	1497
Castings or carvings. Imitation of metal .....	G. B. Dexter .....	270,580	Jan. 16	928	268	23	109
Castings. Pattern and flask for producing .....	S. C. Tatam .....	282,403	July 31	2617	719	24	477
Castings. Pattern for producing .....	J. E. Donovan .....	275,166	Apr. 3	368	101	23	1290
Catamenial sack .....	L. Lange .....	282,201	July 31	2370	652	24	433
Catarrah remedy .....	W. Wohltmann .....	276,119	Apr. 17	1611	.....	23	1518
Cattle-guard .....	D. W. Granger .....	270,054	Jan. 2	266	77	23	54
Cattle on vessels. Fittings for carrying .....	T. Udey .....	286,976	Oct. 16	1507	414	25	286
Cattle-tie .....	L. M. Hawes .....	273,986	Mar. 13	950	261	23	1004
Ceiling .....	W. S. Cogswell .....	282,167	July 31	2326	641	24	426
Ceiling. Fire-proof .....	C. J. Bandman .....	270,623	Jan. 16	982	284	23	209
Ceiling. Fire-proof .....	A. W. Cordes .....	272,657	Feb. 20	1358	381	23	692
Ceiling. Fire-proof .....	A. W. Cordes .....	272,658	Feb. 20	1358	381	23	693
Ceiling. Fire-proof .....	A. W. Cordes .....	275,151	Apr. 3	353	97	23	1287
Ceiling. Fire-proof .....	P. J. L. De Rache .....	281,467	July 17	1413	388	24	261
Ceiling. Fire-proof .....	E. V. Johnson .....	270,677	Jan. 16	1055	302	23	222
Ceiling. Fire-proof .....	J. E. Ware .....	277,814	May 15	1585	433	23	1912
Ceiling or floor. Fire-proof .....	J. H. Dreyer .....	273,825	Mar. 13	761	206	23	972
Ceilings. Hollow-tile arch for .....	P. B. Wight .....	285,452	Sept. 25	1585	445	24	1198
Cell-case .....	G. L. Jaeger .....	282,899	Aug. 7	507	142	24	590
Cell-cases. Making .....	E. B. Stocking .....	276,497	Apr. 24	2085	579 } 580 }	23	1607
Cellars for cooling and ventilation. Construction of .....	E. Schröder .....	290,483	Dec. 18	1401	387	25	1149
Celluloid, &c. Apparatus for molding .....	I. S. Hyatt .....	275,216	Apr. 3	430	117 } 118 }	23	1300
Celluloid, &c. Apparatus for producing rods or tubes of .....	A. Olszewski .....	278,667	May 29	2671	730 } 731 }	23	2115
Celluloid collars, cuffs, &c. Manufacture of .....	I. S. Hyatt .....	276,248	Apr. 24	1766	492	23	1553
Celluloid, &c. Machine for breaking or cutting up sheets of .....	J. Everding .....	286,535	Oct. 9	941	254	25	182
Celluloid, &c. Manufacturing sheets of .....	I. S. Hyatt .....	275,215	Apr. 3	429	.....	23	1300
Celluloid, &c. Mold for forming articles of .....	A. B. Diss .....	278,321	May 29	2243	616	23	2040
Celluloid, &c. Nozzle for making rods and tubes from .....	J. B. Edson .....	277,694	May 15	1450	391	23	1887
Celluloid, &c. Process of and apparatus for lining hollow articles with .....	M. C. Lefferts .....	281,529	July 17	1487	408	24	274
Celluloid, &c. Process of and apparatus for molding hollow articles from .....	J. R. Furman .....	282,451	July 31	2687	737	24	489
Celluloid, &c. Press or mold for coating articles with .....	J. W. Hyatt .....	280,745	July 3	494	139 } 140 }	24	88
Celluloid, &c., with woven or knitted fabric, &c. Combining .....	M. P. Bogert .....	270,538	Jan. 9	873	254	23	181
Cellulose from wood. Preparing .....	A. Mitscherlich .....	284,319	Sept. 4	198	56	24	938
Cement. Building .....	J. E. Trask .....	271,950	Feb. 6	443	.....	23	519
Cement compound .....	W. J. Badington .....	281,965	July 24	2054	.....	24	376
Cement compound. Hydraulic .....	E. J. De Smedt .....	275,369	Apr. 10	658	.....	23	1347
Cement. Fluid .....	T. J. Mayall .....	286,040	Oct. 2	321	.....	25	59
Cement for the manufacture of memorandum blocks and tablets. Rubber .....	W. E. Dond .....	285,980	Oct. 2	250	.....	25	48
Cement. Hydraulic .....	J. Murphy .....	270,097	Jan. 2	310	.....	23	63
Cement. Hydraulic Portland .....	W. Jones .....	287,941	Nov. 6	191	.....	25	541
Cement. Manufacture of .....	L. Roth .....	270,608	Jan. 16	967	.....	23	206
Cement. Manufacture of Portland .....	E. J. De Smedt .....	274,734	Mar. 27	1913	.....	23	1188
Cement. Manufacture of Portland .....	E. J. De Smedt .....	274,735	Mar. 27	1915	.....	23	1188
Cement. Manufacture of Portland .....	E. J. De Smedt .....	274,288	Mar. 20	1342	.....	23	1080
Cement. Manufacturing Portland .....	E. J. De Smedt .....	279,357	June 12	932	.....	23	2291
Cement mixture for fire-proof and other structures. Plastic .....	E. H. Rust .....	289,451	Dec. 4	93	.....	25	903
Cement pipe. Mold for manufacturing .....	N. W. Stowell. (Reissue) .....	10,409	Nov. 20	1473	407	25	782
Cementing composition .....	W. W. Campbell .....	278,681	June 5	6	.....	23	2126
Center-board .....	W. O. Christensen .....	276,353	Apr. 24	1910	530	23	1577
Center-board .....	J. E. Couch .....	275,361	Apr. 10	646	174	23	1345
Center-board .....	H. C. Goodrich .....	276,026	Apr. 17	1493	411	23	1498
Center-board. Folding .....	W. Childs .....	278,776	June 5	124	35	23	2145
Center-board for boats .....	J. E. Couch .....	271,607	Feb. 6	29	7	23	445
Center-board for boats .....	E. L. Sibley .....	282,386	July 31	2597	713	24	473
Center-board for sailing-vessels .....	F. Joyner .....	284,130	Aug. 28	2037	566	24	890
Center-board. Vessel .....	G. S. Bell .....	277,406	May 8	1101	295	23	1822
Centering device .....	J. F. Whitney .....	272,995	Feb. 27	1769	501	23	774
Centering-gage .....	A. Sequeira .....	271,746	Feb. 6	193	54	23	473
Centering shafts, axles, &c. Machine for .....	J. N. Kanfholz .....	272,704	Feb. 20	1412	396	23	702
Centralizing device .....	L. H. Wattles .....	272,107	Feb. 13	657	178	23	565
Centrifugal machine .....	O. S. Andersen and T. T. A. Hansen .....	272,185	Feb. 13	744	205	23	580
Centrifugal machine .....	A. A. Goubert .....	274,187	Mar. 20	1209	332 } 333 }	23	1057
Centrifugal machine .....	A. A. Goubert .....	280,465	July 3	166	45	24	30
Centrifugal machine .....	J. E. Meyer .....	273,578	Mar. 6	439	118	23	909
Centrifugal machine .....	G. M. Newhall .....	278,260	May 22	2149	590	23	2015
Centrifugal machine .....	G. L. Shorey .....	288,129	Nov. 6	416	118	25	580
Centrifugal machine .....	C. Von Bechtolsheim .....	276,985	May 1	586	154	23	1726
Centrifugal machine .....	M. Wanner .....	274,064	Mar. 13	1045	288	23	1021

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Centrifugal machine .....	D. M. Weston .....	275,874	Apr. 17	1317	363	23	1467
Centrifugal machine .....	D. M. Weston .....	275,875	Apr. 17	1321	364	23	1468
Centrifugal machines. Crushing attachment for .....	E. C. Knight .....	272,710	Feb. 20	1417	397	23	703
Centrifugal reel .....	J. J. Walterhouse .....	274,234	Mar. 20	1273	352	23	1069
Centrifugal reel .....	L. W. Pruss .....	283,814	Aug. 28	1631	459 460	24	819
Centrifugal separator .....	W. P. Northway .....	288,257	Nov. 13	581	161	25	617
Ceramics. Ornamentation of .....	A. L. Gorham .....	276,389	Apr. 24	1958	542	23	1585
Cereals. Curing .....	G. Davis .....	284,284	Sept. 4	156	.....	24	931
Chain .....	C. G. Anderson .....	271,186	Jan. 23	1682	485	23	336
Chain .....	C. G. Anderson .....	290,832	Dec. 25	1863	514	25	1236
Chain .....	W. H. Dickey .....	282,177	July 31	2343	645	24	428
Chain .....	W. T. Foley .....	274,752	Mar. 27	1940	539	23	1192
Chain .....	B. A. Legg .....	282,536	Aug. 7	74	21	24	513
Chain-bar, &c .....	E. S. Johnson .....	272,444	Feb. 20	1080	304	23	644
Chain-bar .....	F. E. Sturdy .....	281,646	July 17	1631	446	24	297
Chain bar. Jewelry .....	G. E. Adams .....	288,392	Nov. 13	769	207	25	648
Chain bar. Watch .....	J. Hoagland .....	271,069	Jan. 23	1536	443	23	312
Chain bar. Watch .....	E. T. Pearce and J. Hoagland .....	284,887	Sept. 11	890	250	24	1063
Chain cap. Roller .....	H. A. Church .....	289,618	Dec. 4	304	85	25	941
Chain-conveyer .....	J. Kelley .....	273,741	Mar. 13	646	172	23	953
Chain cutter .....	F. L. Magaw .....	279,781	June 19	1439	403	23	2384
Chain. Dredger .....	H. B. Angell .....	278,482	May 29	2448	668	23	2076
Chain. Drive .....	A. Assmus .....	280,780	July 10	559	157	24	106
Chain. Drive .....	W. D. Ewart .....	280,729	July 3	469	134	24	84
Chain. Drive .....	N. W. Holt .....	270,433	Jan. 9	740	217	23	154
Chain. Drive .....	E. L. Howe .....	273,845	Mar. 13	783	212	23	976
Chain. Drive .....	J. Patzern and L. Wagner .....	285,430	Sept. 25	1561	439	24	1193
Chain. Drive .....	T. Shields .....	286,338	Oct. 9	711	190	25	139
Chain. Drive .....	C. A. Weller .....	282,689	Aug. 7	258	75	24	544
Chain-fastener .....	J. H. Armstrong .....	290,833	Dec. 25	1863	515	25	1236
Chain for bracelets, &c .....	C. A. Müller .....	287,564	Oct. 30	2256	612	25	440
Chain. Harness breast .....	J. C. Covert .....	274,723	Mar. 27	1903	531	23	1186
Chain-link .....	S. Simons and O. Scofield .....	271,141	Jan. 23	1618	465	23	326
Chain link. Drive .....	A. S. Held .....	273,732	Mar. 13	638	170	23	951
Chain link. Drive .....	A. S. Held .....	281,995	July 24	2083	572	24	381
Chain-links from coiled wire. Machine for making .....	F. P. Barney .....	283,556	Aug. 21	1309	366 367	24	749
Chain. Neck or bracelet .....	D. S. Spaulding .....	290,278	Dec. 18	1124	316	25	1100
Chain or belt. Driving .....	L. H. Goodwin .....	279,742	June 19	1397	390	23	2376
Chain. Ornamental .....	F. Becker .....	276,338	Apr. 24	1895	526	23	1574
Chain. Ornamental .....	N. P. Carter .....	273,025	Feb. 27	1827	512	23	781
Chain. Ornamental .....	S. Davidson .....	282,280	July 31	2457	677	24	449
Chain. Ornamental .....	J. Etzensperger .....	281,853	July 24	1916	523	24	352
Chain. Ornamental .....	F. Fontcau .....	281,688	July 24	2077	570	24	381
Chain. Ornamental .....	H. M. Herring .....	273,733	Mar. 13	639	170	23	952
Chain. Ornamental .....	W. J. Johnson .....	290,688	Dec. 25	1673	461	25	1202
Chain. Ornamental .....	J. T. Joyce .....	290,643	Dec. 18	1610	443	25	1184
Chain. Ornamental .....	S. L. Lederer .....	273,744	Mar. 13	650	173	23	954
Chain. Ornamental .....	J. B. Peck .....	278,454	May 29	2419	659	23	2071
Chain. Ornamental .....	C. H. Ware .....	283,542	Aug. 21	1291	361	24	745
Chain. Ornamental .....	C. H. Ware .....	289,874	Dec. 11	630	175	25	1003
Chain. Pitch .....	A. H. Wallis. (Reissue) .....	10,413	Nov. 27	1973	548	25	879
Chain. Roller .....	W. Ballou .....	277,194	May 8	861	229	23	1779
Chain. Roller .....	H. F. Barrows .....	277,976	May 22	1784	487	23	1952
Chain. Roller .....	W. M. Patt .....	290,798	Dec. 25	1822	502	25	1229
Chain snap. Neck .....	L. F. Cahn .....	275,584	Apr. 10	933	253	23	1394
Chain-swivel .....	J. F. Simms and J. W. Cody .....	271,375	Jan. 30	1923	556	23	387
Chain swivel-hook. Ornamental .....	C. E. Richards .....	274,933	Mar. 13	1006	276	23	1014
Chain-swivel loops. Machine for making .....	J. E. Walcott .....	273,919	Mar. 13	876	237 238	23	992
Chain units. Machine for making roller .....	S. M. Field and W. Halkyard. (Re-issue.) .....	10,326	May 15	1654	451	23	1924
Chains. Cog-link for .....	J. S. Aydelott .....	270,723	Jan. 16	1113	318	23	233
Chains. Device for securing binding .....	N. Smith .....	276,295	Apr. 24	1825	508	23	1563
Chains. Machine for making ornamental .....	R. S. Matteson .....	274,955	Apr. 3	91	25, 26	23	1241
Chains. Manufacture of .....	E. Orry .....	273,139	Feb. 27	1972	554	23	807
Chains. Manufacture of ornamental .....	D. D. Coddling .....	279,340	June 12	915	255	23	2288
Chains. Toggle for boom .....	J. B. Jonis .....	286,544	Oct. 9	954	257	25	184
Chair:							
See Adjustable chair. Photographer's chair.							
Barber's chair. Railway-chair.							
Camp-chair. Railway-rail chair.							
Child's chair. Reclining-chair.							
Child's dining-chair. Recumbent chair.							
Convertible chair. Rocking-chair.							
Corn-husking chair. Rocking, reclining, and easy chair.							
Dental chair. School-chair.							
Folding chair. Steamer-chair.							
Folding, bath, and invalid chair. Surgeon's operating-chair.							
Gymnastic chair. Surgical and invalid chair.							
Invalid-chair. Tilting and revolving chair.							
Locomotive-chair. Turning chair.							
Nursery-chair.							
Opera-chair.							
Oscillating chair.							
Chair .....	J. T. C. Cove .....	281,617	July 17	1600	437	24	292
Chair .....	A. W. Eichelberger .....	281,038	July 10	862	240	24	160
Chair .....	H. S. Hale .....	275,823	Apr. 17	1254	345	23	1456
Chair .....	H. S. Hale .....	277,272	May 8	947	254	23	1795
Chair .....	H. A. Isberov .....	283,111	Aug. 14	762	215	24	643
Chair .....	T. G. Maguire .....	277,759	May 15	1528	414 415	23	1901



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Chair .....	C. P. Nash .....	275,252	Apr. 3	469	131	23	1306
Chair .....	C. P. Nash .....	277,329	May 8	1018	273	23	1807
Chair .....	W. H. Paulding .....	272,579	Feb. 20	1258	351	23	675
Chair .....	C. W. Reeves .....	288,737	Nov. 20	1201	329	25	730
Chair .....	R. Richardson .....	272,901	Feb. 27	1687	472	23	757
Chair .....	A. B. Stevens .....	270,144	Jan. 2	373	108 109	23	76
Chair .....	W. A. Wright .....	281,424	July 17	1355	373 374	24	251
Chair and bed. Combined .....	S. A. D. Clark .....	276,774	May 1	317	83	23	1681
Chair and cutting-table. Combined .....	B. A. Hathaway .....	272,434	Feb. 20	1071	302	23	642
Chair, cot, and bed. Combined .....	S. McClelland .....	282,343	July 31	2546	698	24	464
Chair-fastening device .....	T. M. Blackstock .....	272,406	Feb. 20	1038	291	23	636
Chair-frames. Device for holding and forming .....	J. L. May .....	274,803	Mar. 27	1999	556	23	1203
Chair, knee, and truss bracket. Combined .....	J. H. Bonn and A. De Bevoise .....	282,697	Aug. 7	267	77	24	546
Chair-pedestal .....	D. McKinnon .....	283,131	Aug. 14	782	220	24	646
Chair-seat .....	P. E. Chappell .....	277,544	May 15	1274	341	23	1857
Chair-seat .....	I. D. Comstock .....	270,748	Jan. 16	1147	328	23	239
Chair-seat .....	I. D. Comstock .....	270,749	Jan. 16	1148	328	23	239
Chair-seat .....	M. V. B. Howe .....	275,383	Apr. 10	682	181	23	1351
Chair-seat .....	M. V. B. Howe .....	290,884	Dec. 25	1921	530	25	1246
Chair-seat spring .....	W. P. Miller .....	270,093	Jan. 2	306	91	23	62
Chair-seats. Machine for sandpapering .....	M. V. B. Howe .....	275,385	Apr. 10	684	181	23	1351
Chair-seating needle .....	C. R. Long .....	278,982	June 5	447	122 123	23	2199
Chair-support. Adjustable .....	W. Farmer .....	280,593	July 3	308	85, 86	24	55
Chair-support and footstool .....	M. O. Baldwin .....	274,877	Mar. 27	2094	581	23	1217
Chairs. Adjustable head-rest for .....	W. F. Wellman .....	283,443	Aug. 21	1181	332	24	725
Chairs. Arm for folding steamer .....	F. G. Johnson and J. H. Hayward .....	271,248	Jan. 30	1750	506	23	357
Chairs, settees, car-seats, &c. Seat and back of .....	J. H. Woodman .....	271,757	Feb. 6	206	58	23	476
Chalk. Device for holding marking .....	J. Taylor .....	272,986	Feb. 27	1779	498	23	772
Chamber and slop bucket. Combined .....	A. G. Mack .....	289,011	Nov. 27	1328	422	25	797
Chamber-pot and cover .....	J. Finsterer .....	283,588	Aug. 21	1350	377	24	756
Chamber pot or commode .....	H. Loth .....	288,824	Nov. 20	1301	356 357	25	749
Chamfering-machine .....	T. Tobin .....	276,927	May 1	505	131	23	1713
Chandelier .....	R. B. Perkins .....	284,890	Sept. 11	892	251	24	1063
Chandelier .....	H. Phillips .....	273,145	Feb. 27	1979	556	23	808
Chandelier. Extension .....	J. Brannen .....	285,963	Oct. 2	233	66	25	45
Chandelier. Extension .....	J. T. Bruen .....	276,130	Apr. 17	1623	447	23	1520
Chandelier. Extension .....	F. H. Chapman .....	271,420	Jan. 30	1975	571	23	397
Chandelier. Extension .....	L. Hornberger .....	290,883	Dec. 25	1920	530	25	1246
Chandelier. Extension .....	D. W. Parker .....	275,515	Apr. 10	852	230 231	23	1380
Chandelier. Extension .....	D. W. Parker .....	277,057	May 8	686	179	23	1749
Chandelier. Extension .....	D. W. Parker .....	278,359	May 29	2301	630	23	1205
Chandelier. Extension .....	R. B. Perkins .....	285,668	Sept. 25	1837	524	24	1245
Chandelier. Extension .....	H. O. Winslow .....	290,618	Dec. 18	1579	434	25	1179
Chandelier extension-fixture .....	L. F. Griswold and F. H. Chapman .....	282,628	Aug. 7	186	54	24	532
Chandelier extension-fixture .....	R. A. Wooding .....	281,656	July 17	1649	450	24	300
Chandelier-holding attachment .....	A. Reed .....	271,739	Feb. 6	182	49	23	472
Chandelier suspension-hook .....	W. E. Hammond .....	280,611	July 3	327	92	24	58
Chandeliers. Suspension-joint for .....	J. Klein .....	285,277	Sept. 18	1371	386	24	1155
Change-gate for public conveyances .....	G. Beadle .....	273,337	Mar. 6	125	35	23	855
Channel-flaps. Machine for flattening and smoothing .....	G. W. Day .....	286,790	Oct. 16	1270	344	25	245
Channeling and grooving knife .....	J. N. Whitman and T. A. Taylor .....	277,092	May 8	736	193	23	1758
Channeling and sole shaping or rounding machine .....	S. F. Packard .....	277,056	May 8	686	179	23	1749
Channeling-machine groover .....	J. N. Whitman and T. A. Taylor .....	277,093	May 8	737	193	23	1758
Channeling rivers and other navigable streams .....	D. Spangler .....	275,952	Apr. 17	1402	387	23	1482
Channels of rivers, &c. Deepening the .....	J. F. Spearing .....	275,534	Apr. 10	875	236 237	23	1383
Charcoal and kiln therefor. Manufacturing .....	H. M. Pierce .....	284,059	Aug. 28	1940	542	24	874
Charcoal-furnace .....	J. Burt .....	276,222	Apr. 24	1734	480	23	1548
Charcoal-kiln .....	C. S. Nellis .....	283,643	Aug. 21	1407	394 395	24	767
Charcoal-kiln .....	H. M. Pierce .....	272,766	Feb. 20	1489	419	23	716
Charcoal. Manufacture of .....	H. M. Pierce .....	278,731	June 5	71	22	23	2136
Charcoal. Manufacturing .....	J. A. Mathieu .....	288,716	Nov. 20	1167	.....	25	724
Charcoal. Manufacturing .....	H. M. Pierce .....	272,976	Feb. 27	1770	495	23	771
Charm-compass .....	J. R. Hawley .....	280,617	July 10	599	167	24	112
Charm-compass frame .....	R. A. Kipling .....	272,265	Feb. 13	846	235	23	599
Charring timber. Apparatus for .....	J. D. Stanley .....	282,395	July 31	2607	716	24	475
Chart. Arithmetical .....	J. B. Finch .....	275,475	Apr. 10	806	218	23	1372
Chart. Dress .....	L. A. Call .....	281,666	July 24	1666	455	24	309
Chart. Dress .....	H. Propach .....	278,180	May 22	2035	559	23	1996
Chart for cutting out shirts. Pattern .....	J. Snow .....	273,626	Mar. 6	495	133	23	919
Chart-hanging .....	E. Shepard .....	286,736	Oct. 16	1206	325	25	234
Chart-holder .....	D. Yarian .....	281,601	July 17	1577	431	24	287
Check. Baggage .....	C. Sears .....	281,733	July 24	1758	478	24	324
Check. Baggage .....	J. A. Thompson .....	281,163	July 10	1013	283	24	186
Check. Baggage .....	W. W. Wilcox .....	280,427	July 3	112	30	21	21
Check-book .....	M. Campbell .....	273,254	Mar. 6	15	5	23	837
Check-book .....	N. A. Gibbs .....	281,682	July 24	1687	450	24	312
Check-book. Office .....	C. B. Sprague .....	282,393	July 31	2606	716	24	475
Check-box .....	D. Lubin .....	285,495	Sept. 25	1633	458	24	1207
Check, draft, note, &c .....	H. Bodey .....	281,006	July 10	822	229	24	152
Check hook or terret .....	T. Garrick .....	275,817	Apr. 17	1246	343	23	1455
Check or valve .....	W. H. Mosely .....	286,472	Oct. 9	862	234	25	167
Check-registering and printing apparatus .....	G. W. Kendall and C. Kruse .....	286,019	Oct. 2	293	82	25	55
Check-row cord .....	D. C. Stover .....	272,916	Feb. 27	1701	476	23	759
Check-row cord .....	D. C. Stover .....	277,956	May 22	1759	479	23	1947
Check-row cords. Anchor for .....	I. B. Curtis .....	273,263	Mar. 6	23	8	23	838
Check-row cords. Anchor for .....	L. Eberhart .....	281,473	July 17	1420	329	24	262

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Check-row dropper	J. H. Warren	290,950	Dec. 25	2009	554	25	1261
Check-row lines. Anchor for	M. Barnes	239,372	Dec. 4	3	1	25	887
Check-row-wire reel	G. W. and F. P. Murphey	286,218	Oct. 9	535	146	25	109
Check-row-wire reeling and laying device	A. Y. Chamberlin	273,953	Mar. 13	917	251	23	998
Check-row wires. Stop for	A. M. Sackett	284,240	Sept. 4	108	29	24	922
Check-rower	J. Brickett	284,603	Sept. 11	543	154	24	1002
Check-rower	F. M. Elliott	288,040	Nov. 6	315	89	25	561
Check-rower	D. W. Jacoby	289,913	Dec. 11	680	189	25	1012
Check-rower	T. A. Lanscha	273,370	Mar. 6	174	48	23	864
Check-rower	F. Miller	287,953	Nov. 6	205	59	25	543
Check-rower	J. Putnam and F. E. Berry	285,764	Sept. 25	1965	557	24	1266
Check-rower	L. Scofield	283,425	Aug. 21	1162	327	24	721
Check-rower	A. W. Thompson	277,856	May 15	1638	446	23	1921
Check-rower	A. W. Thompson	289,468	Dec. 4	112	33	25	906
Check-rower	T. Whitaker and S. D. Moore	273,789	Mar. 13	715	193 194	23	965
Check-rower	L. A. Williams	271,756	Feb. 6	206	57	23	475
Check-rower and corn-planter. Combined	F. B. Tait and J. Gross	287,976	Nov. 6	234	66, 67	25	548
Check-rower and drill	D. G. Shaner	283,824	Aug. 28	1641	462	24	821
Check-rower and planter	C. P. Hanson	270,428	Jan. 9	732	215	23	152
Check-rower attachment	F. L. Brewer	277,673	May 15	1427	335	23	1883
Check-rower cord	H. Farmer	274,579	Mar. 27	1741	483	23	1156
Check-rower. Corn	J. W. Smith	270,497	Jan. 9	811	236	23	168
Check-rower. Smooth-rope and knotted-wire	D. Spooner	278,622	May 29	2617	714	23	2106
Check. Watch	S. H. Fuller	284,623	Sept. 11	568	160	24	1006
Checks and other negotiable papers. Blank for	C. H. Uhler	286,159	Oct. 2	462	126	25	86
Checking the arrival of employés. Apparatus for	W. M. Llewellyn	275,229	Apr. 3	445	124	23	1302
Cheese-hoop	G. W. Hoy	277,838	May 15	1617	441	23	1917
Cheese-making apparatus	S. Jenks and H. W. Millar	283,250	Aug. 14	933	260	24	673
Cheese-making apparatus	S. Jenks and H. W. Millar	283,251	Aug. 14	935	260 261	24	673
Cheese-press	G. W. Hey	277,839	May 15	1619	441	23	1918
Cheese-safe	W. H. Gordon and P. J. Boost	272,875	Feb. 27	1650	462	23	751
Cheese-safe	W. H. Gordon and P. J. Boost	274,119	Mar. 20	1128	311	23	1042
Cheese-vat	S. B. Ferguson	285,803	Oct. 2	25	9	25	7
Cheese-vat	G. H. Gutchins	281,053	July 10	880	245	24	163
Chenille fringe	J. Loeb	281,534	July 17	1492	410	24	275
Chenille ornament	G. Dietzel and S. Green	282,709	Aug. 7	295	83	24	551
Chenille web and manufacturing the same	W. Adam	289,203	Nov. 27	1766	490	25	840
Cherry-stoner	J. G. Baker	276,331	Apr. 24	1888	524	23	1572
Cherry-stoner	D. S. Buck	275,353	Apr. 10	636	170	23	1343
Chest:							
See Flour-chest. Ice-chest.							
Chest-protector	W. H. Purcell	288,857	Nov. 20	1342	368	25	756
Child's chair	L. Schmetzer	278,826	June 5	204	60	23	2158
Child's dining-chair	W. T. Miles	275,508	Apr. 10	842	228	23	1378
Child's money bank or box	D. R. Goudie	282,978	Aug. 14	592	167	24	613
Chill	H. R. Allen	285,779	Oct. 2	2	1	25	3
Chimney and ventilating flue	W. P. Esterbrook	280,024	June 26	1749	491	23	2443
Chimney-cap	B. P. Field	289,636	Dec. 4	329	91	25	945
Chimney-cap	F. H. Leonard	287,553	Oct. 30	9243	609	25	437
Chimney-cap	R. J. Smith	282,392	July 31	2605	715	24	475
Chimney-cap	J. H. Watt	276,102	Apr. 17	1586	437	23	1514
Chimney cap or ventilator	W. D. Bartlett	272,517	Feb. 20	1176	329	23	660
Chimney cowl and ventilator	J. F. Pond	290,266	Dec. 18	1110	311	25	1098
Chimney-funnels. Safety device and cut-off for	C. Woodbury	278,069	May 22	1893	519	23	1971
Chimney or flue	T. Rowan	283,025	Aug. 14	660	186	24	625
Chimney. Portable	L. E. Clawson	285,112	Sept. 18	1181	331	24	1120
Chimney-protector	J. G. Keller	276,423	Apr. 24	1908	553	23	1592
Chimney-sweeper	J. W. Resor	282,775	Aug. 7	362	102	24	564
Chimney-top	W. Faulstich	286,597	Oct. 16	1029	278	25	203
Chimney-top	A. Rosenstar	281,645	July 17	1630	445	24	297
Chimney-ventilator and heater. Combined	F. E. Ormsby	273,589	Mar. 6	453	122	23	912
Chinoline. Preparing oxyhydro-ethyl	O. Fischer	273,498	Mar. 6	326		23	890
Chinoline. Preparation of oxyhydro-methyl	O. Fischer	276,796	May 1	1343		23	1686
Chipping-machine	J. Boyer	277,448	May 15	1159	311	23	1838
Chisel holder. Mortising	G. W. Amesbury	275,346	Apr. 10	625	167	23	1341
Chloride-of-silver battery	P. S. Hayes	282,634	Aug. 7	194	56	24	534
Chlorine and sodium. Process of and apparatus for obtaining	A. L. Nolf	271,906	Feb. 6	388	107	23	509
Chopper:							
See Cotton-chopper. Meat-chopper.							
Cotton-stalk-chopper.							
Chopper and cultivator. Combined	E. A. Daniel	287,251	Oct. 23	1865	510	25	357
Chopping-knife	J. T. Foster	288,044	Nov. 6	321	90	25	562
Christmas-tree candle-holder	F. Arzt	286,572	Oct. 16	995	269	25	197
Christmas-tree candle-holder	W. M. Fischer	270,771	Jan. 16	1171	335	23	243
Christmas-tree holder	H. Henneberg	283,392	Aug. 21	1118	316	24	714
Christmas-tree stand	G. Pannster	280,851	July 10	638	180	24	119
Chronometer-escapement	A. W. Kientoff	283,349	Aug. 14	1059	297	24	698
Chronometer-escapement	L. F. Munger	289,551	Dec. 4	225	63	25	926
Chuck	H. H. Barnard	271,208	Jan. 30	1808	495	23	349
Chuck	J. A. Peer	282,765	Aug. 7	353	99	24	562
Chuck	J. Sleeth and F. M. Lucas	271,941	Feb. 6	431	118	23	516
Chuck. Drill	C. Morrill	274,135	Mar. 20	1146	316	23	1045
Chuck. Drill	I. G. Todd	282,015	July 24	2110	578	24	385
Chuck. Engraver's	G. H. Strong	270,615	Jan. 16	973	281	23	207
Chuck for holding rose-cutters or similar tools	W. Loreuz	283,124	Aug. 14	776	218	24	645
Chuck for planing valves	D. W. Pedrick	284,227	Sept. 4	92	25	24	920
Chuck. Lathe	C. W. Gray	286,426	Oct. 9	813	220	25	158
Chuck. Lathe	W. W. Lee	277,908	May 22	1704	465	23	1939
Chuck. Lathe	C. H. Reid	279,017	June 5	494	134	23	2207
Chuck. Lathe	J. N. Skinner	269,889	Jan. 2	81	24	23	18
Chuck. Planer	W. Porter	287,160	Oct. 23	1746	478	25	337



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. 56	Vol.	Page.
Chuck. Planer.....	J. P. Wright .....	286,362	Oct. 9	737	{ 197 198 }	25	144
Chuck. Self-oiling drill.....	A. Söderström .....	288,957	Nov. 20	1462	404	25	779
Chuck. Tenon and turning.....	B. A. Whitsett .....	271,753	Feb. 6	203	57	23	475
Churn.....	T. F. Ayres .....	274,252	Mar. 20	1298	357	23	1073
Churn.....	E. Bach .....	275,747	Apr. 10	1145	314	23	1429
Churn.....	H. Baldridge .....	277,103	May 8	747	196	23	1760
Churn.....	A. C. Ball and B. H. Tripp .....	271,566	Jan. 30	2164	623	23	429
Churn.....	G. R. Barnes .....	272,516	Feb. 20	1175	328	23	660
Churn.....	H. T. Brantley .....	289,968	Dec. 11	740	209	25	1024
Churn.....	M. A. Briggs .....	278,391	May 29	2338	639	23	2057
Churn.....	D. T. Bruck .....	282,047	July 31	2154	591	24	399
Churn.....	J. W. Bruton .....	283,323	Aug. 14	1019	285	24	690
Churn.....	G. Bull .....	277,830	May 15	1606	438	23	1915
Churn.....	S. Collins .....	278,098	May 22	1930	529	23	1978
Churn.....	A. R. Dillehay .....	269,837	Jan. 2	23	7	23	7
Churn.....	J. H. Duke .....	283,085	Aug. 14	727	204	24	637
Churn.....	S. E. Dunn .....	271,818	Feb. 6	284	78	23	491
Churn.....	J. L. Ellis .....	273,671	Mar. 6	554	147	23	928
Churn.....	E. German .....	284,625	Sept. 11	569	161	24	1007
Churn.....	W. and J. Hurst .....	273,281	Mar. 6	42	13	23	842
Churn.....	H. Kean .....	276,598	May 1	70	19	23	1640
Churn.....	W. W. Kitchen .....	282,199	July 31	2367	651	24	432
Churn.....	E. B. Lewis .....	277,752	May 15	1518	412	23	1899
Churn.....	C. Massie and J. Legan .....	275,059	Apr. 3	232	63	23	1265
Churn.....	E. N. McKimm .....	279,100	June 5	606	165	23	2227
Churn.....	H. W. Merritt .....	281,906	July 24	1983	543	24	364
Churn.....	S. L. Nelson .....	274,360	Mar. 20	1436	394	23	1097
Churn.....	D. K. Pomeroy .....	271,266	Jan. 30	1775	515	23	360
Churn.....	M. Reeves .....	288,738	Nov. 20	1202	329	25	730
Churn.....	J. N. Renfro .....	282,224	July 31	2394	659	24	438
Churn.....	F. M. Richardson .....	282,669	Aug. 7	232	67	24	540
Churn.....	E. J. Rowe, R. Holmes, and J. Dawson .....	271,130	Jan. 23	1607	462	23	324
Churn.....	D. A. Schoch and H. W. Bolender .....	279,447	June 12	1051	290	23	2310
Churn.....	Z. T. Slusher .....	283,033	Aug. 14	669	188	24	626
Churn.....	W. F. Stouthard .....	282,232	July 31	2405	661	24	440
Churn.....	W. H. Sterns .....	285,174	Sept. 18	1257	354	24	1133
Churn.....	V. Stirewalt .....	276,922	May 1	496	{ 129 130 }	23	1712
Churn.....	J. Swenson .....	283,302	Aug. 14	993	278	24	685
Churn.....	W. M. Taylor and I. P. Merrill .....	289,786	Dec. 4	512	142	25	975
Churn.....	J. R. Thompson .....	271,544	Jan. 30	2137	615	23	425
Churn.....	J. Tweedy .....	282,935	Aug. 7	542	153	24	597
Churn.....	E. B. Way .....	286,510	Oct. 9	909	246	25	175
Churn.....	W. Werfield .....	277,091	May 8	735	193	23	1758
Churn.....	L. B. Wilson .....	280,890	July 10	681	192	24	127
Churn.....	D. B. Wooster .....	282,143	July 31	2293	629	24	421
Churn and butter-worker.....	N. L. Rigby .....	274,383	Mar. 20	1463	401	23	1102
Churn and domestic motor.....	M. L. Scivalley .....	269,964	Jan. 2	169	49	23	35
Churn and like apparatus for use in the manufacture of artificial butter, &c.....	S. H. Cochran .....	285,973	Oct. 2	243	69	25	46
Churn and washing-machine motor.....	H. Smith .....	284,500	Sept. 4	417	118	24	974
Churn-cover.....	M. D. Chapin .....	277,001	May 8	613	161	23	1737
Churn-dasher.....	C. Berst .....	271,301	Jan. 30	1821	528	23	369
Churn-dasher.....	D. R. Shriver .....	285,694	Sept. 25	1871	533	24	1251
Churn mechanism.....	J. W. Heldreth and E. W. Umberger .....	271,705	Feb. 6	141	39	23	464
Churn-motor.....	A. Green .....	290,639	Dec. 18	1606	441	25	1183
Churn-motor.....	A. McIlravy .....	285,291	Sept. 18	1385	391	24	1158
Churn-motor.....	N. Mosher .....	275,691	Apr. 10	1073	293	23	1418
Churn-motor.....	W. H. O'Bannon and J. J. Snider .....	285,504	Sept. 25	1643	462	24	1209
Churn-motor.....	O. E. Perry .....	290,799	Dec. 25	1823	502	25	1229
Churn-motor.....	G. B. and G. H. Smith .....	282,389	July 31	2602	715	24	474
Churn or mixer for use in the manufacture of artificial butter, &c.....	S. H. Cochran .....	285,974	Oct. 2	244	69	25	47
Churn-power.....	J. M. Furlong .....	276,799	May 1	346	92	23	1687
Churn-power.....	J. B. Snider .....	284,769	Sept. 11	757	210	24	1038
Cbute. Ash.....	G. A. Fisher .....	273,499	Mar. 6	327	89	23	890
Cbute. Coal.....	I. Burnett and J. E. Clifton .....	270,736	Jan. 16	1131	324	23	236
Cbute. Coal.....	H. Clausen and T. Staeber .....	280,133	June 26	1870	527	23	2466
Cbute. Coal.....	J. Vinson .....	270,919	Jan. 23	1352	390	23	283
Cbute. Coal and ore.....	G. H. White .....	271,386	Jan. 30	1935	560	23	389
Cbute used in loading and unloading apparatus. Flexible.....	A. D. Fox .....	286,193	Oct. 9	507	140	25	104
Cider and wine press.....	S. M. Brown .....	280,570	July 3	278	76	24	50
Cider-mill.....	J. W. Allmon, J. H. Wommack, and W. M. Highball .....	290,657	Dec. 25	1631	449	25	1195
Cider-mill.....	W. H. Hull and D. L. Smoke .....	276,413	Apr. 24	1985	550	23	1590
Cider mill and press.....	J. U. Bendare .....	274,432	Mar. 20	1526	420	23	1112
Cider mill and press. Combined.....	G. D. Cooper .....	286,265	Oct. 9	594	163	25	119
Cider-press.....	J. L. Barnes .....	277,195	May 8	861	229	23	1779
Cider-press.....	J. L. Wilcox .....	271,387	Jan. 30	1936	560	23	389
Cigar.....	M. Asher and G. Minck .....	284,151	Nov. 6	440	124	25	584
Cigar and cigarette holder.....	J. Fletcher .....	282,183	July 31	2349	647	24	429
Cigar-box.....	R. Luckner, Sr .....	270,683	Jan. 16	1064	305	23	223
Cigar-bunching machine.....	F. E. Kelsey .....	281,517	July 17	1474	405	24	272
Cigar-bunching machine.....	G. Moebis .....	288,355	Nov. 13	709	194	25	639
Cigar clipper and perforator. Combined.....	C. Klaiber and A. Currier .....	289,351	Nov. 27	1939	539	25	874
Cigar-clipper. Pocket.....	F. G. Johnson .....	274,201	Mar. 20	1224	337	23	1060
Cigar coloring and flavoring machine.....	N. Du Brul .....	274,472	Mar. 27	1584	435	23	1130
Cigar coloring and flavoring machine.....	E. Hadra .....	275,046	Apr. 10	1023	276	23	1409
Cigar-coloring machine.....	G. B. French .....	286,412	Oct. 9	796	215	25	155
Cigar-coloring machine.....	G. B. French .....	286,413	Oct. 9	797	215	25	155
Cigar-coloring machine.....	F. Stiles .....	273,185	Feb. 27	2022	569	23	816

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Cigar-coloring machine.....	M. A. Winget .....	290,617	Dec. 18	1578	434	25	1179
Cigar-cutter.....	P. Abbott .....	275,009	Apr. 3	166	44	23	1254
Cigar-cutter.....	G. W. Burns .....	282,155	July 31	2306	633	24	423
Cigar envelope or covering.....	J. A. Whitney .....	271,006	Jan. 23	1462	421	23	300
Cigar-holder.....	H. E. Darling.....	270,025	Jan. 2	235	68	23	48
Cigar-holder.....	J. B. Holmer.....	276,042	Apr. 17	1513	416	23	1501
Cigar-lighter.....	W. S. McLewee.....	273,868	Mar. 13	816	221	23	982
Cigar-lighter cutter.....	C. B. Hitchcock.....	269,934	Jan. 2	131	39	23	27
Cigar-machine.....	R. A. Bright, Jr.....	279,125	June 12	655	170	23	2245
Cigar-machine.....	O. Hammerstein.....	272,958	Feb. 27	1749	488	23	767
Cigar-machine.....	C. Haugk.....	289,412	Dec. 4	48	14	25	895
Cigar-maker's implement.....	T. Streat.....	290,811	Dec. 25	1838	509	25	1232
Cigar-making apparatus.....	J. R. Williams.....	290,954	Dec. 25	2015	556	25	1262
Cigar-mold press.....	C. P. Leshar.....	278,245	May 22	2122	584	23	2011
Cigar-perforator.....	R. M. Collard.....	288,210	Nov. 13	519	144	25	607
Cigar-tip cutter.....	F. Flad.....	276,964	May 1	564	147	23	1723
Cigar-wrappers. Machine for cutting out.....	J. Brandt.....	277,452	May 15	1165	313	23	1839
Cigars and tobacco. Moistening apparatus for.....	W. W. and J. B. Wentzell.....	273,205	Feb. 27	2048	577	23	821
Cigars. Implement for perforating and clipping.....	A. J. Peavey.....	282,764	Aug. 7	351	99	24	561
Cigars. Machine for treating tightly-rolled.....	J. Beres.....	274,554	Mar. 27	1707	474	23	1150
Cigars. Making.....	I. Brach.....	278,769	June 5	114	.....	23	2143
Cigarette and match box. Combined.....	H. Bloch.....	283,065	Aug. 14	706	198	24	633
Cigarette-machine.....	O. W. Allison.....	290,166	Dec. 11	974	275	25	1067
Cigarette-machine.....	J. Burns and A. Buckman. (Reissue).....	10,428	Dec. 18	1627	{ 447 448 }	25	1188
Cigarette-machine.....	H. E. Casgrain.....	281,451	July 17	1397	383	24	258
Cigarette-machine.....	P. Everitt.....	274,746	Mar. 27	1929	{ 537 538 }	23	1190
Cigarettes for the market. Case or envelope for putting up.....	E. J. Fraser.....	276,171	Apr. 24	1674	463	23	1537
Cipher. Combination.....	T. Gruaz.....	283,883	Aug. 28	1708	481	24	833
Circles. Machine for cutting.....	J. W. Hicks.....	290,882	Dec. 25	1918	530	25	1246
Circuit-closer.....	C. Bartlett.....	281,603	July 17	1579	{ 431 432 }	24	288
Circuit-controlling device.....	E. Weston.....	277,640	May 15	1388	374	23	1876
Circuit-opener. Automatic.....	D. Rousseau.....	279,107	June 5	622	170	23	2229
Circuit-opener. Automatic.....	J. P. Tirrell.....	283,303	Aug. 14	994	{ 278 279 }	24	685
Cistern.....	G. W. Overall.....	274,022	Mar. 13	994	272	23	1012
Cistern-cover.....	T. Cubbins.....	285,801	Oct. 2	24	8	25	6
Cisterns. Apparatus for cleaning.....	W. M. Prather.....	270,118	Jan. 2	333	98	23	67
Cisterns. Cleaning.....	W. S. Henson.....	277,486	May 15	1204	323	23	1846
Clamp:							
See Bed-slat clamp. Metallic clamp.							
Bench-clamp. Pipe-clamp.							
Billiard-cue clamp. Quilting-frame clamp.							
Book-clamp. Rope-clamp.							
Book-binder's clamp. Rubber-dam clamp.							
Boot or shoe clamp. Saw-clamp.							
Clothes-line clamp. Sewing-machine clamp.							
Drawer-clamp. Sewing-machine-attach-							
Fire-escape friction-							
clamp. ment clamp.							
Flanged clamp. Shade-ring clamp.							
Floor-clamp. Standard-clamp.							
Harrow-tooth clamp. Stone-work clamp.							
Ironing-board clamp. Stool screw-clamp.							
Lamp-shade clamp. Trace-loop clamp.							
Well-tubing clamp.							
Clamp.....	G. C. Bacon.....	282,945	Aug. 14	561	159	24	607
Clamp.....	A. W. Davis.....	286,688	Oct. 16	1146	308	25	223
Clamp.....	E. Sage.....	279,601	June 19	1235	343	23	2348
Clamp.....	C. Steineke.....	274,838	Mar. 27	2038	567	23	1209
Clamp.....	L. D. Wright.....	273,215	Feb. 27	2066	581	23	823
Clamp and vise.....	C. L. Bellamy.....	286,376	Oct. 9	751	202	25	147
Clamp device.....	C. E. Worline.....	282,479	July 31	2718	749	24	494
Clamp for hand-power dumb-waiters and other purposes.	E. Lange.....	286,024	Oct. 2	300	84	25	56
Clamp for panel lining or facing.....	J. C. Weaver.....	286,243	Oct. 9	568	156	25	114
Clarinet-case.....	W. H. Cundy.....	270,640	Jan. 16	1005	290	23	213
Clasp:							
See Album-clasp. Garment-supporter clasp.							
Album and book clasp. Halter-clasp.							
Book-clasp. Metallic clasp.							
Corset-clasp. Pencil-clasp.							
Fencing-clasp. Purse or bag clasp.							
Garment-clasp. Shoe-clasp.							
Stocking-clasp.							
Clasp.....	J. E. Bedford.....	286,991	Oct. 23	1533	422	25	296
Clasp.....	F. B. Brown.....	284,536	Sept. 4	461	130	24	982
Clasp.....	F. B. Brown.....	284,943	Sept. 11	960	269	24	1075
Clasp.....	C. V. Mulligan.....	289,690	Dec. 4	395	113	25	956
Clasp.....	E. S. Smith.....	289,153	Nov. 27	1703	473	25	828
Clasp and button. Combined.....	G. T. Kilner.....	276,427	Apr. 24	2002	555	23	1593
Clasp for pocket-books, &c.....	G. Crouch.....	276,362	Apr. 24	1920	532	23	1579
Clasp for suspenders, &c.....	H. A. Hayden.....	271,452	Jan. 30	2021	583	23	405
Clasp pivot-pin.....	W. W. Anderson.....	287,605	Oct. 30	2330	629	25	452
Claw-bar.....	A. Hamm.....	282,722	Aug. 7	309	87	24	553
Claw-bar.....	J. Moore and A. J. O'Leary.....	287,561	Oct. 30	2250	611	25	438
Clay. Apparatus for preparing.....	C. Chambers, Jr.....	277,459	May 15	1174	315	23	1841
Clay. Coloring and hardening.....	J. Ambuhl.....	274,543	Mar. 27	1697	.....	23	1148
Clay. Coloring and hardening articles manufactured of.....	E. S. Boynton.....	287,799	Nov. 6	13	.....	25	509
Clay-crusher.....	W. W. Wallace.....	288,895	Nov. 20	1387	382	25	765
Clay crushing and grinding roller.....	J. W. Penfield.....	289,025	Nov. 27	1552	428	25	801



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Clay crushing and pulverizing roller .....	J. W. Penfield .....	289,026	Nov. 27	1553	428	25	802
Clay. Machine for separating stones from .....	H. Cockell .....	284,613	Sept. 11	557	158	24	1005
Clay-pulverizer .....	W. Andrus .....	286,520	Oct. 9	924	249	25	178
Clay reducer and disintegrator .....	J. C. Anderson .....	271,588	Feb. 6	5	2	23	441
Clay reducer and disintegrator .....	J. C. Anderson .....	271,589	Feb. 6	6	2	23	441
Clay smoking-pipes. Machine for making .....	O. J. Mason .....	272,966	Feb. 27	1757	491	23	768
Cleaner:							
See Boiler-cleaner. Peantt-cleaner.							
Boot-cleaner. Seed-cleaner.							
Carpet-cleaner. Sink-cleaner.							
Coal-cleaner. Slate-cleaner.							
Colter-cleaner. Slate and blackboard							
Cotton-cleaner. cleaner.							
Cotton-gin cleaner. Slate and window cleaner.							
Ditch-cleaner. Spectacle-cleaner.							
Flue-cleaner. Steam-boiler cleaner.							
Fruit-cleaner. Steam-boiler-tube cleaner.							
Grain-cleaner. Stove-pipe cleaner.							
Grate-cleaner. Track-cleaner.							
Gnn-wad cleaner. Tumbler-cleaner.							
Hoof-cleaner. Wheat-cleaner.							
Lamp-chimney Wick-cleaner.							
cleaner. Window-cleaner.							
Cleaning compound .....	W. E. Clarke .....	289,621	Dec. 4	308	.....	25	942
Cleaning compound .....	M. J. Gibler .....	275,189	Apr. 3	396	.....	23	1295
Cleat .....	F. W. Limeburner .....	271,484	Jan. 30	2069	595	23	413
Clevis .....	A. Buckell .....	270,201	Jan. 9	440	130	23	97
Clevis .....	R. A. Ronse .....	286,075	Oct. 2	364	101	25	67
Clevis. Plow .....	F. Bastam .....	274,897	Apr. 3	8	2	23	1228
Clevis. Plow .....	E. L. Bracken .....	285,962	Oct. 2	233	65	25	44
Clevis. Plow .....	A. Patton .....	278,453	May 29	2418	659	23	2071
Clip:							
See Carriage-clip. Tug-clip.							
Single-tree clip. Wagon-clip.							
Thill-coupling clip. Whiffletree-clip.							
Clip-bender .....	N. R. Dull .....	274,741	Mar. 27	1922	536	23	1189
Clipping machine. Horse-	R. K. Carpenter .....	281,668	July 24	1669	455	24	309
Cloak .....	W. B. Dowse .....	272,537	Feb. 20	1200	335	23	664
Cloak .....	D. W. Howard .....	272,440	Feb. 20	1077	303	23	643
Cloak. Circular .....	W. B. Dowse .....	277,014	May 8	629	165	23	1740
Cloak. Circular .....	C. W. Morrison .....	278,727	June 5	67	20	23	2136
Clock .....	W. S. McLewee .....	272,737	Feb. 20	1453	407	23	710
Clock. Alarm .....	H. J. Davies .....	270,400	Jan. 9	693	205	23	145
Clock. Alarm .....	A. D. Smith .....	283,429	Aug. 21	1166	{ 327 328 }	24	722
Clock-alarm .....	O. H. Woodworth .....	271,012	Jan. 23	1470	422	23	301
Clock alarm mechanism .....	J. Ganss .....	277,702	May 15	1458	393	23	1888
Clock and alarm striking apparatus .....	I. B. Woodruff .....	284,583	Sept. 4	518	145	24	991
Clock and watch spring .....	G. P. Ganster .....	286,417	Oct. 9	802	217	25	156
Clock-bell .....	H. Camp .....	278,874	June 5	273	79	23	2170
Clock-bell .....	G. E. Norton .....	276,456	Apr. 24	2037	566	23	1599
Clock-bell .....	A. C. Sanford .....	279,022	June 5	498	135	23	2208
Clock. Calendar .....	F. Cheselbrough .....	283,568	Aug. 21	1329	371	24	752
Clock. Calendar .....	B. Franklin .....	279,143	June 12	677	186	23	2249
Clock. Calendar .....	J. E. Young .....	279,850	June 19	1523	426	23	2398
Clock. Carriage .....	R. J. Clay .....	277,234	May 8	901	240	23	1787
Clock-case .....	A. O. Jennings .....	278,144	May 22	1993	548	23	1988
Clock. Electric .....	V. Himmer .....	274,325	Mar. 20	1391	381	23	1088
Clock. Electric .....	J. P. A. Schaeffi .....	288,496	Nov. 13	898	244	25	672
Clock. Electric .....	D. F. Sweet .....	272,100	Feb. 13	649	{ 176 177 }	23	564
Clock. Electric .....	D. F. Sweet .....	273,634	Mar. 6	504	{ 135 136 }	23	920
Clock. Electric alarm .....	J. I. Conklin, Jr. ....	270,659	Jan. 16	1004	290	23	213
Clock-escapement .....	J. Blanshan .....	283,957	Aug. 28	1801	510	24	851
Clock-escapement .....	G. P. Ganster .....	286,419	Oct. 9	805	217	25	156
Clock-escapement .....	A. Lawrence .....	280,936	July 10	748	208	24	137
Clock escapement. Electric .....	A. W. Gray .....	274,445	Mar. 20	1552	425	23	1117
Clock gravity-escapement .....	D. Shive .....	287,181	Oct. 23	1775	487	25	242
Clock-leveling device .....	R. B. Freeman .....	277,261	May 8	934	251	23	1793
Clock movement. Electric .....	J. Happersberger .....	278,946	June 5	410	112	23	2193
Clock-pendulum .....	I. B. Woodruff, G. B. Owen, and H. W. Beecher.	287,604	Oct. 30	2328	629	25	451
Clock-pendulums. Device for adjusting .....	M. C. Davis .....	278,781	June 5	145	43	23	2147
Clock. Primary electric .....	D. F. Sweet .....	284,578	Sept. 4	513	143	24	990
Clock. Quarter-second timing .....	J. Karr .....	271,078	Jan. 23	1549	{ 446 447 }	23	315
Clock-regulator. Pneumatic .....	G. G. Wagner .....	269,900	Jan. 2	93	28	23	20
Clock. Repeating .....	W. D. Davies .....	278,105	May 22	1938	532	23	1979
Clock. Secondary electric .....	A. S. Crane .....	286,181	Oct. 9	493	136	25	102
Clock-setting mechanism. Electric .....	J. F. Kettell .....	290,894	Dec. 25	1936	{ 533 534 }	25	1249
Clock-springs. Maintaining power for .....	F. T. Marchand .....	278,572	May 29	2555	697	23	2095
Clock-striking mechanism .....	O. O. Lövaas .....	276,437	Apr. 24	2011	558	23	1595
Clock system. Electric .....	C. E. Buell .....	280,715	July 3	450	{ 129 130 }	24	81
Clock system. Electric pneumatic .....	C. A. Mayrhofer .....	278,159	May 22	2006	{ 552 553 }	23	1991
Clock system. Hydropneumatic .....	C. A. Mayrhofer .....	271,888	Feb. 6	362	{ 100 101 }	23	504
Clock system. Pneumatic .....	V. Popp .....	275,701	Apr. 10	1082	296	23	1420
Clock system. Pneumatic and electric .....	L. Mautner .....	271,347	Jan. 30	1880	{ 545 546 547 }	23	378
Clock systems. Circuit and apparatus for electric .....	J. Hamblet .....	288,175	Nov. 6	471	131	25	589

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Clock winding and setting apparatus	V. Popp	275,700	Apr. 10	1081	296	23	1419
Clock-winding device	A. Cupit	273,471	Mar. 6	299	81	23	884
Clock-winding device. Electric	G. F. Ballou	277,104	May 8	748	197	23	1760
Clock-winding. Signal device for	C. Votti	289,789	Dec. 4	515	142	25	976
Clocks. Actuating device for secondary electric	A. S. Crane	288,623	Nov. 20	1051	289	25	706
Clocks by air-currents. Apparatus for winding	G. P. Ganster	286,418	Oct. 9	803	217	25	156
Clocks. Circuit-breaker for electric	G. B. Webb	289,944	Dec. 11	708	200	25	1018
Clocks. Circuit-controller for electric	V. Himmer	274,323	Mar. 20	1386	381	23	1087
Clocks. Circuit-controller for electric	V. Himmer	274,324	Mar. 20	1388	381	23	1088
Clocks. Circuit for secondary electric	H. L. Bailey	284,355	Sept. 4	241	67	24	945
Clocks. Device for synchronizing	R. W. Willson	288,906	Nov. 20	1397	385	25	767
Clocks. Electric mechanism for controlling the hands of	J. Happersherger	273,231	Feb. 27	1086	586	23	897
Clocks. Electrical control for pendulum	R. W. Willson	270,533	Jan. 9	868	253	23	180
Clocks. Electro-magnetic motor for	H. Grau	279,239	June 12	776	214	23	2266
Clocks. Gravity-escapement for	J. H. Gerry	280,463	July 3	164	44	24	30
Clocks. Illuminating	J. M. Crawford	281,465	July 17	1410	387	24	261
Clocks. Second-hand attachment for	F. L. Gregory	281,493	July 17	1447	396	24	267
Clocks. Synchronizing	G. G. Wagner	281,585	July 17	1553	425	24	284
Clod-crusher	S. Cole	281,021	July 10	840	233	24	156
Clod-crusher	A. Peterson	277,059	May 8	690	180	23	1750
Clod-crusher	E. S. Reed	280,513	July 3	216	57	24	39
Clod-crusher	O. A. Satrang	281,303	July 17	1204	333	24	226
Clod-crusher and sod and stalk cutter. Combined	J. Miller	273,123	Feb. 27	1947	546	23	802
Clog or shoe	J. Cassidy	277,458	May 15	1172	315	23	1841
Closet.							
See Water-closet.							
Closets. Apparatus for operating self-flushing	T. Prosser	279,183	June 12	719	196	23	2256
Cloth-cutting machine	P. Howe	280,827	July 10	607	170	24	114
Cloth-cutting machine. Band knife	E. Dredge	280,917	July 10	712	200	24	132
Cloth fabrics. Ornamenting woven	H. Maltby and A. K. Gardner	288,249	Nov. 13	570	158	25	616
Cloth impervious to water. Process of and compound for rendering	E. B. Collins	285,734	Sept. 25	1930	24	1261	
Cloth. Machine for applying cement and flock to	T. J. Mayall	286,038	Oct. 2	319	89	25	59
Cloth. Machine for cutting and folding strips of	T. Woodhouse	273,790	Mar. 13	716	194	23	965
Cloth, &c. Machine for spreading surfacing material upon	J. Tregurtha	279,462	June 12	1065	295	23	2312
Cloth. Method of and machine for shrinking, drying, and finishing	W. Hebdon	276,036	Apr. 17	1505	414	23	1500
Cloth-napping machine	E. Gessner	271,534	Feb. 6	392	82, 83	23	494
Cloth opening and measuring machine	W. Hebdon	276,037	Apr. 17	1506	415	23	1500
Cloth-pressing machines. Bed for	G. W. Miller	275,243	Apr. 3	460	128	23	1305
Cloth reeling and measuring machine	G. W. Kemery	273,690	Mar. 6	578	154	23	933
Cloth-shearing machine	D. C. Sumner	282,401	July 31	2615	718	24	477
Cloth-shearing machine	D. C. Sumner	282,402	July 31	2616	719	24	477
Clothes and towel rack	J. P. Geishaker	275,478	Apr. 10	808	219	23	1372
Clothes-bar	D. S. Worthington	288,148	Nov. 6	437	123	25	584
Clothes-drier	J. S. Gold	272,424	Feb. 20	1961	298	23	640
Clothes-drier	A. Iske	277,736	May 15	1494	406	23	1895
Clothes-drier	O. F. Smith	281,734	July 24	1759	478	24	324
Clothes-drier	C. G. Udell	290,501	Dec. 18	1425	395	25	1153
Clothes-drier	J. A. Ward	283,728	Aug. 21	1518	428	24	789
Clothes-drier frame. Adjustable	M. A. Warren	286,878	Oct. 16	1382	379	25	265
Clothes-hook	P. Miles	280,062	June 26	1790	502	23	2451
Clothes-hook	A. Wode and J. Miffin, Jr.	285,094	Sept. 18	1157	323	24	1116
Clothes-line	D. H. Murphy	290,995	Dec. 25	2079	572	25	1271
Clothes-line clamp	A. W. Bristow	285,005	Sept. 18	1048	293	24	1068
Clothes-line coupling	A. F. Brower	289,334	Nov. 27	1922	534	25	871
Clothes-line fastener	E. Baner	282,601	Aug. 7	152	46	24	527
Clothes-line hook	J. B. Garfield	281,260	July 17	1156	319	24	217
Clothes-line support	M. Houtman	286,441	Oct. 9	831	225	25	161
Clothes-pin	R. B. Perkins	272,762	Feb. 20	1485	418	23	715
Clothes-pin. Locking	S. Strong	273,633	Mar. 6	503	135	23	920
Clothes-pins. Machine for making wire	A. E. Francis	276,575	May 1	41	11	23	1634
Clothes-pounder	O. Colvin	271,602	Feb. 6	24	6	23	444
Clothes-pounder	N. B. Elliott and J. T. Lloyd	278,522	May 29	2498	682	23	2085
Clothes-pounder	J. W. McCalla	272,268	Feb. 13	870	243	23	603
Clothes-pounder	A. McCready and C. S. Alshouse	289,292	Nov. 27	1806	518	25	860
Clothes-pounder	M. Remington and J. L. Riter	285,930	Oct. 2	196	55	25	38
Clothes-pounder. Atmospheric	W. H. Noll	282,759	Aug. 7	344	97	24	560
Clothes-pounder. Pneumatic	G. C. Dimock	280,145	June 26	1883	530	23	2468
Clothes-rack	J. H. French	287,655	Oct. 30	2389	644	25	464
Clothes-rack	W. Klinschmidt	270,442	Jan. 9	749	220	23	155
Clothes-rack	N. H. Long	288,645	Nov. 20	1078	296	25	710
Clothes-rack. Folding	H. M. Downing	284,286	Sept. 4	158	43	24	931
Clothes-reel	T. Alderdyce	271,675	Feb. 6	107	29	23	458
Clothes-reel	J. H. Stuart	277,171	May 8	839	221	23	1775
Clothes-washer	J. B. Bell	270,726	Jan. 16	1116	320	23	233
Clothes-washer	C. A. Dodge	280,915	July 10	710	199	24	132
Clothes-washer	J. H. Hey	273,360	Mar. 6	158	45	23	861
Clothes-washer	H. C. McIlwain	284,459	Sept. 4	366	101	24	966
Clothes-washer	S. A. Niver	273,134	Feb. 27	1965	552	23	806
Clothes-washer and churn. Combined	M. J. Bridges	273,453	Mar. 6	274	74	23	880
Clothes-wringer	J. E. Donovan	275,165	Apr. 3	367	101	23	1290
Clothes-wringer	O. P. Gould	281,866	July 24	1930	527	24	355
Clothes-wringer	H. C. Hopkins	270,800	Jan. 16	1204	348	23	251
Clothes-wringer	H. C. Hopkins	278,966	June 5	431	118	23	2197
Clothes-wringer	C. K. Stinson	287,782	Oct. 30	2562	689	25	496
Clothes-wringer	J. Todd	272,990	Feb. 27	1783	499	23	773
Clothes wringer and mangle	C. Gentesse	281,358	July 17	1275	354	24	238



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Clothes-wringer. Bench.	E. A. Jones	272,885	Feb. 27	1669	466	23	754
Clothes-wringer. Centrifugal	J. G. Crawford	273,262	Mar. 6	23	7	23	838
Clover-hullers. Recleaning attachment for	M. O. Meacham	276,551	May 1	407	108	23	1687
Club-foot apparatus	J. Burns	282,491	Aug. 7	14	4	24	503
Club. Indian	C. W. Foster and W. W. Dudley	275,627	Apr. 10	998	270	23	1404
Clutch	W. D. Ewart	272,947	Feb. 27	1737	485	23	765
Clutch	I. N. Forrester	283,993	Aug. 28	1843	520	24	858
Clutch	J. Gibbins	289,249	Nov. 27	1814	501	25	850
Clutch	O. Kromer and F. Rinkloff	278,024	May 22	1846	504	23	1963
Clutch	A. C. Miller	288,951	Nov. 20	1454	401	25	778
Clutch	L. C. Perkins	284,475	Sept. 4	380	106	24	968
Clutch	L. C. Pratt	290,706	Dec. 25	1695	467	25	1206
Clutch	H. E. Pridmore	272,152	Feb. 13	706	194	23	574
Clutch	W. W. Wythe	283,452	Aug. 21	1192	335	24	727
Clutch and brake. Combined	C. H. Rohde	278,601	May 29	2587	706	23	2100
Clutch and reversible pawl for sewing-machines, &c	N. H. Davis	270,893	Jan. 23	1317	380	23	277
Clutch. Automatic friction	H. Unzicker	284,689	Sept. 11	652	184	24	1020
Clutch device	J. and T. H. Parvin	270,107	Jan. 2	320	95	23	65
Clutch for elevators. Friction	W. Winkless	285,866	Oct. 2	108	32	25	21
Clutch. Friction	G. W. Baker	285,725	Sept. 25	1915	543	24	1259
Clutch. Friction	G. L. Barnes	285,870	Oct. 2	111	33	25	22
Clutch. Friction	J. H. Blessing	290,517	Dec. 18	1452	401	25	1157
Clutch. Friction	E. P. H. Capron	275,466	Apr. 10	787	211	23	1369
Clutch. Friction	T. F. Carver. (Reissue)	10,365	Aug. 14	1086	305	24	702
Clutch. Friction	C. C. Child	270,636	Jan. 16	1001	289	23	212
Clutch. Friction	H. C. Crowell	281,242	July 17	1130	311	24	213
Clutch. Friction	H. E. Eberhardt	290,671	Dec. 25	1649	454	25	1198
Clutch. Friction	J. C. Eckardt	287,915	Nov. 6	157	45, 46	25	535
Clutch. Friction	W. H. Eddy	285,593	Sept. 25	1750	496	24	1229
Clutch. Friction	W. G. Gass and W. A. Galashan	275,186	Apr. 3	394	108	23	1204
Clutch. Friction	J. Gibbins	284,731	Sept. 11	708	198	24	1030
Clutch. Friction	D. R. Kinyon	281,700	July 24	1715	466	24	317
Clutch. Friction	J. E. Meyer	283,009	Aug. 14	638	181	24	620
Clutch. Friction	D. Mills	286,214	Oct. 9	531	145	25	108
Clutch. Friction	J. A. Neilson	270,099	Jan. 2	311	92	23	63
Clutch. Friction	J. K. Proctor	286,556	Oct. 9	969	261	25	186
Clutch. Friction	F. H. Richards	283,145	Aug. 14	797	223	24	648
Clutch. Friction	G. N. Schoenberg	277,066	May 8	702	183	23	1752
Clutch. Friction	R. Wels	285,940	Oct. 2	209	59	25	40
Clutch. Friction	J. H. Wright	288,291	Nov. 13	621	170	25	621
Clutch-hook	C. Green	274,935	Apr. 3	66	18	23	1237
Clutch. Lever	J. Hill	278,137	May 22	1985	546	23	1987
Clutch mechanism	O. R. Chaplin	277,002	May 8	614	161	23	1737
Clutch mechanism	D. B. Hartley	276,688	May 1	199	51	23	1658
Clutch mechanism	M. Kraker	283,493	Aug. 21	1244	349	24	736
Clutch. Reversible friction	F. P. Huyck	275,388	Apr. 10	690	183	23	1352
Coach	H. F. Stahmer	278,463	May 29	2428	662	23	2073
Coach-pad plate	E. A. Cooper	281,179	July 10	1040	288	24	191
Coach-window. Sliding	J. C. Goold	277,565	May 15	1301	349	23	1861
Coal and ore carrier and transmitter	F. Murgatroyd	279,264	June 12	808	224	23	2271
Coal and ore carrier and transmitter	F. Murgatroyd	279,788	June 19	1445	405	23	2385
Coal and rock drilling machine	T. Aitken	289,595	Dec. 4	281	78	25	937
Coal. Apparatus for loading	W. G. Barnard	285,952	Oct. 2	222	62	25	43
Coal. Apparatus for separating slate from	J. Fern	274,747	Mar. 27	1933	538	23	1191
Coal, &c. Apparatus for washing and delivering	C. Sheppard	283,156	Aug. 14	811	227	24	650
Coal-burning furnace	A. G. Moore and J. W. Rahn	279,969	June 26	1675	470	23	2430
Coal-cleaner	J. Snyder and D. Morse	281,735	July 24	1760	478	24	324
Coal-crushing roller	J. H. and J. P. Hosie	279,761	June 19	1416	399	23	2350
Coal-drilling machine	E. Bittenbender and M. L. Snyder	273,443	Mar. 6	260	70	23	878
Coal-elevator	S. V. Cook	280,014	June 26	1731	485	23	2441
Coal elevator and bucket	A. L. Hitchcock	287,831	Nov. 6	51	15	25	516
Coal elevator and conveyer	R. B. Little	287,140	Oct. 23	1718	470	25	332
Coal-fork	G. W. Herrick	272,137	Feb. 13	693	189	23	572
Coal-hod	C. Hoff	279,871	June 19	1551	434	23	2403
Coal-hod	E. G. Luscher	278,157	May 22	2005	551	23	1991
Coal hod or scuttle	F. W. Gardner and M. B. Mills	271,699	Feb. 6	136	38	23	463
Coal-hopper	W. Swindell	270,149	Jan. 2	381	110	23	77
Coal. Machine for separating impurities from	C. W. Ziegler	277,530	May 15	1259	338	23	1854
Coal-scuttle	R. F. Lewis	284,030	Aug. 28	1911	535	24	860
Coal-scuttle	H. S. Reynolds	279,502	June 12	1115	308	23	2320
Coal-scuttle and ash-sifter. Combined	A. Bayley	283,848	Aug. 28	1668	471	24	826
Coal-tubs. Lock for self-dumping	G. L. Stuebner	289,940	Dec. 11	703	197	25	1017
Coal. Unloading and handling	J. R. McPherson	282,555	Aug. 7	101	30	24	517
Coat	W. P. Dodge and J. Cummings, Jr.	289,236	Nov. 27	1801	499	25	847
Coat	N. F. Sandling	284,070	Aug. 28	1959	546	24	877
Coat and cloak hook	D. Kelly	271,640	Feb. 6	70	19	23	452
Coat-spring	M. C. Stone	281,578	July 17	1544	423	24	283
Coat. Water-proof	J. Maguire	273,115	Feb. 27	1940	544	23	801
Cock	A. W. Parsons	275,406	Apr. 10	713	190	23	1357
Cock	J. Semple	269,886	Jan. 2	74	22, 23	23	17
Cock and casing	J. O. Waddell	270,520	Jan. 9	852	248	23	176
Cock and check-valve. Steam	J. A. I. Claudon	279,338	June 12	909	253	23	2287
Cock and faucet	F. Hickman	270,066	Jan. 2	280	83	23	57
Cock and low-water detector. Gage	G. L. Engelking	275,175	Apr. 3	379	105	23	1292
Cock and valve	T. D. Lyons and D. J. Lnehan	273,862	Mar. 13	810	219	23	981
Cock. Automatic cylinder	C. E. Ulrick and T. Williams	270,266	Jan. 9	519	152	23	111
Cock. Ball	W. Smith	278,189	May 22	2047	562	23	1998
Cock. Ball	J. Zaue	279,625	June 19	1337	372	23	2365
Cock. Combined stop and draw	E. Dassau	270,399	Jan. 9	693	205	23	145
Cock. Compression	J. S. Barr	285,953	Oct. 2	223	63	25	43
Cock. Compression	C. C. Reed	283,660	Aug. 21	1427	399	24	772
Cock. Compression basin	J. H. Solis	273,177	Feb. 27	2015	566	23	815

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Cock. Cylinder.....	J. N. Chamberlin.....	283,566	Aug. 21	1327	370	24	752
Cock. Cylinder.....	D. Smullen.....	284,504	Sept. 4	424	120	24	976
Cock for engines. Cylinder.....	J. B. Haight.....	279,562	June 19	1192	330	23	2340
Cock for steam-radiators. Air.....	H. Patterson.....	274,650	Mar. 27	1822	506	23	1171
Cock. Gage.....	M. J. Fitzgerald.....	289,637	Dec. 4	330	92	25	946
Cock. Gage.....	L. B. Fulton. (Reissue).....	10,398	Oct. 30	2575	692	25	499
Cock. Gage.....	C. P. Higgins.....	280,176	June 26	1914	538	23	2473
Cock. Gage.....	J. Lee.....	276,836	May 1	391	103	23	1694
Cock. Gage.....	R. S. Manchester.....	272,286	Feb. 13	869	243	23	603
Cock. Gage.....	D. F. Tonsey.....	274,994	Apr. 3	140	40	23	1250
Cock-grinding machine.....	W. E. Berens.....	286,525	Oct. 9	929	251	25	179
Cock-grinding machine.....	G. Westinghouse, Jr.....	270,527	Jan. 9	961	250	23	178
Cock. Hydrant.....	J. Snell.....	290,132	Dec. 11	939	266	25	1060
Cock. Locking stop.....	J. Norris and N. Moore.....	288,725	Nov. 20	1188	324	25	728
Cock or faucet.....	W. S. Cooper.....	280,136	June 26	1872	528	23	2467
Cock. Relief.....	J. L. Wolcott.....	273,213	Feb. 27	2064	580	23	823
Cock. Steam.....	W. R. Middleton.....	276,618	May 1	90	25	23	1643
Cock. Steam-cylinder.....	E. Richards and A. Krieger.....	270,250	Jan. 9	502	148	23	108
Cock. Stop.....	C. Hirsch.....	283,887	Aug. 28	1713	483	24	834
Cock. Stop.....	J. Howes.....	280,829	July 10	613	171	24	114
Cock. Stop and waste.....	J. Kelly.....	283,613	Aug. 21	1376	384	24	761
Cock. Stop and waste.....	J. F. Lamping.....	276,431	Apr. 24	2005	556	23	1593
Cock valve. Water.....	F. W. Kelly.....	279,569	June 19	1200	332	23	2341
Cock. Water.....	M. Hogan.....	275,487	Apr. 10	818	921	23	1374
Cock. Water-closet.....	C. F. Pike.....	270,334	Jan. 9	604	178	23	128
Cocks or valves. Machine for finishing.....	C. H. Goodrich.....	270,052	Jan. 2	263	76	77	54
Cockle, &c., from grain. Machine for separating.....	H. Ogborn.....	283,015	Aug. 14	644	182	24	622
Cockle-machine.....	M. Crawford.....	285,344	Sept. 18	1447	408	24	1168
Cockle-machine.....	J. Lucas.....	274,797	Mar. 27	1993	554	23	1901
Cockle-machine and grain-separator.....	T. M. Bales and J. A. Jackson.....	282,036	July 31	2136	586	24	396
Cockle-screen.....	J. B. Cornwall.....	276,523	Apr. 24	2123	590	23	1613
Cocoanut-sheller.....	J. P. Anderson.....	286,368	Oct. 9	744	199	25	145
Cocoa. Soluble.....	E. F. G. Hartmann.....	270,878	Jan. 16	1293	337	23	267
Cocoa. Soluble.....	E. F. G. Hartmann.....	273,975	Mar. 13	940	23	23	1003
Coffee and other beverages. Method of and apparatus for making.....	J. C. Grant.....	276,579	May 1	47	14	23	1635
Coffee and tea pot.....	A. Stewart.....	290,136	Dec. 11	942	267	25	1061
Coffee-boiler.....	H. and J. Kassen.....	279,649	June 19	1294	359	23	2358
Coffee-boiler lip.....	G. W. Knapp.....	281,522	July 17	1480	406	24	273
Coffee compound.....	S. B. Bushfield.....	274,438	Mar. 20	1534	23	23	1114
Coffee compounds. Preparing.....	C. R. Groff.....	270,787	Jan. 16	1192	344	23	248
Coffee-cooler.....	J. P. Emerson.....	285,349	Sept. 18	1451	409	24	1169
Coffee-drying apparatus.....	F. Klee.....	271,869	Feb. 6	343	95	23	501
Coffee grading and cleaning machine.....	L. A. Gobin.....	287,823	Nov. 6	42	12	25	515
Coffee, &c. Machine for scouring, cleaning, and polishing.....	J. H. Pendleton.....	274,369	Mar. 20	1449	397	23	1099
Coffee, &c. Machine for separating.....	H. B. Stevens.....	270,501	Jan. 9	816	238	23	169
Coffee-mill.....	F. K. Brierly.....	284,271	Sept. 4	140	39	24	928
Coffee-mill.....	F. H. Chapman.....	279,130	June 12	659	180	23	2246
Coffee-mill.....	O. J. Range.....	272,584	Feb. 20	1263	352	23	676
Coffee or tea pot.....	P. H. O'Hara.....	270,463	Jan. 9	772	226	23	160
Coffee or tea pot.....	J. Vacheresse.....	272,802	Feb. 20	1535	432	23	724
Coffee-pot.....	H. H. Beach.....	284,363	Sept. 4	249	69	24	946
Coffee-pot.....	J. Cochran.....	285,972	Oct. 2	242	68	25	46
Coffee-pot.....	I. C. H. Gilmore.....	270,415	Jan. 9	710	210	23	148
Coffee-pot.....	C. Halstead.....	281,265	July 17	1161	320	24	218
Coffee-pot.....	T. Keys.....	281,373	July 17	1292	358	24	241
Coffee-pot.....	L. W. Walker.....	277,813	May 15	1584	433	23	1912
Coffee-pot and filter.....	A. Rutnick.....	272,481	Feb. 20	1131	318	23	652
Coffee pot or urn.....	E. Robinson.....	276,473	Apr. 24	2058	571	23	1603
Coffee-pot spouts, &c. Machine for forming.....	G. R. Scates.....	279,602	June 19	1237	343	23	2348
Coffee, rice, &c. Machine for hulling and polishing.....	H. B. Stevens.....	286,499	Oct. 9	895	241	25	173
Coffee-roaster.....	C. Bertling.....	270,373	Jan. 9	658	193	23	138
Coffee-roaster.....	J. Burns.....	279,329	June 12	897	250	23	2255
Coffee-roaster.....	G. H. Pfeifer.....	279,179	June 12	715	195	23	2255
Coffee-roaster.....	J. W. Rees and J. J. Smith.....	285,929	Oct. 2	195	55	25	38
Coffee-roaster.....	J. J. Stoppel.....	270,503	Jan. 9	821	239	23	170
Coffee-roaster.....	J. A. Sweeney.....	278,199	May 22	2064	569	23	2001
Coffee-roaster.....	T. C. White.....	274,538	Mar. 27	1690	469	23	1147
Coffee-roaster and corn-pepper.....	E. B. Sheldon.....	289,312	Nov. 27	1887	526	25	864
Coffee-roaster. Portable.....	W. F. Beecher and R. S. West.....	271,770	Feb. 6	221	62	23	479
Coffee-separator.....	P. P. Brannon.....	271,779	Feb. 6	234	65	23	481
Coffee-separator.....	J. R. Merrihew.....	277,317	May 8	1003	269	23	1805
Coffee substitute.....	E. A. Grote.....	271,332	Jan. 30	1864	23	23	676
Coffin-handle.....	J. McCarthy.....	272,289	Feb. 13	871	244	23	304
Coffin head-rest.....	E. Hedges.....	290,682	Dec. 25	1664	459	25	1200
Coffin. Knockdown.....	N. Swanson.....	284,986	Sept. 11	1010	294	24	1085
Coffin-lid fastener.....	J. Martin.....	281,382	July 17	1299	360	24	243
Coffin-lifter.....	C. E. Wilson.....	270,620	Jan. 16	979	283	23	208
Coffin-lowering apparatus.....	A. B. Morrison.....	285,149	Sept. 18	1228	345	24	1128
Coffin-lowering device.....	J. Patterson.....	285,064	Sept. 18	1121	313	24	1110
Coffin-ornament.....	J. B. Sargent.....	290,118	Dec. 11	924	262	25	1058
Coin and making change. Device for holding.....	W. H. Harrison.....	289,723	Aug. 7	369	87	24	554
Coin-detector.....	E. Bachmann.....	285,204	Sept. 18	1286	362	24	1139
Coin-tester.....	M. Clarke.....	273,667	Mar. 6	545	146	23	927
Coko. Apparatus for the manufacture of bituminous-coal.....	J. F. Bennett.....	282,604	Aug. 7	155	47	24	528
Coke-furnace and apparatus connected therewith.....	R. Thomas.....	276,504	Apr. 24	2095	582	23	1609
Coke-oven.....	J. Butler.....	289,887	Dec. 11	647	180	25	1006



*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Coke-oven	F. Carves	287,905	Nov. 6	143	42, 43	25	533
Coke-oven	B. Cochrane	276,002	Apr. 17	1461	403	23	1493
Coke-oven	G. Seibel	288,874	Nov. 20	1361	373 374	25	760
Coke-oven	L. Semet	287,332	Oct. 23	1964	536 537	25	375
Coke-oven	R. De Solderhoff	273,822	Mar. 13	758	206	23	972
Coke oven and kiln	F. C. Eberley and R. Richter	282,064	July 31	2175	597 598	24	402
Coke-oven door	W. H. Beckwith	288,761	Nov. 20	1230	337	25	735
Coke-oven door and frame therefor	J. Herron and R. T. Wray	287,285	Oct. 23	1906	521	25	365
Coking coal-dust for manufacturing fuel and gas	J. W. Pittinos	270,796	June 19	1455	.....	23	2387
Cold. Production of	J. C. Rossi	284,068	Aug. 28	1956	545	24	876
Collar	F. Beiermeister, Jr	278,677	June 5	3	1	23	2125
Collar	F. Beiermeister, Jr	289,604	Dec. 4	290	81	25	939
Collar	W. Cohlman	287,241	Oct. 23	1858	508	25	355
Collar	A. C. Fellows	284,829	Sept. 11	824	230	24	1050
Collar	A. C. Fellows	287,263	Oct. 23	1878	514	25	359
Collar	J. M. Ide	279,567	June 19	1198	331	23	2341
Collar	I. P. Turner and F. S. Searle	279,994	June 26	1702	478	23	2435
Collar	J. M. Varney	277,088	May 8	723	192	23	1757
Collar and hame. Combined	M. Hummer	286,010	Oct. 2	284	79	25	53
Collar. Dog	J. H. Fassitt	272,036	Feb. 13	562	152	23	550
Collar-fastener	W. Hayton	279,751	June 19	1408	393	23	2378
Collar fastener. Horse	W. L. Fries	290,673	Dec. 25	1651	455	25	1198
Collar fastener. Horse	F. Johnson	278,970	June 5	435	119	23	2197
Collar fastening. Dog	J. M. Riley	277,785	May 15	1556	423	23	1907
Collar fastening. Horse	O. H. Morris	279,177	June 12	713	194	23	2255
Collar for female wear. Standing	W. L. Weatherly	278,758	June 5	102	29	23	2141
Collar. Horse	J. N. Bickel	276,521	Apr. 24	2119	589	23	1613
Collar. Horse	W. Cosbie	277,463	May 15	1179	317	23	1842
Collar. Horse	B. K. Emerson	282,450	July 31	2686	737	24	469
Collar. Horse	S. Gissinger	276,577	May 1	46	13	23	1635
Collar. Horse	F. A. Hake	282,721	Aug. 7	308	87	24	553
Collar. Horse	T. Loveday	288,248	Nov. 13	569	158	25	616
Collar. Horse	C. Marin	283,717	Aug. 21	1505	424	24	786
Collar. Horse	J. W. Pearson	274,966	Apr. 3	109	31	23	1243
Collar. Horse	R. Porter	271,921	Feb. 6	410	111	23	512
Collar. Horse	J. H. Snyder	274,229	Mar. 20	1268	350	23	1068
Collar. Horse	J. F. Trautmann	277,857	May 15	1640	446	23	1922
Collar. Horse	M. Turley. (Reissue)	10,431	Dec. 25	2105	580	25	1276
Collar. Horse	L. E. Woodard	272,824	Feb. 20	1562	439	23	729
Collar or cuff of celluloid	A. A. Sanborn	288,955	Nov. 20	1460	403	25	779
Collar pad. Horse	W. J. Cochran	275,886	Apr. 17	1333	367	23	1470
Collar pad. Horse	J. Kallista	283,610	Aug. 21	1372	383	24	760
Collar pad. Horse	M. W. Lynch	270,960	Jan. 23	1409	405	23	291
Collar pad. Horse	W. H. Osmer and R. M. Grier	284,658	Sept. 11	607	171	24	1013
Collar pad. Horse	J. Walmer	288,141	Nov. 6	429	121	25	583
Collar rim-plate. Horse	W. L. Bellis	287,497	Oct. 30	2173	589	25	422
Collar-stuffing machine	W. Foglesong	275,624	Apr. 10	994	269	23	1404
Collar throat. Horse	B. D. Fisher	288,562	Nov. 13	972	267	25	685
Collars and cuffs. Manufacture of	E. K. Betts	280,899	July 10	690	194	24	128
Collars. Machine for blocking horse	W. Foglesong	283,878	Aug. 28	1703	480	24	832
Collieries. Method of and apparatus for the treatment of spoil-heaps of	L. H. Armour	285,945	Oct. 2	215	60	25	41
Color	J. Urban	277,633	May 15	1381	.....	23	1875
Color-can	J. C. Jessup	286,015	Oct. 2	290	81	25	54
Color-tints. Apparatus for indicating and classifying	J. Pittiot	280,665	July 3	391	109	24	69
Colors on cotton fabrics. Production of azo	T. Halliday	271,636	Feb. 6	66	.....	23	451
Coloring-matter from xylydine. Basic	C. Martius. (Reissue)	10,353	July 10	1101	.....	24	201
Coloring-matter. Manufacture of cardinal-red	J. Wolff	285,335	Sept. 18	1433	.....	25	1166
Coloring-matter. Manufacture of red	O. Bredt	289,613	Dec. 4	300	.....	25	940
Coloring-matter. Manufacture of yellow	I. Levinstein	289,543	Dec. 4	214	.....	25	924
Coloring-matter or dye-stuff from thiodiphenylamine. Obtaining	A. Bernthsen	286,527	Oct. 9	932	.....	25	180
Coloring-matter. Production of yellow	E. Jacobsen	290,585	Dec. 18	1538	.....	25	1172
Coloring-matter. Sulphureted derivative of diphenylamine as a basis for the production of	A. Bernthsen	286,526	Oct. 9	931	.....	25	179
Coloring-matter to fibrous material. Machine for applying	H. W. Vaughan	273,198	Feb. 27	2037	573	23	819
Coloring-matter to fibrous material. Machine for applying	H. W. Vaughan	280,885	July 10	674	190	24	126
Coloring-matters from diazoamide compounds. Production of	J. Wolff	277,182	May 8	849	.....	23	1777
Coloring-matters. Manufacture of	A. Bernthsen	282,836	Aug. 7	430	.....	24	576
Coloring-matters. Manufacture of	L. Limpach	280,317	June 26	2094	.....	23	2505
Coloring-matters. Obtaining	C. D. Ekman	282,971	Aug. 14	587	.....	24	612
Colter-bracket	J. Oliver	284,322	Sept. 4	202	57	24	938
Colter. Caster	B. C. Bradley	285,790	Oct. 2	12	4	25	4
Colter-cleaner	F. E. Jeanjaquet	288,442	Nov. 13	828	224	25	660
Colter hub. Plow	C. R. Hartman	278,949	June 5	413	113	23	2194
Colter hub. Wheel	C. R. Hartman	278,950	June 5	413	113	23	2194
Colter. Plow	G. H. Bunch	284,810	Sept. 11	805	225	24	1047
Colter. Plow	D. W. Copeland	270,750	Jan. 16	1148	328	23	239
Colter. Rolling	H. M. Skinner	287,733	Oct. 30	2493	671	25	483
Colter. Rolling	H. M. Skinner	288,672	Nov. 20	1113	306	25	716
Colter. Rolling landslide	G. B. St. John	287,336	Oct. 23	1970	538	25	376
Colter. Rotary	F. J. Underwood	290,148	Dec. 11	955	270	25	1063
Colter. Rotary	S. M. Weston and C. T. Shanner	272,368	Feb. 13	969	270	23	620
Colters. Device for sharpening plow	V. A. Mayberry	285,287	Sept. 18	1381	390	24	1157
Comb	See Curry-comb.						
Comb	P. J. Cullinan	279,227	June 12	765	211	23	2264
Comb and brush. Combined	B. M. Wilkerson	288,534	Nov. 13	940	256	25	679

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. Et.	Vol.	Page.
Combing-machine.....	I. Best.....	287,498	Oct. 30	2173	590	25	422
Combing wool, &c. Machine for.....	C. Fletcher.....	271,325	Jan. 30	1852	537	23	374
Combination-lock.....	J. W. Allen.....	282,691	Aug. 7	260	75	24	544
Combination-lock.....	W. B. Atkinson.....	277,188	May 8	854	227	23	1778
Combination-lock.....	H. Lemmon.....	280,488	July 3	191	50, 51	24	35
Combination-lock.....	J. H. and T. D. Morris.....	269,954	Jan. 2	157	46	23	33
Commode.....	J. Fink and T. B. Branson.....	290,983	Dec. 25	2064	568	25	1269
Commode.....	J. Rundback.....	281,203	July 10	1073	295	24	196
Commode.....	E. Sullivan and R. Tobin.....	289,168	Nov. 27	1717	479	25	831
Compass and apparatus for reading its indications.	E. F. Macgeorge.....	281,772	July 24	1811	495	24	334
Clinometer.....							
Compass. Mariner's.....	E. Bisson.....	289,209	Nov. 27	1772	491	25	841
Compass. Recording.....	R. Pickwell.....	272,765	Feb. 20	1488	419	23	716
Compass. Surveyor's.....	T. F. Randolph.....	282,117	July 31	2259	620	24	415
Compasses.....	J. Neimeyer.....	275,403	Apr. 10	709	189	23	1356
Compasses and calipers. Combined.....	G. P. Conant.....	288,163	Nov. 6	455	127	25	587
Composing-stick.....	A. Danziger.....	279,332	June 12	927	259	23	2290
Composing-stick.....	W. H. Golding.....	278,700	June 5	31	9	23	2130
Composite washer.....	C. A. Rodney.....	271,365	Jan. 30	1915	553	23	385
Compound engine.....	H. D. Dunbar.....	276,368	Apr. 24	1926	534 535	23	1580
Compound for lining and coating tubes, cylinders, &c., also for joint-packing, taking impressions, making castings, &c. Indestructible.....	I. R. Blumenberg.....	275,123	Apr. 3	322		23	1282
Compressing dry and plastic materials. Machine for.....	C. Killgore.....	276,828	May 1	379	101	23	1692
Compressing engine or pump.....	W. M. Wood and W. L. Bailie.....	278,068	May 22	1891	518	23	1971
Compressing lime, &c., into solid or cohesive form. Machinery or apparatus for.....	C. S. Smith.....	276,487	Apr. 24	2072	575	23	1605
Compressing plastic and other materials. Machine for.....	C. Hemje and T. C. Brecht.....	279,384	June 12	976	271	23	2297
Compressing pulverized material.....	C. Hemje.....	287,128	Oct. 23	1706	467	25	329
Compressing pulverized substances. Machine for.....	O. E. Weber.....	289,945	Dec. 11	709	200 201 202 203	25	1018
Concentrator.....	D. H. Anderson.....	285,098	Sept. 18	1160	324 325	24	1117
Concentrator.....	G. A. Metcalf.....	286,050	Oct. 2	332	92	25	61
Concentrator.....	C. H. Wetzel.....	290,625	Dec. 25	1855	513	25	1235
Condenser.....	F. A. Wilms.....	282,020	July 24	2116	580	24	386
Condenser and cooler. Separating.....	F. Sonier.....	278,056	May 22	1881	514	23	1969
Condenser. Injector.....	J. Wheelock.....	269,979	Jan. 2	182	53	23	38
Condenser. Injector.....	J. Wheelock.....	278,476	May 29	2442	666	23	2075
Condenser. Jet.....	E. Körting.....	285,822	Oct. 2	47	15	25	10
Condenser. Steam.....	H. A. Campbell.....	277,457	May 15	1171	315	23	1840
Condenser. Steam.....	C. A. Dixon.....	276,526	Apr. 24	2126	591	23	1614
Condenser. Steam.....	B. T. Stowell.....	285,703	Sept. 25	1880	536	24	1253
Condenser. Steam-engine.....	W. A. Miles.....	280,213	June 26	1959	551 552	23	2482
Condenser. Steam-jet.....	L. Schutte and J. Goehring.....	285,846	Oct. 2	80	24	25	16
Condenser. Steam-pump.....	W. A. Miles.....	280,212	June 26	1958	551	23	2481
Condenser. Surface.....	A. W. Robertson.....	281,927	July 24	2005	549	24	368
Condenser-tube follower.....	W. E. Todd.....	288,891	Nov. 20	1382	381	25	764
Condenser tubes. Gland for surface.....	J. F. Tolmer.....	277,557	May 15	1293	347	23	1860
Condensers. Injection-regulator for steam.....	T. Blass.....	289,609	Dec. 4	296	83	25	940
Condensing certain gaseous compounds.....	J. Henderson.....	283,342	Aug. 14	1048	295	24	696
Condensing steam and heating fluids. Apparatus for.....	E. Theisen.....	285,936	Oct. 2	203	57, 58	25	39
Conduit and making the same. Tube-lined cement.....	C. Detrick.....	288,033	Nov. 6	308	87	25	560
Conduits of plastic or semi-plastic material. Machine for making lined.....	C. Detrick.....	288,034	Nov. 6	309	87	25	560
Conduits of concrete. Apparatus for forming continuous.....	W. M. Campbell.....	272,411	Feb. 20	1044	292	23	637
Confection.....	J. S. Dunham.....	281,849	July 24	1912		24	352
Confection-grinding apparatus.....	J. B. Rivera.....	288,860	Nov. 20	1343	369	25	757
Confections. Machine for making.....	J. Luttet.....	284,136	Aug. 28	2043	568	24	891
Confectionery.....	P. Richter.....	279,812	June 19	1473	413	23	2389
Confectionery and pill coating and rounding machine.....	T. Daniels.....	278,780	June 5	143	42, 43	23	2147
Confectionery icing-machine.....	J. H. Mitchell.....	271,897	Feb. 6	372	103	23	506
Confectionery, &c. Machine for molding or shaping.....	O. R. Chase.....	279,131	June 12	660	181	23	2246
Confectionery, &c. Machine for molding or shaping.....	O. R. Chase.....	279,132	June 12	662	181 182	23	2246
Confectionery, &c. Machine for molding, shaping, } and combining.....	O. R. Chase.....	279,133	June 12	664	182 183	23	2247
Congelation of water, &c. Facilitating the.....	O. Guthrie. (Reissue).....	10,283	Feb. 6	531	142	23	532
Connecting-rod and pitman.....	J. B. Lang.....	290,332	Dec. 18	1195	335	25	1113
Consolidating loose and bulky material into solid blocks. Machine for.....	W. H. Smith.....	275,866	Apr. 17	1306	359 360 361	23	1465
Converter. Bessemer.....	T. Crowe.....	283,577	Aug. 21	1341	374	24	754
Convertible chair.....	E. H. Bolgiano.....	277,871	May 22	1664	454	23	1932
Convertible chair.....	E. H. Bolgiano.....	280,711	July 3	447	128	24	80
Convertible chair.....	E. H. Bolgiano.....	282,154	July 31	2305	633	24	423
Conveyer.....	W. H. Felthousen.....	275,758	Apr. 10	1164	319	23	1433
Conveyer.....	F. I. Pearce.....	285,664	Sept. 25	1833	523	24	1244
Conveyer.....	S. Stutz.....	289,466	Dec. 4	109	32	25	906
Conveyer for mill products.....	R. Craik.....	275,153	Apr. 3	354	97	23	1288
Cooker. Feed.....	J. June and L. Falk.....	284,861	Sept. 11	862	242	24	1057
Cooker. Steam.....	A. Sherman.....	273,901	Mar. 13	852	231	23	958
Cooker. Steam.....	T. F. Timby.....	273,913	Mar. 13	866	235	23	990
Cooker. Steam.....	C. S. West.....	284,104	Aug. 28	2000	557	24	824
Cooking apparatus.....	H. L. Howse.....	271,463	Jan. 30	2041	587	23	408
Cooking apparatus. Steam.....	J. E. Welling.....	275,302	Apr. 3	335	146	23	1317
Cooking-boiler. Steam.....	A. E. Kuhns and G. D. Beattie.....	274,503	Mar. 27	1645	457	23	1139
Cooking-cabinet.....	A. Segal.....	273,169	Feb. 27	2006	564	23	813
Cooking-utensil.....	J. Campbell.....	284,608	Sept. 11	549	155 156	24	1003
Cooking utensil.....	J. Eyer, Jr.....	281,042	July 10	867	241	24	160



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Cooking-utensil .....	M. C. Lockwood .....	282,542	Aug. 7	79	23	24	513
Cooking-utensil .....	C. P. Simpson and S. Wilson .....	256,082	Oct. 2	373	103	25	68
Cooking-utensil .....	C. W. Taylor .....	274,408	Mar. 20	1494	412	23	1107
Cooking-utensil lifter .....	J. B. Fitzpatrick .....	280,596	July 3	311	87	24	56
Cooking-vessel. Steam .....	J. Ebbert .....	280,591	July 3	306	85	24	55
Cool atmosphere in rooms and apartments. Producing a cooler. See Beer-cooler. Lard-cooler. Candy-cooler. Liquid-cooler. Coffee-cooler. Milk-cooler. Evaporative cooler. Water-cooler. Grain-cooler.	H. D. Cogswell .....	272,653	Feb. 20	1351	379	23	691
Cooler and filter. Combined .....	S. Kalfus .....	274,339	Mar. 20	1413	387	23	1093
Cooler for liquids and solids .....	E. Johnson and J. Barnes .....	290,687	Dec. 25	1671	460	25	1201
Cooler for mash and other liquids .....	P. N. Bardo and T. Ford .....	270,367	Jan. 9	652	191	23	137
Cooling and freezing liquids. Apparatus for .....	H. Egells .....	272,667	Feb. 20	1366	383	23	694
Cooling and ventilating buildings. Apparatus for .....	C. A. Van Cort .....	282,474	July 31	2710	746	24	492
Cooling apparatus .....	H. Stollwerck .....	277,604	May 15	1577	431	23	1910
Cooling beer, &c. Apparatus for .....	J. W. Schorr .....	274,830	Mar. 27	2030	565	23	1208
Cooling-board. Undertaker's .....	G. T. Townsend .....	277,961	May 22	1763	481	23	1945
Cooling device. House .....	A. Zerban .....	269,983	Jan. 2	187	54	23	39
Cooling lard and like materials .....	E. Kells .....	284,212	Sept. 4	72	20	24	917
Cooling liquids. Apparatus for .....	E. E. Duryea and P. H. Grimm .....	271,436	Jan. 30	2000	577	23	401
Cooling or drying granular materials. Apparatus for .....	H. E. Niese and G. Dinkel .....	278,356	May 29	2298	628	23	2950
Cooling water. Apparatus for .....	R. M. Downie .....	285,472	Sept. 25	1607	451	24	1202
Coop. Chicken .....	E. L. Nash .....	290,346	Dec. 18	1211	339	25	1116
Coop. Poultry .....	H. J. Haight .....	270,307	Jan. 9	568	167	23	121
Coop. Poultry .....	H. J. Haight .....	280,815	July 10	597	167	24	112
Coop. Poultry .....	F. M. Woolard .....	275,314	Apr. 3	550	149	23	1320
Coping for walls .....	E. C. Clark .....	278,656	May 29	2659	727	23	2113
Cops. Apparatus for rewinding yarn from broken or damaged .....	R. L. Carr .....	276,668	May 1	159	41	23	1653
Copy-holder .....	A. Gerard .....	281,759	July 24	1795	490	24	331
Copy-holder and book-rest. Combined .....	G. Weinschenk .....	289,495	Nov. 27	1754	487	25	838
Copy-holder for printers .....	L. W. Sunderland .....	283,039	Aug. 14	675	190	24	627
Copying and printing press .....	F. D. Belknap .....	286,677	Oct. 16	1129	304	25	220
Copying-book. Manifold .....	J. R. Carter. (Reissne) .....	10,359	July 24	2127	583	24	388
Copying composition .....	H. S. Myers .....	287,457	Oct. 30	2121	576	25	412
Copying-press .....	J. S. Sammons .....	277,946	May 22	1746	476	23	1945
Copying-press .....	P. Schneider .....	271,525	Jan. 30	2116	608	23	421
Copying-press. Letter .....	E. Cope .....	289,983	Dec. 11	760	214	25	1028
Copying-presses. Cloth-steepers for .....	J. D. McIntosh .....	284,460	Sept. 4	366	102	24	966
Copying-roller .....	C. E. Baldwin .....	274,549	Mar. 27	1702	472	23	1149
Cord-coating machinery .....	R. E. Johnston .....	289,773	Dec. 4	495	137	25	972
Cord or twine elevator or holder. Automatic .....	G. G. Cook .....	272,211	Feb. 13	776	215	23	586
Cord, tape, &c. Device for holding .....	C. F. Sleeper .....	278,615	May 29	2609	711	23	2104
Cordage, webbing, &c. Machine for making .....	J. P. Tolman .....	276,201	Apr. 24	1711	473	23	1543
Core-box .....	R. M. Johnson .....	273,095	Feb. 27	1919	537	23	797
Core compound .....	W. T. Bausmith .....	270,625	Jan. 16	983	23	209	
Core or center. Contractible .....	W. H. Hoopes and G. Paist .....	278,551	May 29	2533	691	23	2091
Cores and molds. Apparatus for forming .....	F. Shickle .....	289,037	Nov. 27	1566	432	25	804
Cores. Forming .....	S. J. Adams .....	272,612	Feb. 20	1298	362	23	682
Cork and screw nozzle. Combined .....	E. Norton .....	287,046	Oct. 23	1603	441	25	309
Cork. Artificial .....	C. Grunzweig and P. Hartmann .....	275,904	Apr. 17	1350	223	23	1473
Cork-extractor .....	R. Morgan .....	270,095	Jan. 2	307	91	23	63
Cork puller or screw .....	F. Cappel .....	287,504	Oct. 30	2181	592	25	423
Cork-turner .....	G. W. Korn .....	283,900	Aug. 23	1728	487	24	836
Corks from bottles. Drawing .....	J. E. Berlien .....	278,388	May 29	2336	638	23	2057
Corks in bottles. Machine for wiring .....	G. C. Coon .....	273,964	Mar. 13	924	254	23	1000
Corks or bungs from bottles, casks, &c. Withdrawing .....	F. W. Russell .....	273,897	Mar. 13	847	230	23	987
Corking-machine .....	F. G. Riley .....	279,813	June 19	1473	413	23	2389
Corking machine. Bottle .....	C. Pfannenstiehl .....	274,221	Mar. 20	1258	347	23	1066
Corkscrew .....	W. Bennit .....	277,442	May 15	1154	310	23	1837
Corkscrew .....	M. Green .....	276,804	May 1	350	94	23	1687
Corkscrew .....	T. M. Strait .....	279,202	June 12	738	202	23	2259
Corkscrew .....	T. M. Strait .....	279,203	June 12	739	203	23	2259
Corkscrew .....	J. W. White .....	280,697	July 3	431	122	24	77
Corkscrew .....	C. T. Williamson .....	274,539	Mar. 27	1690	469	23	1147
Corkscrew. Hollow .....	S. T. McDougall .....	285,143	Sept. 18	1222	343	24	1127
Corkscrew. Lever .....	C. F. A. Wienke .....	283,731	Aug. 21	1520	429	24	789
Corkscrews to bottles. Attaching .....	J. E. Berlien .....	279,216	June 12	750	207	23	2261
Corn and bunion shield .....	J. J. Georges .....	281,487	July 17	1439	394	24	265
Corn and fodder binding device .....	T. G. Brooke .....	277,214	May 8	882	234	23	1783
Corn and other grain. Implement for shocking Indian .....	T. G. Conkling .....	285,395	Sept. 25	1518	427	24	1186
Corn crushing and splitting machine .....	E. A. Porter .....	285,512	Sept. 25	1651	464	24	1210
Corn cutter. Ear .....	J. N. Howser .....	277,284	May 8	959	258	23	1798
Corn cutter. Green .....	E. M. C. Anderson .....	287,080	Oct. 23	1647	452	25	318
Corn. Device for hanging seed .....	A. Belding .....	276,755	May 1	296	76	23	1676
Corn-drill .....	J. D. Arras .....	282,433	July 31	2663	730	24	485
Corn-dropping attachment .....	I. H. Athey .....	276,151	Apr. 24	1651	456	23	1534
Corn from the cob. Machine for cutting green .....	J. W. Brown, Jr. .....	273,457	Mar. 6	290	76	23	881
Corn from the cob. Machine for cutting green .....	D. E. Longsdorf .....	276,054	Apr. 17	1525	420	23	1503
Corn from the cob. Machine for cutting green .....	J. A. Smith .....	279,833	June 19	1501	420	23	2394
Corn from the cob. Machine for cutting green .....	S. D. Warfield .....	281,588	July 17	1556	427	24	285
Corn-husker .....	T. P. Fletcher .....	287,269	Oct. 23	1886	516	25	361
Corn husker, sheller, and separator. Combined .....	C. Roberts .....	278,824	June 5	201	58, 59	23	2157

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.		
				Spec.	Dr's	Vol.	Page.	
Corn-husking chair .....	J. Hansel .....	281,266	July 17	1161	321	24	219	
Corn-husking machine .....	W. Washington .....	282,173	Aug. 14	832	232	24	654	
Corn in the stalk and separating the kernels. Reducing .....	S. P. Goddard .....	290,571	Dec. 18	1524	419			25
Corn off the cob. Machine for cutting green .....	H. F. Zehnder .....	278,210	May 22	2078	572	23	2003	
Corn-sheller .....	H. W. Cornell .....	284,388	Sept. 4	282	573			78
Corn-sheller .....	C. P. Ferrier .....	275,623	Apr. 10	993	268	23	1404	
Corn-sheller .....	J. R. Hamilton .....	281,868	July 24	1932	269			23
Corn-sheller .....	G. H. Pattison .....	275,259	Apr. 3	479	528	23	1308	
Corn-sheller .....	G. Prichard .....	287,718	Oct. 30	2473	529			133
Corn-sheller .....	J. S. Pursley .....	281,921	July 24	1998	607	25	367	
Corn-sheller .....	J. T. Wilson .....	284,991	Sept. 11	1019	547	24	1086	
Corn-sheller elevator .....	W. O. Gotchall .....	288,426	Nov. 13	810	286	24	657	
Corn-sheller, feed-grinder, and horse-power. Combined .....	J. S. Tarr .....	272,495	Feb. 20	1151	810	25	656	
Corn-sheller. Hand .....	G. W. Gordon .....	274,588	Mar. 27	1753	486	23	1158	
Corn-sheller. Hand .....	J. G. Warren .....	280,887	July 10	679	191	24	127	
Corn silker. Green .....	C. P. Baile .....	287,083	Oct. 23	1650	453	25	318	
Cornstalk-cutter .....	G. J. Contancin, J. M. Scott, and J. Stumpff .....	281,025	July 10	845	235	24	157	
Cornet .....	G. W. L. Schweich .....	284,492	Sept. 4	403	113	24	972	
Cornet mouth-piece .....	H. E. Jones .....	275,918	Apr. 17	1366	376	23	1476	
Cornet tremolo attachment .....	W. S. Ditterline .....	282,448	July 31	2685	736	24	488	
Cornice .....	F. J. Geissinger .....	271,058	Jan. 23	1519	438	23	309	
Cornice .....	J. M. Montgomery, Jr. ....	289,299	Nov. 27	1874	520	25	862	
Cornice .....	S. R. Scott .....	270,851	Jan. 16	1262	364	23	262	
Cornice. Adjustable .....	A. D. Field .....	274,444	Mar. 20	1551	425	23	1116	
Cornice. Adjustable window .....	W. C. Hamnett .....	270,425	Jan. 9	730	214	23	152	
Cornice and cornice-pole. Combined .....	J. W. Campbell .....	281,340	July 17	1252	348	24	234	
Cornice and curtain-pole. Combined window .....	J. M. Hough .....	282,323	July 31	2520	691	24	450	
Cornice-hook .....	T. C. Richards .....	283,280	Aug. 14	970	271	24	680	
Cornice-packing case .....	A. D. Field .....	269,927	Jan. 2	123	37	23	26	
Cornice-pole and curtain-suspender .....	C. F. Grimmett and J. Cook .....	288,231	Nov. 13	545	150	25	612	
Cornice-pole joint .....	W. H. Edsall .....	288,319	Nov. 13	658	182	25	630	
Cornice-pole support .....	J. Day .....	278,892	June 5	295	85	23	2174	
Cornice. Window .....	F. C. Burt .....	273,459	Mar. 6	283	77	23	882	
Cornice. Window .....	J. W. Campbell .....	273,814	Mar. 13	743	203	23	970	
Cornice. Window .....	E. Kugemann .....	271,718	Feb. 6	157	43	23	467	
Cornice. Window .....	M. Linz .....	289,544	Dec. 4	914	60	25	924	
Cornice. Window-curtain .....	C. Eberly .....	279,232	June 12	770	212	23	2264	
Corse-lifter .....	J. M. Jacobsen .....	286,202	Oct. 9	518	143	25	106	
Corset .....	C. F. Allen .....	270,360	Jan. 9	635	187	23	134	
Corset .....	C. M. A. Barry .....	281,659	July 24	1657	451	24	307	
Corset .....	A. H. Bowers .....	290,843	Dec. 25	1874	452			517
Corset .....	M. P. Bray .....	271,780	Feb. 6	235	66	23	481	
Corset .....	M. P. Bray .....	275,982	Apr. 17	1440	397	23	1490	
Corset .....	M. P. Bray .....	279,323	June 12	888	246	23	2283	
Corset .....	M. P. Bray .....	280,565	July 3	274	75	24	49	
Corset .....	M. P. Bray .....	289,969	Dec. 11	741	209	25	1024	
Corset .....	R. V. Cable .....	270,739	Jan. 16	1135	325	23	237	
Corset .....	C. N. Chadwick .....	274,272	Mar. 20	1319	326			364
Corset .....	F. D. Cooke .....	279,345	June 12	919	256	23	2289	
Corset .....	F. D. Cooke .....	281,462	July 17	1406	386	24	260	
Corset .....	J. E. Doolittle and H. C. Sherwood .....	273,042	Feb. 27	1849	518	23	785	
Corset .....	S. B. Ferris .....	271,618	Feb. 6	42	10	11	23	448
Corset .....	J. H. Hayward .....	276,397	Apr. 24	1967	544	23	1587	
Corset .....	J. Henniger .....	270,062	Jan. 2	277	82	23	57	
Corset .....	C. W. Higby .....	275,652	Apr. 10	1030	278	23	1410	
Corset .....	C. W. Higby .....	275,653	Apr. 10	1031	278	23	1410	
Corset .....	J. A. House .....	273,280	Mar. 6	41	13	23	841	
Corset .....	E. C. Hurlbut .....	270,222	Jan. 9	472	138	23	103	
Corset .....	M. F. Linquist .....	280,638	July 3	361	100	24	63	
Corset .....	W. Ritzmann .....	273,393	Mar. 6	201	54	23	868	
Corset .....	S. H. Rosenberg .....	274,387	Mar. 20	1467	402	23	1102	
Corset .....	H. S. Strauss .....	271,377	Jan. 30	1926	557	23	387	
Corset .....	I. Strouse .....	274,405	Mar. 20	1491	411	23	1107	
Corset .....	J. C. Tallman .....	279,041	June 5	525	143	23	2213	
Corset .....	J. Waterman .....	290,822	Dec. 25	1852	512	25	1234	
Corset .....	C. H. Williams .....	272,179	Feb. 13	737	203	23	579	
Corset .....	C. H. Williams .....	276,114	Apr. 17	1605	204			442
Corset. Brace .....	V. Whittington .....	283,050	Aug. 14	688	193	24	629	
Corset-clasp .....	M. P. Bray .....	277,671	May 15	1425	384	23	1882	
Corset-clasp .....	T. C. Candlish .....	279,910	June 26	1600	449	23	2418	
Corset-clasp .....	J. M. Cohn .....	288,022	Nov. 6	297	83	25	558	
Corset-clasp .....	J. M. Cohn .....	288,023	Nov. 6	297	84	25	558	
Corset-clasp .....	C. W. Foster .....	284,730	Sept. 11	707	198	24	1020	
Corset-clasp .....	T. F. Gaynor .....	288,171	Nov. 6	464	130	25	588	
Corset-clasp .....	M. W. Henius .....	278,430	May 29	2388	651	23	2066	
Corset-clasp .....	C. F. Lanfer .....	281,771	July 24	1810	494	24	334	
Corset-clasp .....	A. Ottenheimer .....	276,978	May 1	578	152	23	1725	
Corset-clasp fastening .....	W. F. Gilbert .....	287,660	Oct. 30	2395	646	25	465	
Corset-clasp fastening and protector .....	T. C. Bates .....	287,997	Nov. 6	267	75	25	553	
Corset fabric .....	J. G. Kienle .....	281,519	July 17	1477	405	24	273	
Corset-lacing .....	B. Baldwin .....	273,798	Mar. 13	724	196	23	967	
Corset. Nursing .....	I. Strouse .....	285,704	Sept. 25	1881	536	24	1253	
Corset-press .....	J. M. Bishop .....	284,533	Sept. 4	456	129	24	981	
Corset-protector .....	S. R. Raffle .....	278,043	May 22	1867	510	23	1967	



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Corset-spring	M. P. Bray	270,380	Jan. 9	667	196	23	140
Corset-spring	M. F. Linquist	286,453	Oct. 9	843	228	25	164
Corset-stay	A. Kelley	283,611	Aug. 21	1372	384	24	760
Corset-stay-plate	J. A. Ray	281,792	July 24	1841	503	24	339
Corset-stiffener	E. K. Warren	286,749	Oct. 16	1221	330	25	236
Corsets. Apparatus for forming and shaping	J. A. House	288,637	Nov. 20	1068	294	25	709
Cosmetic wash	B. E. Buse	277,221	May 8	888		23	1784
Cot.	A. W. Martial	270,961	Jan. 23	1409	406	23	292
Cot. Folding	G. E. Bedell	274,455	Mar. 27	1567	429	23	1127
Cot. Folding	C. W. Powers, Jr.	273,306	Mar. 6	81	24	23	847
Cot. Folding	E. F. Vance	289,584	Dec. 4	267	75	25	934
Cotton and hay press	B. Babcock	277,101	May 8	745	196	23	1759
Cotton and hay press	H. M. Meetze	279,174	June 12	710	193	23	2254
Cotton and hay press					194		
Cotton and hay press	W. D. Slauson	287,734	Oct. 30	2494	671	25	483
Cotton and other fibers. Machine for cleaning	J. Graner	271,578	Jan. 30	2176	672		
Cotton-buncher	J. L. Goodin	270,786	Jan. 16	1191	626	23	431
Cotton-chopper	J. H. Brown	276,557	May 1	14	344	23	248
Cotton-chopper	W. S. Craig	271,801	Feb. 6	259	72	23	486
Cotton-chopper	W. J. Irwin	274,780	Mar. 27	1976	550	23	1198
Cotton-chopper	F. E. Kemp and E. A. Mock	276,599	May 1	71	19	23	1640
Cotton-chopper	W. H. Mercer	279,966	June 26	1673	470	23	2430
Cotton-chopper	M. S. Michaelis	270,824	Jan. 16	1233	356	23	256
Cotton-chopper	E. L. Mowrey	273,586	Mar. 6	448	121	23	911
Cotton-chopper	R. R. Pace	281,125	July 10	970	271	24	178
Cotton chopper and cultivator	B. J. Curry	284,389	Sept. 4	283	79	24	952
Cotton chopper and cultivator	F. A. Pettitt	277,777	May 15	1548	421	23	1905
Cotton chopper and scraper	W. R. Russell	281,205	July 10	1076	296	24	197
Cotton chopper, cultivator, and plow	H. C. White	284,930	Sept. 11	942	264	24	1072
Cotton-cleaner	C. W. Turner	275,095	Apr. 3	284	78	23	1275
Cotton-cleaner	W. Wimpey and J. C. Printup	283,733	Aug. 21	1522	429	24	789
Cotton cleaner and condenser	F. Baltzell	271,297	Jan. 30	1816	527	23	368
Cotton cleaner and condenser	W. H. Sawyer	286,334	Oct. 9	706	188	25	138
Cotton cleaner and feeder	A. J. Williams	284,151	Aug. 28	2065	572	24	894
Cotton-cleaner and gin-feeder					573		
Cotton-cleaner and gin-feeder	Z. F. Nance	287,153	Oct. 23	1736	475	25	335
Cotton-cleaner and gin-feeder					476		
Cotton cleaner. Seed	A. T. Atherton	288,152	Nov. 6	440	124	25	584
Cotton-condenser	F. M. Sewell	280,868	July 10	659	185	24	123
Cotton-conveyer	A. D. Thomas	281,319	July 17	1227	340	24	230
Cotton, corn, and tobacco fender	M. F. Dnncean and E. E. Coyle	290,009	Dec. 11	796	224	25	1033
Cotton, &c. Device for packing	D. C. Summers	280,333	June 26	2115	593	23	2508
Cotton elevator and distributor	S. W. Bartholomew	284,359	Sept. 4	245	68	24	946
Cotton elevator and distributor	A. D. Thomas	275,960	Apr. 17	1411	369	23	1465
Cotton-gathering machine	B. J. Curry	273,035	Feb. 27	1842	515	23	784
Cotton-gin	W. B. Burdine	271,570	Jan. 30	2168	624	23	430
Cotton-gin	T. Camp	277,223	May 8	889	237	23	1784
Cotton-gin	G. Forshaug	277,417	May 8	1113	299	23	1824
Cotton-gin	R. R. Gwathmey	278,134	May 22	1983	544	23	1987
Cotton-gin					545		
Cotton-gin	C. H. Merry	285,144	Sept. 18	1222	343	24	1127
Cotton-gin	J. D. Milburn	274,806	Mar. 27	2003	557	23	1203
Cotton-gin					558		
Cotton-gin	J. D. Milburn	276,447	Apr. 24	2036	561	23	1598
Cotton-gin	G. N. Osgood	284,223	Sept. 4	87	24	24	919
Cotton-gin	D. S. Rogan	280,082	June 26	1815	511	23	2456
Cotton-gin and linter saws. Machine for filing	W. H. Blanchard	280,900	July 10	691	194	24	128
Cotton-gin brush	T. Kihnenman	273,692	Mar. 6	581	154	23	933
Cotton-gin building	B. F. Ferguson	273,048	Feb. 27	1854	519	23	786
Cotton-gin building					520		
Cotton-gin cleaner and feeder combined	W. L. Crowson	279,720	June 19	1374	383	23	2372
Cotton-gin feeder	W. O. Coleman	278,402	May 29	2351	643	23	2059
Cotton-gin feeder	M. L. Nix	274,961	Apr. 3	103	28	23	1242
Cotton-gin feeder	A. L. Stietenroth	278,195	May 22	2059	567	23	2000
Cotton-gin hopper	E. G. Horne	272,694	Feb. 20	1399	392	23	700
Cotton-gin hopper					393		
Cotton-gin power	L. R. Nolan	276,454	Apr. 24	2035	565	23	1599
Cotton-gin rib	W. S. Anderson	278,073	May 22	1897	520	23	1972
Cotton-gin rib	W. Deering	289,996	Dec. 11	778	219	25	1030
Cotton-gin rib	W. Merritt	280,498	July 3	202	53	24	37
Cotton-gin rib	W. S. Reeder	290,471	Dec. 18	1387	383	25	1146
Cotton-gin rib	A. J. Williams	284,152	Aug. 28	2066	573	24	895
Cotton-gins. Feed-governor for	H. P. Schaefer	289,718	Dec. 4	439	123	25	963
Cotton-gins, mills, &c. Driving machinery for	W. H. Davis	277,240	May 8	912	244	23	1789
Cotton-opener	R. Kitson	289,004	Nov. 27	1519	420	25	796
Cotton opener and lapper	R. Kitson	272,709	Feb. 20	1416	397	23	703
Cotton-picker	G. N. Todd	271,160	Jan. 23	1644	473	23	330
Cotton-picker. Hand	E. V. D. Miller	280,651	July 3	376	105	24	66
Cotton-pickers. Vehicle for	J. T. Reid	273,157	Feb. 27	1990	560	23	810
Cotton-picking machine					408		
Cotton-picking machine	C. C. Price, Jr.	279,799	June 19	1458	409	23	2387
Cotton-press	J. W. Hobbs	273,080	Feb. 27	1887	530	23	792
Cotton-press	W. B. Ingram	271,467	Jan. 30	2047	589	23	409
Cotton-press	E. M. Ivens	284,208	Sept. 4	65	18	24	916
Cotton-press	A. McKay	290,696	Dec. 25	1681	463	25	1203
Cotton-press	R. D. Thompson	281,259	Sept. 4	128	35, 36	24	926
Cotton-press	R. R. Tugwell	281,210	July 10	1081	297	24	198
Cotton-press. Self-packing	L. C. Rummel and E. J. Fiedler	285,765	Sept. 25	1967	537	24	1267
Cotton-scraper	W. H. Mercer	281,103	July 40	935	262	24	173

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'Gt	Vol.	Page.
Cotton scraper and cultivator.....	W. C. Thompson .....	290,814	Dec. 25	1841	{ 509 510 }	25	1233
Cotton-seed-oil residue, &c. Utilizing.....	J. Longmore .....	284,313	Sept. 4	191		24	937
Cotton separator and cleaner. Seed.....	W. O. Coleman .....	278,401	May 29	2349	642	23	2059
Cotton separator and cleaner. Seed.....	W. O. Coleman .....	281,671	July 24	1673	456	24	310
Cotton separator and cleaner. Seed.....	W. O. Coleman .....	282,057	July 31	2166	{ 594 595 }	24	401
Cotton-stalk chopper.....	L. B. Stith .....	281,577	July 17	1543	422	24	283
Cotton-stalk cutter.....	J. M. Stone .....	274,670	Mar. 27	1847	515	23	1176
Cotton thinner and cultivator.....	W. Wilkes .....	283,181	Aug. 14	844	236	24	656
Cough-sirup.....	S. R. Scoggins .....	283,029	Aug. 14	664		24	625
Counter-machine.....	M. Hynes .....	285,134	Sept. 18	1207	339	24	1124
Counter-rail or arm-rest bracket.....	E. F. Seidel .....	281,405	July 17	1331	309	24	247
Counter-seat.....	J. Pullen .....	271,511	Jan. 30	2099	603	23	418
Counter-stiffener machine.....	J. L. Hatch .....	286,432	Oct. 9	819	222	25	159
Counters. Foot-railing for.....	J. Gaetje .....	285,403	Sept. 25	1526	430	24	1187
Countersink for bits.....	R. J. Welles .....	277,859	May 15	1641	447	23	1922
Counting and registering the revolutions of a rotating shaft. Instrument for.....	G. D. Kittoe .....	279,095	June 5	596	162	23	2225
Coupling:							
<i>See</i> Bell-cord coupling. Pipe and hose coupling.							
Belt-coupling. Pitman-coupling.							
Brake-rod coupling. Pump-rod coupling.							
Car-coupling. Railway-rail coupling.							
Carriage-coupling. Screw-conveyer coupling.							
Clothes-line-coupling. Shaft-coupling.							
Crank-coupling. Shafting-coupling.							
Drop-light-pipe coupling. Swivel-coupling.							
Eccentric-coupling. Telegraph-wire coupling.							
Electrical-conductor coupling. Thill-coupling.							
Faucet-coupling. Trace-coupling.							
Harness-coupling. Tube-coupling.							
Harrow-coupling. Universal-joint coupling.							
Hose-coupling. Vehicle-reach coupling.							
Lightning-rod coupling. Wagon-reach coupling.							
Pipe-coupling. Whip-coupling.							
Wire-coupling. Yoke-coupling.							
Coupling for bell-cords, &c.....	G. W. Nock .....	279,267	June 12	812	225	23	2272
Coupling for wires and electric conductors.....	H. F. Pumphrey .....	270,478	Jan. 9	790	231	23	164
Coupling-link.....	H. M. Jones .....	271,713	Feb. 6	151	42	23	466
Coupling-link.....	I. H. Trabue .....	270,860	Jan. 16	1270	367	23	263
Coupling-link. Spring.....	G. A. Baker .....	271,592	Feb. 6	9	3	23	442
Coupling-retainer.....	W. W. Nevegold .....	270,462	Jan. 9	771	226	23	160
Coupon-clipper.....	W. F. Stark .....	284,773	Sept. 11	759	211	24	1039
Coupon-shears.....	G. S. Van Pelt .....	274,998	Apr. 3	144	41	23	1250
Cover for chamber-pails, &c.....	H. Stone .....	287,189	Oct. 23	1785	489	25	343
Cover handle. Vessel.....	J. Chaumont .....	276,772	May 1	315	82	23	1680
Cover. Pan.....	S. C. Dowdell .....	287,425	Oct. 30	2083	566	25	404
Cover. Vessel.....	A. F. Tripp .....	288,139	Nov. 6	428	120	25	582
Cover. Vessel.....	S. J. and N. T. Wilson .....	286,755	Oct. 16	1227	331	25	238
Covering heated surfaces. Material for.....	E. H. Rust .....	283,819	Aug. 28	1637	461	24	820
Covering. Non-conducting.....	H. C. Goodell .....	274,313	Mar. 20	1373	376	23	1095
Covering. Non-conducting.....	G. Kelly .....	273,687	Mar. 6	576	153	23	932
Covering. Non-conducting.....	G. Kelly .....	278,559	May 29	2540	693	23	2092
Coverings. Lining for non-conducting.....	G. Kelly .....	273,688	Mar. 6	577	153	23	933
Cow-tail holder.....	I. C. Mayo .....	281,543	July 17	1502	412	24	276
Cracker-machine.....	D. H. Cornell and A. Schincke .....	281,464	July 17	1408	387	24	261
Cracker-machine.....	C. S. Fowler and L. A. Rockwell .....	288,989	Nov. 27	1503	416	25	794
Cracker-screen.....	C. H. Nichols .....	282,465	July 31	2702	743	24	491
Cradle.....	F. W. Barker .....	274,454	Mar. 27	1567	429	23	1127
Cradle.....	W. H. Burgess .....	281,966	July 24	2055	563	24	376
Cradle and seesaw. Combined.....	J. W. Hill .....	273,530	Mar. 6	371	98	23	898
Cradle. Grain.....	G. W. Kemper and J. B. Cartwright .....	271,335	Jan. 30	1867	541	23	376
Cradle-motor.....	T. Logan .....	277,753	May 15	1518	412	23	1889
Cranberry-gatherer.....	D. Lambert .....	289,846	Dec. 11	597	166	25	998
Cranberry-screen.....	W. F. Hammond .....	280,372	July 3	40	11	24	9
Crane.....	J. A. Caldwell .....	284,274	Sept. 4	144	40	24	928
Crane.....	T. W. Capen .....	271,311	Jan. 30	1830	{ 531 532 }	23	371
Crane.....	S. H. Edgerly .....	282,869	Aug. 7	473	133	24	584
Crane.....	T. R. Morgan, Sr .....	290,260	Dec. 18	1096	{ 305 306 307 308 309 }	25	1096
Crane and derrick. Traveling.....	J. Thompson .....	272,987	Feb. 27	1780	498	23	772
Crane. Brake mechanism for a trolley of a.....	T. A. Weston .....	272,608	Feb. 20	1293	{ 360 361 }	23	680
Crane, derrick, &c. Traveling.....	J. Thompson .....	272,988	Feb. 27	1781	499	23	772
Crane. Hoisting.....	J. Le Duke .....	290,074	Dec. 11	869	247	25	1047
Crane or derrick.....	W. H. Glendon .....	272,236	Feb. 13	808	225	23	592
Crane-swinging machinery.....	H. T. Stock .....	283,037	Aug. 14	673	189	24	627
Crane. Traveling.....	H. M. Barnhart and B. Huber .....	285,100	Sept. 18	1163	{ 325 326 }	24	1117
Crane. Traveling.....	T. W. Capen .....	270,279	Jan. 9	533	{ 156 157 197 }	23	114
Crane. Traveling.....	T. W. Capen .....	270,386	Jan. 9	672	{ 198 199 200 201 }	23	141
Crane. Traveling.....	T. W. Capen .....	278,774	June 5	121	34	23	2144



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Crane. Traveling	T. W. Capen	278,775	June 5	122	34, 35	23	2144
Crane. Traveling	F. K. Kempson	279,765	June 19	1420	397	23	2380
Crank	J. Gosweiler	283,099	Aug. 14	747	210	24	640
Crank-coupling	J. R. Fry, Jr.	290,565	Dec. 18	1518	418	25	1169
Crank-coupling	E. E. Hyatt	289,266	Nov. 27	1833	506	25	853
Crank-movement in steam-engines and other machinery.	J. M. Smith	273,624	Mar. 6	492	132	23	918
Crate:							
See Egg-crate.	Fruit-crate.						
Crate. Chicken	J. S. Falconer	273,496	Mar. 6	325	88	23	889
Crate for fowls	T. F. Woodside	275,969	Apr. 17	1422	392	23	1487
Crate for fowls. Folding	T. F. Woodside	275,968	Apr. 17	1421	392	23	1487
Crate for transportation of window and plate glass	R. D. Flynn	271,827	Feb. 6	293	80	23	492
Crate or box. Folding shipping	J. McIntyre	276,850	May 1	405	107	23	1697
Crate. Return	W. C. R. Smith and J. B. Morton	283,930	Aug. 28	1766	499	24	844
Crates. Form for making	R. Miller	285,053	Sept. 18	1109	309	24	1108
Cravat-supporter	F. Smiley	279,031	June 5	512	140	23	2210
Crayon-holder	J. Pusey	275,517	Apr. 10	855	232	23	1380
Crayon-holder. Automatic	C. Andrew	276,128	Apr. 17	1621	446	23	1520
Crayon-molds. Device for making	C. H. Bill	273,442	Mar. 6	259	70	23	877
Crayon or lead holder	H. C. Hunt	286,615	Oct. 16	1053	283	25	207
Cream and milk transporter	J. E. Baggett	285,724	Sept. 25	1914	543	24	1258
Cream. Apparatus for souring	N. C. Madsen and H. J. Nielsen	279,876	June 19	1555	435	23	2404
Cream-can	C. H. Blossom	283,958	Aug. 28	1802	510	24	851
Cream from milk. Raising	H. W. Kellogg	269,864	Jan. 2	51	16	23	13
Cream-gage	A. P. Petrelin	289,855	Dec. 11	606	169	25	1000
Cream of tartar. Apparatus for treating argols in the manufacture of	A. Dreyfus	277,016	May 8	629	165	23	1740
Cream-puff filler	J. H. Mount	288,843	Nov. 20	1324	363	25	753
Cream-transportation tank	C. D. Elder	285,348	Sept. 18	1450	409	24	1169
Creamer	C. G. Graves	274,485	Mar. 27	1623	450	23	1135
Creamer	D. K. Pomeroy	276,460	Apr. 24	2043	568	23	1600
Creamer	A. Snyder	282,678	Aug. 7	241	70	24	541
Creamer. Centrifugal	H. F. Bond	286,769	Oct. 16	1245	337	25	241
Creamer. Centrifugal	L. B. Nielsen	281,916	July 24	1992	546	24	366
Creaming-can	F. W. Brainerd	284,172	Sept. 4	16	5	24	907
Creaming-machine. Centrifugal	H. Petersen	288,732	Nov. 20	1196	326	25	729
Creasing-machine	H. F. Osborne	276,271	Apr. 24	1792	498	23	1558
Creasing-wheel	H. F. Osborne	275,848	Apr. 17	1285	353	23	1461
Creel for speeling and warping machines	G. L. Tarr	287,338	Oct. 23	1971	538	25	377
Crib and table. Interconvertible	S. S. Burr	274,716	Mar. 27	1896	529	23	1184
Crib, chair, and commode. Combined	J. B. Rohrer	276,633	May 1	110	29	23	1646
Crib. Child's	C. S. Comins	286,666	Oct. 16	1144	308	25	923
Crib. Child's	I. R. Opdyke	275,070	Apr. 3	249	69	23	1268
Crib. Folding	C. S. Comins	274,467	Mar. 27	1580	433	23	1129
Crib. Folding	C. S. Comins	279,134	June 12	667	183	23	2947
Crib. Folding	M. Keating	273,102	Feb. 27	1928	540	23	798
Crib. Trundle	C. T. Shepard	274,982	Apr. 3	126	35	23	1247
Cribbing-plate	A. Quinke	287,577	Oct. 30	2284	618	25	444
Crimp-protector	G. C. Humphries	272,698	Feb. 20	1404	394	23	700
Crimping-forms. Machine for the manufacture of	J. W. D. Fifield	281,856	July 24	1918	524	24	353
Crimping-machine	J. Holmes	276,408	Apr. 24	1978	547	23	1588
Crimping. Machine for radial	J. McCreary and D. R. Smith	284,749	Sept. 11	729	204	24	1034
Crimping. Machine for radial	J. McCreary and D. R. Smith	285,424	Sept. 25	1554	438	24	1192
Crimping. Method of and machine for radial	D. R. Smith and J. McCreary	283,360	Aug. 14	1077	302	24	701
Crimping-tool. Hand	J. Fishwick	271,052	Jan. 23	1513	436	23	309
Crochet needle	J. H. Doolittle	287,109	Oct. 23	1686	462	25	326
Croquet set	A. D. F. Farley	280,807	July 10	587	164	24	110
Cross-head guides. Machinery for grinding or polishing	C. T. Parry	270,106	Jan. 2	319	94	23	65
Cross. Knights-Templar	S. E. Mosher	289,851	Dec. 11	603	168	25	999
Cross-tie. Iron	J. Parr	277,333	May 8	1023	274	23	1808
Crucible	G. Nimmo	271,105	Jan. 23	1579	454	23	319
Crucible and means for heating the same	J. E. Bett	285,214	Sept. 18	1299	365	24	1141
Crucible-furnace. Gas	L. Stilwell	275,284	Apr. 3	510	141	23	1313
Crucible. Metal	M. and S. H. Darragh	282,279	July 31	2457	676	24	449
Crucible, muffle, &c	T. Eggleston	284,287	Sept. 4	159	44	24	931
Crucibles. Protecting plumbago	W. Tatham	281,159	July 10	1009		24	185
Crupper. Harness	J. Shaffer	277,516	May 15	1236	333	23	1851
Crupper-pad. Metallic	C. Tobias	273,641	Mar. 6	512	138	23	922
Crusher:							
See Clay-crusher.	Ore and rock crusher.						
Clod-crusher.	Rock-crusher.						
Ore-crusher.	Rotary crusher.						
Crusher and pulverizer	M. A. Shepard	277,071	May 8	711	184	23	1753
Crushing and grinding machine	C. Kimplen	281,887	July 24	1956	534	24	360
Crushing and grinding machine	G. J. Shimer	287,876	Nov. 6	105	31, 32	25	526
Crushing and pulverizing apparatus	A. E. Griffiths	288,940	Nov. 20	1439	396	25	775
Crushing and pulverizing machine	G. Sibley	275,719	Apr. 10	1106	303	23	1423
Crushing-mill	F. A. Huntington	277,134	May 8	795	208	23	1768
Crutch	A. Schoeninger	288,368	Nov. 13	735	199	25	643
Crutches, heels, &c. Rubber holder for	G. H. Thurzo	282,132	July 31	2283	626	24	419
Cuff	S. H. Haas	284,839	Sept. 11	837	234	24	1053
Cuff	I. P. Turner	269,973	Jan. 2	178	51, 52	23	37
Cuff and collar fastener	J. M. Williams	273,656	Mar. 6	530	143	23	925
Cuff-holder	J. F. Atwood	289,057	Nov. 27	1590	440	25	808

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Cuff-holder .....	E. A. Robbins .....	277,612	May 15	1357	365	23	1870
Cuff-holder and sleeve-button. Combined .....	W. H. Hackett .....	272,240	Feb. 13	814	226	23	593
Culinary boiler .....	W. S. Fickett .....	285,351	Sept. 18	1453	400	24	1169
Culinary heater .....	W. H. Benson .....	271,774	Feb. 6	226	63	23	479
Culinary utensil .....	L. Haas .....	276,939	June 5	399	110	23	2191
Culinary vessel .....	H. B. Asbury, F. A. Neider, and G. Grossmann .....	252,252	July 31	2427	667	24	444
Culinary vessel .....	F. Schifferle .....	271,744	Feb. 6	191	53	23	473
Culinary vessel .....	F. Schifferle .....	271,745	Feb. 6	192	53	23	473
Culinary vessel .....	J. A. Stabel .....	282,394	July 31	2607	716	24	475
Culinary vessel .....	E. A. Stears .....	273,629	Mar. 6	498	134	23	919
Cultivating-machine .....	J. A. Kay .....	273,101	Feb. 27	1926	539	23	798
Cultivator .....	J. H. Albright .....	289,055	Nov. 27	1588	439	25	808
Cultivator .....	F. M. Allen .....	273,426	Mar. 6	238	64	23	875
Cultivator .....	G. Allen .....	269,987	Jan. 2	193	56	23	40
Cultivator .....	J. H. Allen .....	271,586	Feb. 6	3	1	23	441
Cultivator .....	J. H. Allen .....	268,292	Nov. 13	622	170	25	624
Cultivator .....	S. L. Allen .....	281,426	July 17	1357	374	24	251
Cultivator .....	E. B. Bellinger .....	290,960	Dec. 25	2022	558	25	1263
Cultivator .....	J. M. Blade .....	288,764	Nov. 20	1233	338	25	736
Cultivator .....	B. C. Bradley .....	270,629	Jan. 16	990	286	23	210
Cultivator .....	A. E. Brooks .....	275,577	Apr. 10	926	251	23	1392
Cultivator .....	E. Case .....	270,887	Jan. 23	1311	379	23	276
Cultivator .....	J. B. Christian .....	284,379	Sept. 4	267	74	24	949
Cultivator .....	J. B. Christian .....	284,380	Sept. 4	268	75	24	949
Cultivator .....	J. W. Collins .....	276,160	Apr. 24	1662	458	23	1535
Cultivator .....	J. W. Cook .....	290,539	Dec. 18	1478	408	25	1162
Cultivator .....	W. J. Davidson .....	282,852	Aug. 7	432	127	24	580
Cultivator .....	E. P. Davis .....	275,159	Apr. 3	362	99	23	1289
Cultivator .....	J. B. Day and T. J. Gregory .....	285,469	Sept. 25	1605	451	24	1202
Cultivator .....	S. and R. Day .....	274,920	Apr. 3	44	11	23	1233
Cultivator .....	A. W. Diefendorf and P. H. Merrill .....	271,432	Jan. 30	1998	576	23	401
Cultivator .....	J. B. Ennis .....	280,021	June 26	1744	489	23	2443
Cultivator .....	T. M. Flenniken .....	273,673	Mar. 6	556	148	23	929
Cultivator .....	W. J. Flowers .....	284,403	Sept. 4	290	84	24	954
Cultivator .....	S. French .....	289,824	Dec. 11	563	158	25	992
Cultivator .....	L. Gray .....	283,775	Aug. 28	1584	447	24	812
Cultivator .....	E. T. Gregg .....	274,590	Mar. 27	1755	487	23	1158
Cultivator .....	A. Hall .....	282,885	Aug. 7	491	138	24	537
Cultivator .....	B. J. Hall and J. E. Mustard .....	284,734	Sept. 11	712	199	24	1031
Cultivator .....	R. D. Hall .....	289,093	Nov. 27	1632	451	25	815
Cultivator .....	E. R. Ham .....	278,541	May 29	2520	688	23	2089
Cultivator .....	G. W. Hammond .....	278,543	May 29	2522	688	23	2089
Cultivator .....	J. C. Hart .....	273,071	Feb. 27	1878	527	23	790
Cultivator .....	P. Hien and A. H. Grimm .....	284,960	Sept. 11	981	276	24	1079
Cultivator .....	J. H. Hooper .....	279,245	June 12	786	216	23	2267
Cultivator .....	H. Ives .....	290,059	Dec. 11	851	242	25	1043
Cultivator .....	J. C. and I. Jay and B. L. Chambers .....	282,198	July 31	2366	651	24	432
Cultivator .....	T. B. Jewett .....	274,784	Mar. 27	1980	551	23	1199
Cultivator .....	F. H. Johnson .....	272,701	Feb. 20	1407	395	23	701
Cultivator .....	E. W. Joy. (Reissue) .....	10,297	Mar. 20	1565	428	23	1119
Cultivator .....	S. D. B. Kise .....	274,616	Mar. 27	1783	496	23	1164
Cultivator .....	W. A. Knowlton .....	287,443	Oct. 30	2102	571	25	408
Cultivator .....	J. N. Lamm .....	290,778	Dec. 25	1794	495	25	1224
Cultivator .....	J. Lane .....	275,502	Apr. 10	835	226	23	1377
Cultivator .....	J. L. Laughlin .....	274,126	Mar. 20	1137	313	23	1044
Cultivator .....	G. W. Lilly and J. E. Norman .....	290,440	Dec. 18	1343	372	25	1139
Cultivator .....	A. W. Livingston .....	282,540	Aug. 7	77	22	24	513
Cultivator .....	L. Luppen .....	274,798	Mar. 27	1994	554	23	1201
Cultivator .....	D. N. Luse and J. W. Bell .....	284,565	Sept. 4	490	138	24	987
Cultivator .....	S. O. Mason .....	282,341	July 31	2544	697	24	464
Cultivator .....	M. W. McCann .....	283,910	Aug. 25	1739	491	24	838
Cultivator .....	J. T. McIntire .....	278,577	May 29	2559	698	23	2096
Cultivator .....	R. K. Nichols .....	289,127	Nov. 27	1673	464	25	823
Cultivator .....	A. N. Norris .....	272,050	Feb. 13	618	167	23	559
Cultivator .....	J. H. Nutting .....	274,962	Apr. 3	104	29	23	1242
Cultivator .....	W. Ord .....	287,956	Nov. 6	208	60	25	544
Cultivator .....	F. K. Orvis .....	275,846	Apr. 17	1283	352	23	1460
Cultivator .....	F. K. Orvis .....	275,847	Apr. 17	1284	353	23	1460
Cultivator .....	W. H. Parlin .....	276,272	Apr. 24	1793	499	23	1558
Cultivator .....	W. B. Patterson .....	281,126	July 10	971	272	24	178
Cultivator .....	W. H. Pennock .....	275,260	Apr. 3	480	134	23	1308
Cultivator .....	J. Platten, Sr. .....	288,111	Nov. 6	398	112	25	577
Cultivator .....	C. W. Post .....	279,960	June 26	1686	473	23	2432
Cultivator .....	H. C. Pratt .....	289,708	Dec. 4	429	120	25	961
Cultivator .....	C. A., J. H., and A. P. Rainwater .....	285,073	Sept. 18	1129	316	24	1112
Cultivator .....	C. D. Reed .....	290,111	Dec. 11	912	258	25	1055
Cultivator .....	H. C. Rikard .....	284,062	Aug. 28	1948	544	24	875
Cultivator .....	H. H. Sator .....	276,718	May 1	242	61	23	1666
Cultivator .....	H. H. Sator .....	278,366	May 29	2311	632	23	2052
Cultivator .....	A. Schott .....	289,926	Aug. 28	1760	497	24	842
Cultivator .....	G. F. Skank .....	272,490	Feb. 20	1145	321	23	635
Cultivator .....	H. L. Smith .....	277,949	May 22	1750	477	23	1946
Cultivator .....	S. P. Snyder, S. Stough, and T. D. Ulrich .....	290,366	Dec. 18	1234	347	25	1124
Cultivator .....	G. W. Stacy .....	285,618	Sept. 18	1415	400	24	1163



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Cultivator .....	H. V. Thompson.....	228,514	Nov. 13	919	251	25	675
Cultivator .....	J. G. Trump .....	287,196	Oct. 23	1796	492	25	345
Cultivator .....	D. Unthank .....	278,672	May 29	2678	733	23	2116
Cultivator .....	M. L. Utter .....	276,984	May 1	585	154	23	1726
Cultivator .....	D. C. Van Brunt.....	280,263	June 26	2023	569	23	2492
Cultivator .....	M. M. Warmoth .....	290,376	Dec. 18	1247	350	25	1123
Cultivator .....	J. B. Weir .....	273,787	Mar. 13	713	192	23	964
Cultivator .....	W. S. Weir .....	274,070	Mar. 13	1057	291	23	1023
Cultivator .....	H. Wilcox .....	285,193	Sept. 18	1276	359	24	1137
Cultivator .....	N. H. Williams .....	288,289	Nov. 13	618	169	25	624
Cultivator .....	P. W. Williams .....	282,824	Aug. 7	417	118	24	574
Cultivator .....	R. M. Williams .....	282,288	Nov. 13	618	169	25	624
Cultivator .....	D. Wise .....	286,983	Oct. 16	1517	417	25	287
Cultivator and bean-harvester .....	W. Carver .....	273,224	Feb. 27	2076	583	23	825
Cultivator and chopper. Cotton .....	E. McCarty .....	275,062	Apr. 3	236	65	23	1266
Cultivator and cotton and corn planter. Combined .....	D. J. McCall .....	278,810	June 5	178	52	23	2153
Cultivator and fertilizer-distributor .....	C. M. Gray and W. L. Casaday .....	270,584	Jan. 16	932	269	23	200
Cultivator and harrow. Combined .....	J. P. Howe .....	281,221	July 10	1095	303	24	201
Cultivator and harrow teeth. Securing .....	E. Fulmer .....	287,531	Oct. 30	2211	600	25	430
Cultivator and planter attachment .....	J. Palmer .....	278,452	May 29	2414	658	23	2070
Cultivator and planter. Combined .....	J. W. Pool .....	289,707	Dec. 4	428	120	25	961
Cultivator and plow. Combined wheel .....	E. L. Murray .....	272,460	Feb. 20	1100	310	23	647
Cultivator and seed-planter .....	J. F. Hill .....	281,878	July 24	1946	531	24	358
Cultivator attachment .....	O. McVey and G. W. Albin .....	274,132	Mar. 20	1144	315	23	1045
Cultivator-beam .....	D. C. Van Brunt.....	284,093	Aug. 28	1986	553	24	882
Cultivator-blade .....	L. D. Gavitt .....	282,880	Aug. 7	466	136	24	586
Cultivator blade or shovel. Corn .....	J. Lane .....	277,907	May 22	1703	465	23	1939
Cultivator. Cotton .....	H. B. Fry .....	281,259	July 17	1155	319	24	217
Cultivator. Hand .....	L. A. Budlong .....	272,854	Feb. 27	1622	454	23	747
Cultivator. Hand .....	J. H. Thompson .....	290,142	Dec. 11	950	269	25	1062
Cultivator-hoe. Spring .....	A. B. Clark .....	275,146	Apr. 3	349	96	23	1286
Cultivator. Onion .....	J. P. Turner .....	280,416	July 3	94	25	24	19
Cultivator. Orchard .....	G. Richardson and G. Enderson .....	279,277	June 12	823	228	23	2274
Cultivator-shovel .....	E. Children .....	271,791	Feb. 6	250	70	23	484
Cultivator-shovel .....	J. W. Jones .....	273,550	Mar. 6	399	107	23	902
Cultivator-shovel .....	J. E. Mitchell .....	272,301	Feb. 13	882	247	23	606
Cultivator-shovel .....	H. N. Timms .....	275,546	Apr. 10	891	241	23	1386
Cultivator-spring .....	J. B. Neff .....	287,703	Oct. 30	2454	661	25	476
Cultivator. Sulky .....	J. C. Bayley .....	281,957	July 24	2040	558	24	374
Cultivator. Straddle-row .....	P. Rooney .....	270,251	Jan. 9	503	148	23	109
Cultivator. Straddle-row .....	F. Sheaffer .....	279,823	June 19	1488	417	23	2392
Cultivator-teeth. Sheet-metal standard for .....	S. L. Allen .....	280,114	June 26	1849	524	23	2462
Cultivator-tooth. Reversible .....	G. D. Rowell .....	287,172	Oct. 23	1762	483	25	340
Cultivator. Tongueless .....	B. C. Bradley .....	274,555	Mar. 27	1708	474	23	1150
Cultivator. Tongueless .....	G. W. Van Sickle .....	271,164	Jan. 23	1649	474	23	331
Cultivator. Wheel .....	J. S. Andrews .....	280,436	July 3	125	33	24	23
Cultivator. Wheel .....	T. W. and D. J. Brennan .....	277,874	May 22	1668	455	23	1932
Cultivator. Wheel .....	W. P. Brown .....	288,003	Nov. 6	274	77, 78	25	554
Cultivator. Wheel .....	W. E. Butler .....	276,766	May 1	310	80	23	1679
Cultivator. Wheel .....	C. D. Carter .....	274,720	Mar. 27	1901	530	23	1185
Cultivator. Wheel .....	L. C. Chapin .....	285,797	Oct. 2	18	6	25	5
Cup .....	A. W. Steelman and W. H. Maynard .....	272,915	Feb. 27	1701	476	23	759
Sec Dental impression-cup. Hydrometer-cup.							
cup. Oil-cup.							
Feed-cup. Salt and pepper cup.							
Grease-cup.							
Cups, bottles, &c. Removable lip for .....	J. Rhoads .....	280,515	July 3	217	57	24	39
Cupel-furnace .....	J. Lynch .....	275,232	Apr. 3	449	125	23	1303
Cupel-mold .....	H. W. Walker .....	284,693	Sept. 11	660	185	24	1022
Cupelling-furnace .....	B. Roesing .....	289,143	Nov. 27	1689	469	25	826
Cupola-furnace .....	W. J. Clapp and T. Griffiths .....	271,683	Feb. 6	118	32, 33	23	460
Cupric sulphate. Making .....	H. Rössler .....	286,735	Oct. 16	1205	325	25	234
Curd-cutter .....	D. G. Young .....	271,969	Feb. 6	465	127	23	522
Curd-mill .....	G. Castle and G. D. Pohl .....	277,228	May 8	896	239	23	1786
Curd-stirring machine .....	H. H. Ferry .....	288,785	Nov. 20	1233	344	25	741
Current-motor .....	A. D. Garretson .....	283,769	Aug. 28	1577	445	24	811
Currents and streams. Device for utilizing the force of .....	F. M. St. Clair .....	271,145	Jan. 23	1622	466	23	327
Curry-comb .....	G. C. Bunce and L. W. Sammis .....	278,869	June 5	269	78	23	2169
Curry-comb .....	A. Hermondson .....	276,817	May 1	366	97	23	1690
Curry-comb .....	W. E. Lawrence .....	272,558	Feb. 20	1223	342	23	669
Curry-comb .....	J. D. and W. C. Lawrence .....	276,696	May 1	207	82	23	1660
Curry-comb .....	G. C. W. Magruder .....	282,338	July 31	2540	695	24	463
Curtain and shade. Window .....	W. G. Scott .....	289,573	Dec. 4	254	71	25	932
Curtain-bracket .....	D. D. Nugent .....	284,143	Aug. 28	2057	570	24	893
Curtain-cord tightener .....	F. J. Werneth .....	275,303	Apr. 3	536	146	23	1317
Curtain-fixture .....	T. Breen .....	275,351	Apr. 10	635	170	23	1243
Curtain-fixture .....	C. Buckley .....	282,840	Aug. 7	435	123	24	577
Curtain-fixture .....	W. N. Buckley .....	275,580	Apr. 10	929	252	23	1393
Curtain-fixture .....	A. Cole .....	282,846	Aug. 7	445	125	24	579
Curtain-fixture .....	J. Harris .....	274,191	Mar. 20	1213	334	23	1058
Curtain-fixture .....	F. M. Kelly .....	280,833	July 10	617	173	24	115
Curtain-fixture .....	F. B. Mallory .....	277,760	May 15	1530	415	23	1502
Curtain-fixture .....	F. B. Mallory .....	284,454	Sept. 4	358	99	24	964
Curtain-fixture .....	M. Medart .....	286,624	Oct. 16	1065	286	25	209
Curtain-fixture .....	P. G. Newell .....	282,757	Aug. 7	342	97	24	560

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Curtain-fixture.	M. Pepper.	272,898	Feb. 27	1683	470	23	756
Curtain-fixture.	W. P. Putnam.	279,801	June 19	1464	410	23	2388
Curtain-fixture.	W. P. Putnam.	279,802	June 19	1465	410	23	2388
Curtain-fixture.	W. P. and S. L. Putnam.	279,803	June 19	1465	411	23	2388
Curtain-fixture.	A. Sweetland.	274,049	Mar. 13	1021	280	23	1017
Curtain-fixture bracket.	W. Gibbs.	271,446	Jan. 30	2014	581	23	404
Curtain-fixture. Roller.	A. B. Shaw.	283,737	Aug. 21	1527	431	24	790
Curtain-fixture. Spring-roller for.	B. Handforth.	284,417	Sept. 4	319	88	24	957
Curtain-fixture. Spring-roller for.	H. T. Warner.	290,821	Dec. 25	1850	512	25	1234
Curtain-guide.	E. F. De Witt.	275,163	Apr. 3	363	100	23	1289
Curtain-hanger.	J. H. Lingley.	282,912	Aug. 7	519	145	24	592
Curtain-loop.	R. C. Pope.	282,365	July 31	2574	706	24	469
Curtain loop or holder.	S. A. Chapman.	287,234	Oct. 23	1846	505	25	354
Curtain-pin.	J. Day.	275,160	Apr. 3	363	100	23	1289
Curtain-pole.	A. D. Field.	277,253	May 8	927	248	23	1791
Curtain-pole angle-joint.	R. S. Gould.	275,480	Apr. 10	811	219	23	1373
Curtain-pole angle-piece.	C. De Quillfeldt.	274,572	Mar. 27	1730	481	23	1154
Curtain-pole bracket-extension.	R. S. Gould.	275,481	Apr. 10	811	220	23	1373
Curtain pole. Cornice.	E. D. Mercereau.	278,721	June 5	61	19	23	2135
Curtain-pole ring.	W. Lang.	286,712	Oct. 16	1179	317	25	229
Curtain-poles. Ornamental shaft for the ends of.	J. Bassemir and L. R. Walker.	286,821	Oct. 9	925	249	25	178
Curtain-roller.	D. D. Nugent.	279,885	June 19	1220	338	23	2345
Curtain-roller.	C. C. Clawson.	278,884	June 5	286	82	23	2172
Curtain-roller.	G. Furness and J. Robertshaw.	286,194	Oct. 9	509	140	25	104
Curtain-roller.	H. Lobdell.	286,027	Oct. 2	303	85	25	57
Curtain-roller.	W. B. Noyes.	278,037	May 22	1861	508	23	1966
Curtain-roller.	W. B. Noyes.	278,038	May 22	1862	508	23	1966
Curtain-roller attachment.	H. Lobdell.	286,026	Oct. 2	302	84	25	57
Curtain-roller. Spring.	C. Bucklev and L. L. Sawyer.	275,987	Apr. 17	1446	398	23	1491
Curtain-roller. Spring.	C. De Quillfeldt.	271,691	Feb. 6	126	35	23	462
Curtain-roller. Spring.	L. L. Sawyer.	287,729	Oct. 30	2485	670	25	422
Curtain-roller. Spring.	L. L. Sawyer.	288,123	Nov. 6	410	116	25	579
Curtains. Fastening for quarter.	J. H. Snodgrass.	272,094	Feb. 13	635	172	23	561
Curtains. Window-pole for.	W. J. Flickinger.	285,886	Oct. 2	137	39	25	27
Cushion:							
See Billiard-cushion.	Carriage-window cushion.						
Billiard-table cushion.	Pincushion.						
ion.	Railway-rail cushion.						
Cushion-spring for chair backs, seats, &c.	L. A. Warner.	279,998	June 26	1709	479	23	2437
Cuspidor.	B. S. Bowling.	284,601	Sept. 11	541	153	24	1002
Cuspidor.	P. S. Dunsbury.	277,692	May 15	1448	391	23	1886
Cuspidor.	C. Gordon.	282,306	July 31	2494	685	24	455
Cuspidor.	C. Gordon.	282,307	July 31	2495	685	24	455
Cuspidor.	H. S. Parker.	284,473	Sept. 4	378	105	24	968
Cuspidor.	A. Stewart.	276,496	Apr. 24	2084	579	23	1607
Cuspidor-holder.	T. H. Schmitz.	277,353	May 8	1044	280	23	1812
Cuspidor-mat.	F. Haberman.	272,239	Feb. 13	813	226	23	593
Cuspidor. Sheet-metal.	G. T. Sutterley.	275,285	Apr. 3	512	141	23	1313
Cuspidor-stand.	W. Eberhard.	290,759	Dec. 25	1773	490	25	1221
Cuspidors, &c. Manufacture of and mold for making.	W. A. Krouso.	286,830	Oct. 16	1320	360	25	254
Cut-off.	C. P. Allen.	271,761	Feb. 6	212	59	23	477
Cut-off for conductors.	W. F. B. Fisher.	289,821	Dec. 11	559	157	25	991
Cut-off for engines. Automatic.	J. B. Pitchford.	283,656	Aug. 21	1422	398	24	771
Cut-off for service-pipes.	J. Graham.	283,774	Aug. 28	1583	447	24	812
Cut-off governor for steam-engines.	C. B. Richards.	290,113	Dec. 11	913	259	25	1056
Cut-off mechanism.	J. Thomas.	272,797	Feb. 20	1529	430	23	723
Cut-off mechanism for steam-engines.	N. F. Burnham.	274,559	Mar. 27	1713	476	23	1151
Cut-off valve.	W. A. Clarke.	270,744	Jan. 16	1140	327	23	238
Cut-off valve.	M. N. Cumiskey.	270,396	Jan. 9	689	204	23	144
Cut-off valve.	C. H. Edson.	276,528	Apr. 24	2127	592	23	1614
Cut-off valve.	J. Graham.	283,773	Aug. 28	1581	446	24	812
Cut-off valve.	J. G. Haacker.	282,630	Aug. 7	189	55	24	533
Cut-off valve.	T. W. Hoermans.	286,002	Oct. 2	273	76	27	51
Cut-off valve.	B. F. Olmsted.	284,472	Sept. 4	377	105	24	968
Cut-off valve.	C. B. Turner.	286,747	Oct. 16	1220	329	25	236
Cut-off valve.	B. Webster.	272,809	Feb. 20	1543	433	23	726
Cut-off valve.	N. W. Williams.	281,812	July 24	1866	510	24	344
Cut-off valve for steam-engines.	J. M. Sweeney.	274,330	Mar. 27	1682	467	23	1146
Cut-off-valve gear.	J. P. Benoit.	288,297	Nov. 13	629	172	25	625
Cut-off-valve gear.	P. Grödelbach.	273,512	Mar. 6	342	92	23	892
Cut-off-valve gear.	J. K. Hallock and E. F. Spaulding.	281,312	July 17	1214	336	24	228
Cut-off-valve gear.	D. Halpin.	271,063	Jan. 23	1528	441	23	311
Cut-off-valve gear.	J. M. Higbe.	275,337	Apr. 3	595	159	23	1327
Cut-off-valve gear.	C. E. Kimball.	279,253	June 12	794	220	23	2269
Cut-off-valve gear.	H. H. Meyer.	285,500	Sept. 25	1639	461	24	1208
Cut-off-valve gear.	E. O'Neill.	271,352	Jan. 30	1895	548	23	382
Cut-off-valve gear.	J. B. Simmons.	290,808	Dec. 25	1836	507	25	1231
Cut-off-valve gear.	L. Skinner.	282,388	July 31	2601	714	24	474
Cut-off-valve gear.	L. Skinner. (Reissue).	10,405	Nov. 6	139	140	25	595
Cut-off-valve gear.	E. F. Spaulding.	281,314	July 17	1220	337	24	228
Cut-off-valve gear.	E. F. Spaulding and J. K. Hallock.	281,313	July 17	1218	337	24	228
Cut-off-valve gear.	E. F. Spaulding and J. K. Hallock.	281,315	July 17	1223	338	24	229
Cut-off-valve gear.	A. F. Ward.	280,103	Nov. 26	1840	518	23	2460
Cut-off valve. Steam-engine.	A. A. Ackerly.	288,196	Nov. 13	507	141	25	605
Cutlery-blade.	J. D. Frary.	275,630	Apr. 10	1001	271	23	1405
Cutlery. Manufacture of pocket.	J. D. Frary.	290,023	Dec. 11	811	228	25	1036
Cutlery. Manufacture of.	H. Halström.	274,318	Mar. 20	1379	379	23	1086



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Cutter:							
See Axle-cutter.	Ice-cutter.						
Band-cutter.	Label-cutter.						
Bar and pipe cutter.	Lash-cutter.						
Bark-cutter.	Lathe-cutter.						
Barrel-head cutter.	Leather-cutter.						
Belt-cutter.	Meat-cutter.						
Bread-cutter.	Nail-machine cutter.						
Bread or cheese cutter.	Paper-roll cutter.						
Bretzel-cutter.	Peg-cutter.						
Button-hole cutter.	Pipe-cutter.						
Chain-cutter.	Planing-machine cutter.						
Cigar-cutter.	Rotary cutter.						
Cigar-lighter cutter.	Sewing-machine thread-cutter.						
Cigar-tip cutter.	Sod-cutter.						
Corn-cutter.	Stalk-cutter.						
Cornstalk-cutter.	Stave-cutter.						
Cotton-stalk cutter.	Straw-cutter.						
Curd-cutter.	Tobacco-cutter.						
Feed-cutter.	Tube-cutter.						
Fodder-cutter.	Twine-cutter.						
Fruit and vegetable cutter.	Vegetable-cutter.						
Fuse cutter.	Weed-cutter.						
Gear-cutter.	Welt-cutter.						
Groove-cutter.	Wood-cutter.						
Harvester-cutter.	Wood-working-machine cutter.						
Hog-nose cutter.							
Cutter-bar	H. J. Burnworth	284,813	Sept. 11	807	225	24	1047
Cutter-bars. Elastic cushion for.	E. J. Blood	280,901	July 10	693	195	24	129
Cutter-bars. Elastic cushion for.	E. J. Blood	280,902	July 10	694	195	24	129
Cutter for paper, cloth, &c.	J. A. H. Meyer	276,265	Apr. 24	1787	497	23	1557
Cutter-head	R. H. Ainsworth	276,323	Apr. 24	1879	521	23	1571
Cutter-head	R. V. Boice	275,459	Apr. 10	780	209	23	1368
Cutter-head	A. V. Cross	275,890	Apr. 17	1335	368	23	1471
Cutter-head	L. Emery and F. B. Stebbins	286,409	Oct. 9	793	214	25	154
Cutter-head	D. P. Hall	284,630	Sept. 11	575	162	24	1008
Cutter-head	B. F. Lauterman	286,450	Oct. 9	840	227	25	163
Cutter-head	S. G. Pope	290,923	Dec. 25	1970	544	25	1255
Cutter-head	H. D. Wilcox	290,158	Dec. 11	966	273	25	1065
Cutter-head. Abrading	J. L. Perry	273,304	Mar. 6	79	24	23	847
Cutter-head attachment	J. Green	271,199	Jan. 23	1696	489	23	338
Cutter-head for boring-machines	W. Bramwell	276,760	May 1	303	77	23	1678
Cutter-head for carving scrolls	N. K. Jones	275,391	Apr. 10	696	185	23	1354
Cutter-head knives. Gage for	C. Buss	273,022	Feb. 27	1824	511	23	781
Cutter-head tool-holder	P. Hittel	270,313	Jan. 9	573	168	23	122
Cutter-heads of planing and slotting machines. Device for reciprocating the	J. L. Bogert	278,084	May 22	1915	525	23	1975
Cutter. Machinery for supporting and revolving a disk-shaped	A. McDonald	276,260	Apr. 24	1782	495	23	1556
Cutting and polishing tools. Apparatus for supplying abrading and polishing material to	J. S. O'Connor	283,273	Aug. 14	963	268	24	679
Cutting and shaping objects. Method of and apparatus for	F. Bain	288,395	Nov. 13	774	209	25	650
Cutting blanks. Machine for	J. R. Williams	287,073	Oct. 23	1639	450	25	316
Cutting corsets, rags, &c. Machine for	L. and J. C. Ceburn	272,856	Feb. 27	1024	455	23	747
Cutting device	W. S. Seymour	284,496	Sept. 4	410	117	24	973
Cutting-die	W. Biggs	272,115	Feb. 13	668	182	23	567
Cutting-die	I. A. Canfield	286,901	Oct. 16	1413	388	25	269
Cylinder engine. Multiple	P. Brotherhood	284,372	Sept. 4	258	71	24	948
Cutting forms from a layer or layers of fibrous or other material. Apparatus for	G. J. W. Galster	288,049	Nov. 6	326	92	25	563
Cutting-machine	G. Gilbert	271,835	Feb. 6	304	83	23	494
Cutting, punching, and tire-upsetting machine. Combined	H. Morse	274,216	Mar. 20	1253	345	23	1065
Cyclometer	J. Butcher	270,737	Jan. 16	1132	325	23	236
Cyclone-refuge	J. N. Milleham	288,354	Nov. 13	708	194	25	639
Cylinder engine. Revolving	G. W. Hunter	280,041	June 26	1770	497	23	2447
Cylinder-lock	J. H. Barnes	285,207	Sept. 18	1290	363	24	1140
Cylinders. Machine for reboring	W. E. Wild	275,102	Apr. 3	261	80	23	1276
Dam and lock	J. Du Bois	282,062	July 31	2173	596	24	402
Dam for irrigating-ditches	W. H. Bigelow	289,959	Dec. 11	726	205	25	1021
Damper	F. C. Davis	287,637	Oct. 30	2367	638	25	459
Damper	J. Spear	280,411	July 3	89	24	24	18
Damper and cleaner. Combined stove-pipe	T. W. Rickel and G. A. Carpenter	287,964	Nov. 6	232	63	25	546
Damper. Automatic	B. Higgins	286,817	Oct. 16	1304	355	25	252
Damper. Automatic stove	J. C. Higdon	283,106	Aug. 14	758	213	24	642
Damper for furnace or stove pipes	N. A. Boynton	279,530	June 19	1157	320	23	2334
Damper for stove pipes and flues. Ventilating	A. Cummings	274,567	Mar. 27	1724	479	23	1153
Damper-regulator	I. Cumberbatch	283,578	Aug. 21	1341	374	24	754
Damper-regulator	R. Thompson	272,989	Feb. 27	1782	499	23	773
Damper-regulator for steam-boilers	V. H. Hallock	276,810	May 1	359	95	23	1689
Damper regulator, indicator, and lock	E. O. Pehl	281,726	July 24	1752	475	24	323
Damper-regulator. Steam	G. M. Githens	285,478	Sept. 25	1613	453	24	1203
Damper-regulator. Steam	D. C. Kellam	284,023	Aug. 28	1904	533	24	868
Damper safety attachment	J. M. Doleu	286,400	Oct. 9	784	211	25	153
Damper. Stove	M. E. Weller	274,238	Mar. 20	1281	353	23	1070
Dampers. Apparatus for opening	J. H. Haldeman	279,867	June 19	1545	432	23	2402
Dart	H. L. Marbach	275,236	Apr. 3	453	126	23	1303
Dash-board	E. Hoxie	280,378	July 3	46	13	24	10

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Dash-board	L. E. McKimmon	279,412	June 12	1010	280	23	2303
Dash-board fastening	M. J. Rogers	284,575	Sept. 4	508	142	24	989
Dash-frames. Die for making	G. M. Peters	281,553	July 17	1513	416	24	278
Dash-pot bumper	F. G. Coggin	272,652	Feb. 20	1350	379	23	691
Davit and chair for life-boats.	J. H. F. Meyer	276,446	Apr. 24	2024	561	23	1597
Davit for boats	J. F. Mumm	272,745	Feb. 20	1467	412	23	712
Dead-eye	S. B. Luce	290,993	Dec. 25	2075	571	25	1271
Decorating ceilings and walls	F. E. Cheesman	289,811	Dec. 11	549	153	25	989
Decorating rooms	W. Nielson	275,692	Apr. 10	1075	293	23	1418
Decorative fabric	E. Baron	287,495	Oct. 30	2171		25	421
Decorative structure.	E. Vedder	276,100	Apr. 17	1583	437	23	1513
Decoy	J. Danz, Jr.	282,851	Aug. 7	451	127	24	580
Decoy	L. Keller	274,124	Mar. 20	1136	312	23	1044
Decoy purposes. Device for setting up dead game for.	W. R. Benjamin	283,195	Aug. 14	863	241	24	660
Degranulating-machine	K. Seifert	290,485	Dec. 18	1404	388	25	1150
Delivery and transportation. System of	G. H. Herrington	280,620	July 3	338	94	24	60
Dental bracket	F. Slater	276,637	May 1	115	30	23	1647
Dental chair	O. M. Graves	284,294	Sept. 4	170	48	24	932
Dental chair. Folding.	W. G. Browne	271,596	Feb. 6	13	4	23	443
Dental-disk holder	L. D. Shepard	282,384	July 31	2596	713	24	473
Dental drill	E. T. Starr	276,921	May 1	493	129	23	1712
Dental-drill hand-piece.	R. M. Ross	281,139	July 10	988	276	24	181
Dental-drill hand-piece.	R. M. Ross. (Reissue)	10,423	Dec. 11	1011	284	25	1073
Dental drills on whetstones. Device for holding	W. W. Vance	289,472	Dec. 4	122	35	25	908
Dental engine	D. H. Gilmer	278,933	June 5	393	107	23	2190
Dental engine	E. T. Starr	276,299	Apr. 24	1628	509	23	1563
Dental engine	E. T. Starr	278,464	May 29	2429	662	23	2073
Dental-engine fan	R. M. Ross and E. J. Klinek	290,359	Dec. 18	1227	345	25	1119
Dental-engine hand-piece	J. W. Gilbert	287,761	Oct. 30	2533	682	25	491
Dental-engine hand-piece	C. P. Grout	277,126	May 8	778	204	23	1765
Dental-engine hand-piece	W. A. Johnston, A. W. Browne, E. T. Starr, and J. W. Gilbert.	287,683	Oct. 30	2421	653	25	471
Dental-engine hand-piece	J. H. Lincoln	274,008	Mar. 13	980	269	23	1010
Dental-engine hand-piece	S. R. Screven	288,499	Nov. 13	902	246	25	672
Dental-engine suspension-bracket.	W. A. Johnston	288,704	Oct. 16	1166	314	25	227
Dental engines. Abrasive disk-holding spindle for	W. P. Cooke	290,401	Dec. 18	1279	359	25	1128
Dental flask	F. W. Seabury	279,605	June 19	1239	344	23	2349
Dental flask	F. W. Seabury	283,928	Aug. 28	1762	497	24	843
Dental impression-cup	B. J. Field	274,299	Mar. 20	1357	372	23	1082
Dental impression-cup	S. E. Fish	273,833	Mar. 13	768	208	23	974
Dental jaw-brace	L. W. Nevins	278,259	May 22	2148	590	23	2015
Dental lip and tongue holder.	J. H. Doyle	278,520	May 29	2496	681	23	2085
Dental mallet	W. G. Stevenson	283,828	Aug. 28	1644	463	24	822
Dental model	J. B. Graves	270,566	Jan. 9	909	262	23	187
Dental or surgical engine	W. G. A. Bonwill	282,044	July 31	2147	589	24	398
Dental plate	F. B. Shearer	269,966	Jan. 2	177	49	23	36
Dental plate	J. W. Shults	277,796	May 15	1567	427	23	1909
Dental plate	V. Van Vleck	287,199	Oct. 23	1799	493	25	345
Dental plate. Temporary	G. F. Reese	286,845	Oct. 16	1344	368	25	258
Dental plates. Apparatus for forming	W. W. Evans	279,365	June 12	952	264	23	2294
Dental plugger	C. F. Bliven	279,908	June 26	1599	448	23	2418
Dental plugger	B. F. Eshelman	290,014	Dec. 11	801	226	25	1035
Dental plugger	W. W. Evans	279,928	June 26	1625	456	23	2422
Dental plugger.	G. Rehffuss	271,986	Feb. 6	494	133	23	526
Dental purposes. Illuminating apparatus for	R. Telschow	274,671	Mar. 27	1845	515	23	1176
Dental vulcanizer	T. J. Carriek	279,079	June 5	571	137	23	2921
Dentifrice	A. P. Merrill and J. Eastwood	284,751	Sept. 11	732		24	1035
Dentist's flask	J. W. Elliot	285,243	Sept. 19	1333	375	24	1147
Dentist's flask	J. R. Housel	283,487	Aug. 21	1237	347	24	735
Denture. Artificial	C. H. Land	282,094	July 31	2215	609	24	409
Denture. Artificial	A. S. Richmond	277,933	May 22	1733	473	23	1943
Denture. Artificial	C. M. Richmond	277,934	May 22	1735	473	23	1943
Denture. Artificial	C. M. Richmond	277,936	May 22	1736	473	23	1944
Denture. Artificial	C. M. Richmond	277,938	May 22	1737	474	23	1944
Denture. Artificial	C. M. Richmond	277,939	May 22	1738	474	23	1944
Denture. Artificial	C. M. Richmond	277,941	May 22	1739	475	23	1944
Denture. Artificial	C. M. Richmond	277,942	May 22	1740	475	23	1944
Denture. Artificial	C. M. Richmond	282,119	July 31	2263	630	24	416
Deodorizing and disinfecting water-closets, &c	E. Z. Collings	276,357	Apr. 24	1914	531	23	1578
Deodorizing organic substances. Process of and apparatus for	W. S. Hatheway	278,955	June 5	419	114	23	2195
Deodorizing perspiration-powder	A. D. Slocumb and J. W. Day	279,195	June 12	732		23	2258
Deodorizing solutions of colophony in heavy hydrocarbons.	H. Brackebusch	275,568	Apr. 10	914		23	1390
Deplating	A. Laure	285,044	Sept. 18	1098		24	1106
Derrick	P. Kelly	271,474	Jan. 30	2055	592	23	410
Derrick	J. T. Scully	275,421	Apr. 16	729	194	23	1360
Derrick	G. W. Tarr	275,540	Apr. 10	883	239	23	1325
Derrick	I. H. Yeaw	285,721	Sept. 25	1910	542	24	1258
Derrick. Coal, iron-ore, and merchandise	W. E. Ludlow	282,543	Aug. 7	80	23	24	514
Derrick. Hoisting.	W. Manson	290,780	Dec. 25	1795	496	25	1225
Derrick. Lever.	O. H. Mitchell	281,639	July 17	1623	444	24	296
Derrick. Lever.	O. H. Mitchell	290,786	Dec. 25	1800	497	25	1226
Derrick. Portable stacking.	L. T. Mitchell	275,689	Apr. 10	1072	292	23	1417
Dessicating-machine	C. Kimplen	281,888	July 24	1960	536	24	360
Designs. Representing and multiplying monumental and other	F. M. Nichols	287,310	Oct. 23	1941	530	25	371
Desk.	J. A. Guest	270,895	Jan. 23	4321	381	22	278



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Desk.....	M. J. Hafgar .....	281,498	July 17	1451	{ 397 398 }	24	268
Desk.....	C. Ignatius .....	287,543	Oct. 30	2228	605	25	434
Desk.....	C. Larson .....	278,152	May 22	2001	550	23	1990
Desk.....	L. P. Ross .....	287,475	Oct. 30	2145	583	25	417
Desk and blackboard. Combined .....	W. E. Crandall .....	275,598	Apr. 10	949	258	23	1397
Desk and seat. Folding .....	W. J. Jackson .....	288,441	Nov. 13	827	224	25	650
Desk and seat. School .....	J. F. Coulter .....	273,260	Mar. 6	20	6, 7	23	838
Desk attachment for drawers. Adjustable .....	T. L. Jowett .....	282,087	July 31	2209	607	24	408
Desk. Cabinet.....	L. P. Ross .....	272,776	Feb. 20	1502	423	23	718
Desk. Cabinet folding .....	L. P. Ross .....	272,777	Feb. 20	1504	423	23	719
Desk. Cash.....	J. Fanning .....	278,921	June 5	382	{ 104 105 }	23	2188
Desk. Folding .....	M. J. Hafgar .....	271,061	Jan. 23	1523	440	23	310
Desk. Folding .....	P. L. Shepler .....	272,164	Feb. 13	719	198	23	576
Desk. Office.....	C. H. Tyler .....	287,068	Oct. 23	1633	449	25	315
Desk. School.....	H. J. Colburn .....	277,545	May 15	1275	342	23	1857
Desk. School.....	W. H. Dodge .....	286,594	Oct. 16	1023	277	25	202
Desk. School.....	G. Munger .....	277,326	May 8	1014	272	23	1807
Desk-top .....	E. A. Paul .....	272,759	Feb. 20	1479	416	23	714
Desk. Vertically-adjustable .....	H. W. Groehl .....	281,494	July 17	1447	396	24	267
Desks. Book-support for writing.....	J. B. Whitaker .....	276,514	Apr. 24	2108	586	23	1611
Detachable hook .....	H. E. Foster .....	287,115	Oct. 23	1693	464	25	327
Detector: See Carriage-driving de- Coin-detector. tector. Time-detector.							
Developing or tracing machine.....	F. Aborn .....	282,831	Aug. 7	425	121	24	575
Dextrine, glucose, maltrose, and grape-sugar. Mann- facture of	T. P. Kingsford .....	280,045	June 26	1775	.....	23	2448
Dial-spacing machine .....	F. Leman .....	283,350	Aug. 14	1060	{ 298 299 407 }	24	698
Dial. Sun.....	N. Larsen .....	281,527	July 17	1484	{ 408 409 }	24	274
Dial. Sun.....	D. L. Smith .....	277,799	May 15	1572	429	23	1910
Diamond drill .....	J. P. Griscom .....	272,681	Feb. 20	1381	388	23	696
Diamond-drill and well sinking or boring safety-ma- chine.	G. M. Ross and D. Grant .....	284,067	Aug. 28	1955	545	24	876
Diamonds in steel saw-teeth, bits, &c. Inserting .....	E. Foerster .....	279,369	June 12	958	266	23	2295
Diaphragm-meter .....	J. Thomson .....	274,848	Mar. 27	2047	571	23	1211
Dickey.....	M. O. West .....	290,953	Dec. 25	2013	555	25	1261
Die: See Bolt-threading die. Roller-die. Cutting-die. Screw-cutting die. Link-welding die. Stamping-die. Nail-cutting die.							
Die and stamping press .....	F. and O. Kampfe .....	272,056	Feb. 13	588	159	23	554
Die or swage .....	M. L. Ritchie .....	279,020	June 5	497	135	23	2208
Die-plate .....	J. E. Sanders .....	277,163	May 8	898	219	23	1774
Die-plate and tap-wrench. Combined .....	H. M. Vincent and W. N. Smith .....	274,420	Mar. 20	1511	415	23	1110
Die-press .....	G. E. Meeker .....	285,294	Sept. 18	1389	392	24	1158
Die-press .....	G. E. Meeker .....	287,767	Oct. 30	2545	685	25	493
Die-press .....	G. E. Merriman .....	282,747	Aug. 7	331	94	24	558
Die-press connecting-rod .....	J. M. Seymour .....	287,333	Oct. 23	1966	537	25	376
Dies. Making .....	W. F. Weber .....	270,866	Jan. 16	1278	369	23	264
Dies, &c. Manufacture of metal .....	G. F. Champney .....	281,970	July 24	2058	564	24	377
Differential register .....	J. Thomson .....	274,674	Mar. 27	1850	516	23	1176
Differential register .....	J. Thomson .....	285,322	Sept. 18	1420	401	24	1164
Digger: See Post-hole digger. Tree-digger. Potato-digger.							
Digging-machine.....	T. C. Darby .....	276,783	May 1	329	86, 87	23	1683
Dining-table and lunch-case. Portable railway .....	J. M. Case .....	275,991	Apr. 17	1451	{ 399 400 }	23	1492
Diphtheria remedy .....	S. Mathis .....	276,257	Apr. 24	1778	.....	23	1555
Diphtheria remedy .....	J. G. L. Myers .....	271,506	Jan. 30	2093	.....	23	417
Dipper-handle .....	J. H. H. Wilson .....	280,274	June 26	2039	573	23	2495
Direct-acting compound engine .....	F. W. Jenkins .....	287,289	Oct. 23	1911	523	25	366
Direct-acting compound engine .....	E. D. Leavitt, Jr .....	283,261	Aug. 14	948	265	24	676
Direct-acting engine .....	B. Brazelle .....	284,173	Sept. 4	17	5	24	907
Direct-acting engine .....	I. B. Davis .....	282,503	Aug. 7	32	10	24	506
Dirt-loading machine .....	J. J. Melville .....	273,121	Feb. 27	1945	546	23	802
Dish, &c.....	T. B. Russell .....	284,239	Sept. 4	107	29	24	922
Dish. Butter.....	H. Berry .....	284,531	Sept. 4	455	129	24	981
Dish. Butter.....	H. Berry .....	284,532	Sept. 4	455	129	24	981
Dish. Butter.....	A. J. Chase .....	275,587	Apr. 10	936	254	23	1394
Dish cover. Baking.....	A. A. Curtis .....	287,635	Oct. 30	2366	638	25	459
Dish. Covered .....	T. Spencer .....	275,281	Apr. 3	507	140	23	1312
Dish-draining rack .....	M. Raughtigan .....	287,471	Oct. 30	2137	580	25	415
Dish made from ceramic material or glass. Oval or circular	O. A. Gager .....	275,033	Apr. 3	203	54	23	1260
Dish or basket .....	B. D. Marks .....	271,881	Feb. 6	354	98	23	503
Dish or plate lifter .....	O. T. Lee .....	271,340	Jan. 30	1871	543	23	377
Dish pan and drainer .....	G. E. Willis .....	284,264	Sept. 4	133	37	24	927
Dish-washer .....	W. M. Burckett .....	290,528	Dec. 18	1466	405	25	1160
Dish-washer .....	M. C. Mason .....	272,894	Feb. 27	1679	469	23	756
Dish-washing machine .....	C. A. Harris .....	289,650	Dec. 4	347	97	25	948
Dish-washing machine .....	E. Wiseman .....	281,598	July 17	1573	430	24	287
Disinfectant .....	C. T. Kingzett and M. Zingler .....	281,521	July 17	1479	.....	24	273
Disinfectant .....	G. E. Rico .....	289,858	Dec. 11	611	.....	25	1090
Disinfectants. Production of .....	C. T. Kingzett and M. Zingler .....	274,789	Mar. 27	1986	.....	23	1200
Disinfecting apparatus .....	W. J. Hadden and J. S. Wood .....	279,644	June 19	1284	357	23	2357
Disinfecting apparatus .....	F. H. Hubbard .....	282,195	July 31	2363	650	24	431
Disinfecting apparatus .....	J. S. Wood .....	287,208	Oct. 23	1811	497	25	347
Disinfecting apparatus for water-closets .....	S. W. Parker and H. Blackman .....	272,758	Feb. 20	1478	416	23	714

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Disinfecting apparatus for water-closets	C. S. Rice, Jr.	276,470	Apr. 24	2055	571	23	1602
Disinfecting candle	T. Shaw	281,798	July 24	1848	505	24	340
Disinfecting water-closets.	H. E. Wells	276,106	Apr. 17	1592	440	23	1515
Disintegrating fibrous plants. Machine for	D. Prieto	278,668	May 29	2673	{ 731 732 }	23	2115
Disintegrating grain, &c. Apparatus for	F. Taggart	279,842	June 19	1510	{ 422 423 }	23	2396
Disintegrating-machine	S. Dodson	274,574	Mar. 27	1732	481	23	1154
Disintegrating-mill	G. Elbreg	273,829	Mar. 13	765	207	23	973
Disintegration of bagasse and other vegetable matter. Apparatus for the	T. Harang	278,545	May 29	2523	689	23	2090
Disk. Cutting and abrading	E. B. Call	270,384	Jan. 9	670	197	23	140
Disk-engine. Compound	F. Darkin	270,759	Jan. 16	1159	332	23	241
Dispatch-tube. Electro-magnetic	C. A. Cheever	282,165	July 31	2318	{ 636 637 }	24	425
Display-body	J. M. Simpson	290,489	Dec. 18	1409	389	25	1150
Display-rack	C. H. Michael	290,453	Dec. 18	1363	376	25	1142
Displaying articles in the air. Apparatus for	C. B. Linton	286,718	Oct. 16	1184	319	25	230
Distillation. Apparatus for	R. Dean	290,866	Dec. 25	1900	524	25	1243
Distillation of ammoniacal liquors. Apparatus for the	O. A. Stevens and E. L. Du Barry	282,393	July 31	2610	717	24	476
Distillation of coal	W. J. Cooper	282,440	July 31	2673		24	487
Distillation of hydrocarbon oils. Process of and apparatus for the fractional	H. Frasch	281,045	July 10	869	{ 241 242 }	24	161
Distillation. Process of and apparatus for	J. G. Pontefract	289,706	Dec. 4	427	119	25	960
Distillation, sublimation, or roasting of solid materials. Apparatus for the continuous	F. Lürmann	279,099	June 5	601	{ 163 164 }	23	2226
Distilled spirits from grain. Method of and apparatus for manufacturing	T. A. and W. T. Jebb	276,046	Apr. 17	1516	417	23	1502
Distilled spirits from grain. Process of and apparatus for manufacturing	W. T. Jebb	274,783	Mar. 27	1978	551	23	1198
Distilling and carbonizing wood, &c. Furnace for	J. A. Mathien	282,342	July 31	2544	697	24	464
Distilling and charring wood and kiln therefor	H. M. Pierce	284,058	Aug. 28	1939	542	24	873
Distilling apparatus	D. G. Coppin	279,918	June 26	1611	453	23	2420
Distilling apparatus	W. F. C. M. McCarty	283,003	Aug. 14	632	179	24	619
Distilling apparatus	H. C. Selden	276,483	Apr. 24	2069	574	23	1605
Distilling apparatus. Wood	C. J. T. Burcey	275,461	Apr. 10	762	209	23	1368
Distilling petroleum	R. C. Clark and W. F. Beecher	275,589	Apr. 10	937	255	23	1395
Distilling water, &c. Apparatus for	W. H. Herrick	284,011	Aug. 28	1891	530	24	865
Ditch-cleaner. Adjustable	J. K. Rothman	272,057	Feb. 13	627	170	23	560
Ditcher. Tile	H. H. Eatherton	279,141	June 12	674	185	23	2248
Ditches. Machine for forming and cleaning	C. W. Case, J. O. Pattee, and A. M. Long	272,412	Feb. 20	1045	{ 293 294 }	23	637
Ditching and excavating machine. Railway	H. T. Stock	273,631	Mar. 6	501	134	23	920
Ditching apparatus. Steam	J. C. Moore	284,971	Sept. 11	992	{ 279 280 }	24	1081
Ditching-machine	O. M. Allaben	280,112	June 26	1847	521	23	2462
Ditching-machine	M. J. Austin	283,948	Aug. 28	1793	507	24	849
Ditching-machine	H. Carter and W. Rennie	285,225	Sept. 18	1310	{ 369 370 }	24	1143
Ditching-machine	O. Ewing and G. A. Henderson	283,765	Aug. 28	1572	{ 444 445 }	24	810
Ditching-machine	I. B. Hammond	289,410	Dec. 4	44	13	25	894
Ditching-machine	J. L. House	289,839	Dec. 11	585	163	25	996
Ditching-machine	E. H. Lancaster	280,631	July 3	351	98	24	62
Ditching-machine	S. Leffler	269,946	Jan. 2	149	43	23	31
Ditching-machine	G. Meader	281,099	July 10	931	260	24	172
Ditching-machine	N. E. Ross	270,987	Jan. 23	1440	415	23	296
Ditching-machine. Rotary tile	R. H. Nogar	284,320	Sept. 4	201	56	24	938
Ditching-machine. Tile	T. B. Fagan	275,372	Apr. 10	664	177	23	1347
Ditching-machine. Tile	W. S. Hanson	286,696	Oct. 16	1158	312	25	225
Ditching-machines, &c. Cutter-chain for	H. H. Eatherton	288,930	Nov. 20	1430	393	25	773
Ditching-shovel	P. F. Chambard	270,016	Jan. 2	224	64	23	46
Dividers	J. H. Crowell	285,017	Sept. 18	1066	298	24	1101
Dividers	C. Johnsen	280,631	July 10	615	{ 172 173 }	24	115
Dividers and calipers. Joint for	C. Morrill	284,045	Aug. 28	1926	539	24	871
Dividers attachment	H. Hanstein	288,235	Nov. 13	549	151	25	612
Dividers or compasses	W. H. Mitchell	280,390	July 3	63	17	24	14
Dividers. Parallel	J. B. Tetley	279,460	June 12	1063	294	23	2312
Document and file case	A. W. Voltz	273,408	Mar. 6	220	59	23	871
Dog-irons. Chill-mold for	N. Zins	289,366	Nov. 27	1961	546	25	878
Doll	S. Eldridge	278,420	May 29	2374	648	23	2063
Doll	S. C. Robinson	283,513	Aug. 21	1264	354	24	740
Doll	M. L. Wellington	285,448	Sept. 25	1580	444	24	1197
Doll	L. B. J. Wishard	280,826	July 10	800	223	24	147
Doll-carriage	W. S. Reed	288,662	Nov. 20	1102	302	25	714
Domino	C. S. Lockwood	273,559	Mar. 6	414	110	23	905
Domino	R. H. Williams	278,646	May 29	2650	725	23	2111
Dominoes, checks, &c. Manufacture of	C. C. Shepherd	274,668	Mar. 27	1845	514	23	1175
Door	J. D. Benson and R. B. Fogle	280,785	July 10	566	158	24	107
Door	W. S. Castor	270,635	Jan. 16	1000	{ 288 289 }	23	212
Door	J. M. J. Wernert	278,066	May 22	1890	518	23	1971
Door attachment. Inside	J. Smith and J. P. Rhodes	275,726	Apr. 10	1117	305	23	1425
Door. Automatically-operating	J. L. Hawkey	274,765	Mar. 27	1956	544	23	1195
Door-balance	W. F. Sexton, Sr., and W. F. Sexton, Jr.	285,365	Sept. 18	1475	415	24	1172
Door-bolt	C. Clark	279,334	June 12	904	{ 252 253 }	23	2286
Door-bolt	W. S. Hill	284,961	Sept. 11	982	276	24	1079
Door-bolt	A. G. Thompson	271,001	Jan. 23	1456	419	23	299
Door brace or stay	P. J. Lockwood	275,832	Apr. 17	1264	347	23	1457
Door-brake	W. S. Barlow	284,358	Sept. 4	244	68	24	946



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr's	Vol.	Page.
Door-catch	F. J. Lee	289,666	Dec. 4	364	103	25	951
Door-check	J. W. Bulger	290,526	Dec. 18	1465	405	25	1159
Door-check	R. G. S. Collamore	272,531	Feb. 20	1196	333	23	664
Door-check	J. A. Coultaus	288,028	Nov. 6	302	85	25	559
Door-check	F. W. Fieder	270,044	Jan. 2	256	74	23	52
Door-check	S. B. Hazen and G. L. Van Gorder	281,504	July 17	1457	399	24	269
Door-check	W. H. Herrick	299,259	Nov. 27	1825	504	25	852
Door-check	G. G. and R. Matthews	291,542	July 17	1502	412	24	276
Door-check	T. B. McCurdy	280,055	June 26	1784	500	23	2450
Door-check	P. K. O'Lally	289,697	Dec. 4	417	117	25	959
Door-check	S. Porter	283,658	Aug. 21	1425	399	24	771
Door-check	R. Wright	277,820	May 15	1592	435	23	1913
Door-check. Pneumatic	E. I. Blount	289,380	Dec. 4	10	4	25	889
Door-check. Pneumatic	T. N. Page	285,156	Sept. 18	1235	347	24	1129
Door-fastener. Portable	E. F. Pfund	290,352	Dec. 18	1818	342	25	1117
Door. Grain	R. J. Walker	271,957	Feb. 6	450	123	23	520
Door-hanger	W. F. Berry	279,526	June 19	1154	319	23	2333
Door-hanger	W. F. Berry	280,342	July 3	5	2	24	3
Door-hanger	F. Birmingham	289,961	Dec. 11	728	205	25	1021
Door-hanger	W. B. Botsford	288,918	Nov. 20	1413	389	25	770
Door-hanger	C. Brinton	286,774	Oct. 16	1251	338 339	25	242
Door-hanger	C. Brinton	289,885	Dec. 11	644	179 180	25	1006
Door-hanger	C. Brinton	289,886	Dec. 11	646	180	25	1006
Door-hanger	C. W. Bullard	277,542	May 15	1272	341	23	1857
Door-hanger	B. J. Cloes	285,575	Sept. 23	1726	488	24	1284
Door-hanger	W. B. Cogger and H. A. Hamlin	283,208	Aug. 14	879	245	24	664
Door-hanger	L. Eberhart and I. D. Stevens	278,692	June 5	22	6	23	2128
Door-hanger	W. Grace	281,054	July 10	881	245	24	163
Door-hanger	G. W. Hey	271,980	Feb. 6	486	131	23	525
Door-hanger	G. W. Hey	271,981	Feb. 6	488	132	23	525
Door-hanger	G. W. Hey	286,539	Oct. 9	446	255	25	182
Door-hanger	E. Mack	281,537	July 17	1495	411	24	276
Door-hanger	H. T. Moody	281,546	July 17	1505	413	24	277
Door-hanger	D. Nickel	290,093	Dec. 11	891	253	25	1051
Door-hanger	E. Prescott	283,279	Aug. 14	969	271	24	680
Door-hanger	E. L. Shaffner	279,606	June 19	1240	344	23	2349
Door-hanger	L. A. Smith	286,065	Oct. 2	376	104	25	69
Door-hanger	S. M. Stevens	287,065	Oct. 23	1629	448	25	314
Door-hanger	J. D. Wilber	279,898	June 19	1350	442	23	2408
Door hanger and rail-bracket. Barn	W. Cronk	272,031	Feb. 13	556	150	23	549
Door-hanger. Balance	R. S. Henderson and A. Sanders	279,442	June 12	1045	290	23	2309
Door hanger. Parlor	S. Shreffler, Jr.	281,308	July 17	1210	335	24	227
Door-lock	W. H. Flinn	272,037	Feb. 13	563	152	23	550
Door-lock	J. J. Helsing	282,517	Aug. 7	49	14, 15	24	508
Door-lock	W. D. Hughes	286,614	Oct. 16	1051	283	25	207
Door-lock	J. Mathisen	278,719	June 5	52	17, 18	23	2135
Door-lock	A. Montant	276,858	May 1	416	111	23	1699
Door-lock	V. M. Moore	289,435	Dec. 4	75	21, 22	25	900
Door-lock	O. E. Pillard	271,918	Feb. 6	406	110	23	512
Door-lock	W. Rowe	277,616	May 15	1360	366	23	1871
Door-lock	J. Savoie	281,142	July 10	991	277	24	182
Door-lock	J. Schilling and A. A. Massar	289,031	Nov. 27	1558	430	25	803
Door-lock. Extension	J. Kuster, Jr.	277,295	May 8	979	263	23	1800
Door-lock. Sliding	W. T. Mings	275,066	Apr. 3	245	67	23	1268
Door-lock. Sliding	C. S. Rees and P. Mills	274,652	Mar. 27	1831	508	23	1173
Door lock. Sliding	A. B. Walters	276,941	May 1	535	138	23	1717
Door-opener	M. L. Powell	276,626	May 1	104	28	23	1645
Door-opener. Electrical	A. T. Smith	273,622	Mar. 6	489	131 132	23	918
Door-opener. Pneumatic	A. T. Smith	281,148	July 10	997	278 279	24	183
Door-opener. Presser-foot	G. L. Geiger	283,770	Aug. 28	1577	446	24	811
Door or shutter. Sliding	E. H. Walton	290,373	Dec. 18	1241	350	25	1132
Door pull. Sliding	W. H. Andrews	276,325	Apr. 24	1880	522	23	1571
Door-pull. Sliding	T. Lyons	287,039	Oct. 23	1595	439	25	308
Door rail and rail-support. Barn	L. Terry	282,237	July 31	2412	663	24	441
Door-securer	A. Boucher	278,862	June 5	261	75	23	2168
Door-securer	A. Boucher	278,863	June 5	262	76	23	2168
Door-securer	F. Burrows	288,920	Nov. 20	1415	390	25	771
Door-securer	W. Coe	290,400	Dec. 13	1277	359	25	1128
Door-securer	C. Leaming	288,179	Nov. 6	478	132	25	590
Door-securer	T. E. Tateum	280,261	June 26	2021	568	23	2492
Door sheave. Sliding	S. H. Houghton	288,338	Nov. 13	687	189	25	635
Door sill and step	L. Haas	290,876	Dec. 25	1916	529	25	1245
Door. Sliding	A. P. Beard	281,433	July 17	1364	376	24	253
Door. Sliding	J. R. Drilling	290,757	Dec. 25	1771	489	25	1221
Door-spring	W. S. Barlow	270,368	Jan. 9	653	192	23	137
Door-spring	G. W. Downes	278,783	June 5	147	43	23	2147
Door-spring	I. Moore	271,649	Feb. 6	77	21	23	454
Door-spring	I. W. Moore	271,650	Feb. 6	78	22	23	454
Door-spring	W. H. Sherer	274,397	Mar. 20	1483	408	23	1105
Doors. Device for adjusting roses to	G. Watkins	280,539	July 3	245	65	24	44
Doors. Guard for closing the hinge-crevices of	F. V. Fletcher	274,303	Mar. 20	1363	373	23	1083
Doors. Stay-roller for sliding	W. M. Brinkerhoff	287,223	Oct. 23	1831	501	25	351
Doors. Stay-roller for sliding	W. M. Brinkerhoff	290,521	Dec. 18	1457	402	25	1155
Doors. Stay-roller for sliding	W. Cronk	288,980	Nov. 27	1494	414	25	792
Doors. Stay-roller for sliding	W. Cronk	288,981	Nov. 27	1495	414	25	792
Double-circuit instrument	A. W. Hall	284,840	Sept. 11	838	234	24	1053
Double-tree	E. How	285,266	Sept. 18	1358	383	24	1153
Double-tree	O. Vanorman	279,846	June 19	1519	425	23	2397
Doubling machine. Thread	A. L. Washburn	271,383	Jan. 30	1933	559	23	388
Doubling machine. Thread	A. L. Washburn. (Reissue)	10,364	Ang. 7	556	157	24	600

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr <sup>en</sup>	Vol.	Page.
Doubling machines. Tension-equalizer for thread.	J. M. Grant	283,599	Aug. 21	1362	{ 380 381 }	24	759
Doubling silk, &c. Machine for.	G. Singleton	277,074	May 8	715	186	23	1754
Doubling silk, &c. Stop-motion for machines for.	T. S. McElhese	289,117	Nov. 27	1659	460	25	820
Dough-breaker. Self-acting	J. Mackinnon	273,114	Feb. 27	1939	544	23	801
Dough-cutting machine.	L. J. Anger.	274,892	Apr. 3	3	1	23	1227
Dough-mixer.	F. Raymond	283,511	Aug. 21	1362	353	24	739
Dough or butter worker.	W. H. Bryan	290,392	Dec. 18	1270	357	25	1127
Dough-raiser	A. P. Gross	280,370	July 3	38	10	24	9
Dowel-pins. Machine for making	D. S. Force	271,053	Jan. 23	1514	436	23	309
Draft-bar for sleighs	D. N. Barker	285,377	Sept. 25	1494	420	24	1182
Draft-equalizer	W. H. Baker	275,321	Apr. 3	560	153	23	1321
Draft-equalizer	W. H. Baker	275,322	Apr. 3	561	153	23	1321
Draft-equalizer	E. H. Cooper	280,135	June 26	1872	527	23	2466
Draft-equalizer	J. W. Helme	281,505	July 17	1457	399	24	269
Draft-equalizer	G. M. Kerby	272,706	Feb. 20	1414	396	23	702
Draft-equalizer	W. Lewis	276,611	May 1	82	22	23	1642
Draft-equalizer	B. C. Shaw	282,575	Aug. 7	122	36	24	521
Draft-equalizer	E. E. Stevenson	280,876	July 10	667	188	24	125
Draft-equalizer	A. Wickey	273,210	Feb. 27	2059	579	23	822
Draft-regulator	H. D. Bannister	288,914	Nov. 20	1410	388	25	770
Draft-regulator	G. M. Githens	270,302	Jan. 9	561	165	23	119
Draft-regulator	H. W. Norwood	278,814	June 5	183	53	23	2153
Draft-regulator for locomotive and other furnaces	H. W. Norwood	278,813	June 5	182	53	23	2153
Draft-retarder and flue-scraper. Combined.	I. D. Smead	289,865	Dec. 11	617	172	25	1001
Drafting garments. Apparatus for.	T. W. Byrnes	282,842	Aug. 7	438	124	24	577
Drafting patterns. Instrument for	M. B. Chandler	270,933	Jan. 23	1368	395	23	285
Drag. Field.	D. Hill	289,656	Dec. 4	354	100	25	949
Drag. Marine	A. J. Clarke	289,234	Nov. 27	1788	495	25	844
Draughting and ventilating stores, &c. Apparatus for.	E. and W. C. Mentz	272,570	Feb. 20	1250	349	23	674
Draining-case for barrels	G. M. Crapon and R. H. Pickett.	272,415	Feb. 20	1050	295	23	638
Dramatic effects. Apparatus for producing illusory.	J. W. Knell	277,137	May 8	798	209	23	1769
Dramatic effects. Apparatus for producing illusory.	J. W. Knell	286,709	Oct. 16	1174	315	25	228
Draw-bar	T. B. Purves and T. C. Craven	271,269	Jan. 30	1778	{ 516 517 }	23	361
Draw-plate	J. Holland	285,896	Oct. 2	150	42	25	29
Drawer	O. A. Jensen	290,237	Dec. 18	1071	300	25	1092
Drawer	J. Stephens	280,412	July 3	89	24	24	18
Drawer-clamp.	A. Cutler	283,468	Aug. 21	1210	340	24	730
Drawer. Furniture.	T. W. Moore.	287,356	Oct. 23	2029	551	25	387
Drawer. Furniture.	E. C. Roberts	288,861	Nov. 20	1344	369	25	757
Drawer-lock.	R. W. Whitney	276,516	Apr. 24	2110	586	23	1612
Drawer-pull.	E. J. Blackham	275,326	Apr. 3	566	154	23	1322
Drawer-pull.	F. Frank	289,245	Nov. 27	1811	500	25	849
Drawer-pull.	J. G. Hallas	289,251	Nov. 27	1817	502	25	850
Drawer-pull.	B. A. Lewis	289,669	Dec. 4	367	104	25	952
Drawer-pull.	J. C. Miller and A. H. Jones.	288,837	Nov. 20	1316	361	25	752
Drawer-pull.	C. Rebstock	275,078	Apr. 3	263	72	23	1971
Drawer pull and lock. Combined	J. Wise	277,398	May 8	1091	293	23	1820
Drawers	C. Z. Celler	288,012	Nov. 6	285	81	25	556
Drawers	G. A. Howe.	277,283	May 8	958	257	23	1798
Drawers	J. McKean	289,679	Dec. 4	381	109	25	954
Drawers	H. Parker	280,232	June 26	1986	558	23	2486
Drawers	G. Wittman	281,816	July 24	1872	511	24	345
Drawers	G. Wittman	285,195	Sept. 18	1277	359	24	1137
Drawers, overalls, and pantaloons.	M. Fishman	283,992	Aug. 28	1842	{ 519 520 }	24	858
Drawing and design. Movable outline	M. J. Sweeney	285,442	Sept. 25	1574	443	24	1195
Drawing apparatus	W. S. Worden	280,432	July 3	119	32	24	22
Drawing-frame and drawing and doubling slivers.	J. E. Prest	277,606	May 15	1349	363	23	1869
Drawing-frame stopping mechanism	H. B. Estes	289,902	Dec. 11	665	186	25	1009
Drawing-knife	J. S. Cantelo.	290,396	Dec. 18	1275	358	25	1128
Drawing-knife. Adjustable.	J. S. Cantelo.	286,385	Oct. 9	761	206	25	149
Drawing-knife and attachment therefor	A. W. Crossman.	286,787	Oct. 16	1267	343	25	245
Drawing. Map.	J. M. B. Sill	280,965	July 10	778	216	24	143
Drawing-paper to drawing-boards. Device for fast- ening	W. Schönheyder.	284,334	Sept. 4	216	60	24	941
Drawing. Spacing-instrument for	G. P. Cenant	290,210	Dec. 18	1036	292	25	1086
Drawing-table	A. Hörmann	274,605	Mar. 27	1772	{ 491 492 }	23	1162
Drawings. Shading	H. R. Maas	282,653	Aug. 7	214	63	24	537
Dredge and mining machine	D. Blain	276,215	Apr. 24	1726	478	23	1546
Dredge for shell-fish	A. F. Friend.	279,373	June 12	962	267	23	2295
Dredge. Roller.	A. J. Burr	273,021	Feb. 27	1823	511	23	780
Dredger.	H. R. Koon	278,975	June 5	440	120	23	2198
Dredgers and excavators. Disintegrating-hopper for.	J. A. Ball	285,340	Sept. 18	1437	406	24	1167
Dredgers. Chain-wheel for sand.	M. Herron	274,601	Mar. 27	1769	490	23	1161
Dredges. Head-block for A-frames of.	R. R. Osgood	285,658	Sept. 25	1826	521	24	1243
Dredging and excavating apparatus	A. D. Fox	286,691	Oct. 16	1152	310	25	924
Dredging and excavating machine	R. E. Rose	279,599	June 19	1233	342	23	2347
Dredging and other machines. Discharge-pipe for.	J. M. Buckley	282,700	Aug. 7	284	80	24	548
Dredging apparatus.	S. Meinesz.	281,905	July 24	1982	543	24	364
Dredging-bucket.	J. O. Ayo	277,868	May 22	1660	453	23	1931
Dredging-bucket.	A. J. Gosnell	283,598	Aug. 21	1361	380	24	758
Dredging-bucket.	J. Menge	274,358	Mar. 20	1432	392	23	1096
Dredging-machine	T. Z. Cole	277,236	May 8	904	{ 241 242 243 }	23	1787
Dredging-machine	A. Cook	287,631	Oct. 30	2360	637	25	457
Dredging-machine	L. A. Johnson and N. E. Johnsen	281,883	July 24	1952	533	24	359
Dredging-machine	J. Menge	288,091	Nov. 6	372	{ 103 104 105 }	25	571
Dredging-machine	J. Menge	288,092	Nov. 6	375	{ 104 105 }	25	572



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Dredging-machine .....	J. Menge .....	288,093	Nov. 6	376	{ 105 106 }	25	572
Dredging-machine .....	J. Menge .....	288,094	Nov. 6	379	{ 107 107 }	25	573
Dredging-machine .....	J. Van Patten .....	284,095	Aug. 28	1989	{ 534 535 }	24	882
Dredging-machine. Elevator .....	J. Kennedy .....	279,570	June 19	1201	332	23	2342
Dredging-machines, &c. Friction-compressor for .....	A. H. Fisher .....	285,883	Oct. 2	133	38	25	26
Dredging-machines. Swinging frame for .....	J. Menge .....	269,949	Jan. 2	152	44	23	32
Dredging or excavating machine .....	H. E. Hawk .....	287,763	Oct. 30	2538	{ 683 684 }	25	491
Dress and skirt protector .....	G. Baker .....	282,254	July 31	2429	668	24	444
Dress. Lady's .....	A. C. Herts .....	280,174	June 26	1911	537	23	2473
Dress-lining .....	E. W. Wheeler .....	272,813	Feb. 20	1549	435	23	727
Dress-shield .....	I. B. Kleinert .....	287,298	Oct. 23	1925	{ 526 527 }	25	368
Dressing-case .....	E. J. Eisenmann and H. Kock .....	279,233	June 12	770	213	23	2265
Dressing-case and wash-stand. Combined .....	J. Penney .....	272,467	Feb. 20	1110	313	23	649
Drier:							
See Clothes-drier. Hop-drier.							
Feed-drier. Lumber-drier.							
Fruit-drier. Offal-drier.							
Glue-drier. Sand-drier.							
Grain-drier. Tobacco-drier.							
Grain and offal drier.							
Drier .....	T. B. Farrington .....	289,635	Dec. 4	324	90, 91	25	945
Drier for white lead, &c .....	G. L. Irwin .....	288,574	Nov. 13	987	272	25	688
Drill:							
See Corn-drill. Ratchet-drill.							
Dental drill. Rock-drill.							
Diamond-drill. Rotary drill.							
Grain-drill. Seed-drill.							
Hand-drill. Track-drill.							
Manure-drill. Twist-drill.							
Portable drill. Wheat-drill.							
Drill .....	J. S. Bancroft and W. H. Thorne .....	270,366	Jan. 9	648	{ 190 191 }	23	136
Drill .....	J. H. Pendleton .....	283,509	Aug. 21	1260	353	24	739
Drill feed mechanism .....	J. and B. F. Barnes .....	270,537	Jan. 9	872	254	23	180
Drill-grinding machine .....	T. R. Pickering .....	282,364	July 31	2573	705	24	469
Drill guide and rest .....	L. F. Longmore .....	284,449	Sept. 4	352	97	24	963
Drill-hoe. Flexible .....	J. F. Keller .....	269,943	Jan. 2	147	43	23	30
Drill-hoe point .....	A. R. Ludlow .....	273,375	Mar. 6	181	49	23	865
Drill or reamer, tap, and socket. Combined .....	J. W. Douglas .....	279,360	June 12	936	261	23	2291
Drill-rest .....	H. C. Laubach .....	284,967	Sept. 11	988	278	24	1081
Drill-stock .....	L. Eicke .....	283,473	Aug. 21	1216	342	24	731
Drills. Device for grinding and clearing .....	D. Mehan .....	282,209	July 31	2377	654	24	434
Drills. Grain and fertilizer spreading attachment for .....	E. W. Free .....	277,260	May 8	933	250	23	1793
Drills. Machine for sharpening .....	J. S. Bancroft and W. H. Thorne .....	270,365	Jan. 9	642	190	23	136
Drilling and boring machines. Automatic friction feeding device for .....	J. J. Kirby .....	290,242	Dec. 18	1077	301	25	1093
Drilling apparatus .....	W. L. Saunders .....	270,488	Jan. 9	798	233	23	166
Drilling device. Metal .....	P. C. Wright .....	287,986	Nov. 6	254	72	25	552
Drilling-machine .....	W. F. and J. Barnes .....	285,726	Sept. 25	1915	{ 543 544 }	24	1259
Drilling-machine .....	T. J. and F. T. Currier .....	287,366	Oct. 23	2006	546	25	383
Drilling-machine .....	J. Miller .....	282,750	Aug. 7	333	95	24	558
Drilling-machine .....	J. Richards .....	287,326	Oct. 23	1958	535	25	374
Drilling-machine .....	J. Rieppel .....	280,956	July 10	767	213	24	141
Drilling-machine .....	J. C. Smith .....	279,834	June 19	1503	420	23	2394
Drilling-machine .....	G. C. Taft .....	288,510	Nov. 13	915	250	25	674
Drilling-machine .....	F. Veos .....	273,409	Mar. 6	221	59	23	871
Drilling-machine .....	E. J. Worcester .....	274,243	Mar. 20	1288	355	23	1071
Drilling-machine .....	E. J. Worcester .....	287,209	Oct. 23	1812	497	25	348
Drilling-machine. Hand .....	J. Cherney .....	275,885	Apr. 17	1331	366	23	1470
Drilling-machine. Hand .....	D. E. Kempster .....	289,110	Nov. 27	1650	458	25	819
Drilling-machine. Hand .....	G. W. Smith .....	279,032	June 5	513	140	23	2211
Drilling-machine post .....	O. Plummer .....	274,026	Mar. 13	998	273	23	1013
Drilling-machine. Radial .....	A. Box .....	283,857	Aug. 28	1676	473	24	827
Drinking-flask .....	J. P. Eustis .....	285,597	Sept. 25	1756	498	24	1230
Drinking-vessel .....	J. Vernen .....	282,244	July 31	2418	665	24	442
Drinking-vessel .....	A. R. and C. W. Weiss .....	278,205	May 22	2073	571	23	2002
Drinking-vessels, &c. Regulating the containing capacity of .....	J. Tams .....	289,467	Dec. 4	111	33	25	906
Drive-wheel .....	C. Darrow .....	289,992	Dec. 11	774	217	25	1029
Driving-bit .....	E. H. Gilman .....	281,991	July 24	2080	571	24	381
Driving-gear for locomotives, steamboats, &c. Chain.	G. F. Sievern .....	280,091	June 26	1825	513	23	2457
Driving mechanisms. Gallows-frame for portable .....	W. T. Kellogg .....	279,650	June 19	1204	350	23	2358
Drop-light pipe-coupling .....	J. J. Royle .....	286,229	Oct. 9	545	150	25	110
Dropper:							
See Check-row dropper.							
Dropper and check-row attachment. Combined .....	H. Z. Coles .....	271,793	Feb. 6	252	70	23	484
Druggist's graduate .....	L. C. Leake .....	272,713	Feb. 20	1492	398	23	704
Drum .....	E. Boulanger .....	274,900	Apr. 3	11	3	23	1228
Drum for hot-air furnaces. Radiating .....	J. Miller and D. Mager .....	287,149	Oct. 23	1730	474	25	334
Drum. Heating .....	D. S. Richardson .....	282,567	Aug. 7	113	34	24	520
Drum. Heating .....	G. W. Weamer and F. T. Zimmer-	289,045	Nov. 27	1577	435	25	806
Drum. Heating .....	man.						
Drum. Heating .....	H. G. Williams .....	281,219	July 10	1092	301	24	200
Drum. Stove-pipe .....	W. B. Getty and D. Bricker .....	274,117	Mar. 20	1136	310	23	1042
Drying apparatus .....	A. Edwards .....	288,782	Nov. 20	1248	343	25	740
Drying cylinder. Steam .....	W. Maybury .....	284,877	Sept. 11	881	247	24	1061
Drying house or kiln .....	W. A. Allen .....	270,359	Jan. 9	633	{ 186 187 }	23	134
Drying-kiln .....	G. F. Speer .....	271,144	Jan. 23	1620	466	23	327

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Drying-kiln for bricks, &c.	C. Chambers, Jr.	274,907	Apr. 3	19	5	23	1230
Drying kiln for bricks, &c.	H. Cockell	274,910	Apr. 3	21	6	23	1230
Drying material of extensive superficial area	O. Lumpp	290,490	July 3	194	51	24	35
Drying or moisture-extracting apparatus	G. Gerdem	273,721	Mar. 13	614	165	23	947
Drying rack. Adjustable.	J. R. Moore and H. Bovee	269,874	Jan. 2	60	19	23	14
Drying substances in sheets. Frame for	J. B. Edson	277,693	May 15	1449	391	23	1887
Drying sugar and other substances. Machine for	G. M. Newhall	286,056	Oct. 2	340	94, 95	25	63
Dumb-bell.	W. T. McGinnis	272,144	Feb. 13	698	191	23	573
Dummy. Sample.	M. H. Marcus	290,188	Dec. 11	1001	282	25	1071
Dumping boat or scow	J. W. Wilson	279,683	June 19	1334	371	23	2364
Dumping boat or scow	J. W. Wilson	279,684	June 19	1336	371	23	2365
Dumping-platform	W. F. Nine and A. R. Case	288,103	Nov. 6	388	110	25	575
Dumping-platform	J. T. Savage and J. Love. (Reissue).	10,389	Oct. 2	470	129	25	88
Duplex direct-acting engine.	W. H. Guild	278,133	May 22	1982	544	23	1986
Duplex engine	C. C. Worthington	283,315	Aug. 14	1008	282	24	688
Duplex writing-table.	J. B. Swem	277,959	May 22	1762	453	23	1948
Dust-collector.	P. Chaney, Jr.	288,014	Nov. 6	287	81	25	556
Dust-collector.	N. W. Holt	273,533	Mar. 6	374	99	23	898
Dust-pan	C. B. Banning	275,012	Apr. 3	170	46	23	1255
Dust-pan	F. W. Carpenter	277,225	May 8	891	237	23	1785
Dust-pan	F. W. Carpenter	285,877	Oct. 2	124	36	25	24
Dust-pan	N. T. Folsom	276,531	Apr. 24	2131	593	23	1615
Dust-pan	H. C. Godfrey	277,266	May 8	939	252	23	1794
Dust-pan	R. E. Timoney and C. R. Brown	288,280	Nov. 13	610	167	25	622
Dust-pan	W. M. Valentine	279,676	June 19	1328	369	23	2363
Dust-pan	J. F. Wynkoop	280,990	July 10	804	224	24	148
Duster. Feather	J. W. Little	271,877	Feb. 6	350	97	23	502
Duster. Feather	H. Taylor and J. F. C. Elfers	280,531	July 3	235	63	24	42
Dye-stuff. Manufacture of	H. Caro and A. Korn	290,856	Dec. 25	1890	.....	25	1241
Dye-stuff. Manufacture of purple	A. Kern	290,892	Dec. 25	1933	.....	25	1240
Dye-stuff or coloring-matter. Manufacture of	A. Kern	290,891	Dec. 25	1932	.....	25	1240
Dye-stuff or coloring-matter. Manufacture of	A. Kern	290,893	Dec. 25	1935	.....	25	1240
Dye-stuff or coloring-matter. Manufacture of blue	E. Hepp	270,311	Jan. 9	572	.....	23	192
Dye-stuffs for application to fibrous materials. Preparing	H. W. Vaughan	272,499	Feb. 20	1155	.....	23	657
Dye-stuffs. Manufacture of material suitable for.	A. Bernthsen	282,835	Aug. 7	430	.....	24	576
Dye-stuffs to fibrous materials. Applying	H. W. Vaughan	272,498	Feb. 20	1154	.....	23	657
Dye-vat. Machine for handling yarn in the	R. L. Kushlow	279,884	June 19	1563	437	23	2405
Dye-vats. Shell for use in	R. Bell	276,340	Apr. 24	1897	526	23	1575
Dyes. Apparatus for extracting.	G. L. Allen	274,891	Apr. 3	1	1	23	1227
Dyeing and finishing plush fabrics.	J. C. Maguire	283,500	Aug. 21	1253	.....	24	738
Dyeing aniline-black	A. N. Dubois	283,220	Aug. 14	893	.....	24	666
Dyeing compound	A. M. Meincke	276,061	Apr. 17	1535	.....	23	1505
Dyeing mother-of-pearl, &c. Compound for and process of	C. P. Pest	276,378	Apr. 24	1940	.....	23	1582
Dyeing skeins of yarn. Machine for	W. McAllister	280,644	July 3	368	102	24	65
Dyeing textile fabrics. Apparatus for	L. Goudiat	290,678	Dec. 25	1658	457	25	1199
Dyeing with hydrocarbons. Apparatus for	E. Ran	290,110	Dec. 11	910	258	25	1055
Dyeing wool, cloth, &c., to imitate marble	E. A. Batonnier	270,371	Jan. 9	656	.....	23	137
Dynamite-shell.	D. M. Mefford	279,964	June 26	1670	469	23	2430
Dynamometer	A. H. Emery	278,911	June 5	339	94	23	2181
Dynamometer	A. H. Emery	278,912	June 5	343	95	23	2182
Dynamometer	J. McCloskey	287,841	Nov. 6	61	18	25	518
Dynamometer. Electro-magnetic	C. F. Brackett	287,800	Nov. 6	13	4	25	509
Ear-drum. Artificial	J. W. Culbertson	270,284	Jan. 9	543	160	23	116
Ear-jewel fastening	G. W. Washburn	285,532	Sept. 25	1677	472	24	1215
Ear-protector	C. Beard and C. E. Baldwin	280,005	June 26	1718	481	23	2139
Ear-ring	A. F. Arnold	276,993	May 8	695	158	23	1736
Ear-ring	J. A. Riley and C. S. Freer	271,122	Jan. 23	1597	459	23	332
Ear-ring, bracelet, &c.	J. A. Riley and C. S. Freer	271,121	Jan. 23	1596	459	23	332
Ear-ring fastener	W. R. Dutemple	280,726	July 3	466	133	24	83
Ear-ring fastener	G. Krementz	271,084	Jan. 23	1558	448	23	316
Ear-ring wire	W. E. Liddle	281,068	July 10	920	257	24	170
Earthenware vessel	J. Pech	280,661	July 3	385	108	24	68
Earthenware vessels. Cover for	J. C. Thompson	282,802	Aug. 7	392	111	24	569
Easel	T. L. Fisher	278,116	May 22	1954	535	23	1982
Easel	F. S. Frost	275,631	Apr. 10	1002	271	23	1405
Easel	B. Smiley	285,438	Sept. 25	1569	442	24	1195
Easel	E. Werner	281,591	July 17	1562	428	24	286
Easel	D. K. Woodward	280,279	June 26	2043	574	23	2496
Easel, artist's box, sketching-board, and stool combined.	E. Werner	283,175	Aug. 14	834	233	24	655
Easel attachment	D. K. Woodward	280,278	June 26	2042	574	23	2496
Easel, blackboard, and writing-desk. Combined	R. Smilie	284,251	Sept. 4	121	33	24	925
Easel. Sketcher's	M. A. Merrill	274,620	Mar. 27	1796	499	23	1166
Eaves-gutter	H. I. Aldrich	280,111	June 26	1846	521	23	2461
Eaves-trough	J. P. Gould	280,737	July 3	483	136	24	86
Eaves-trough	F. L. Schaffert	274,393	Mar. 20	1479	406	23	1104
Eaves-trough bracket. Adjustable	F. P. Campbell	288,307	Nov. 13	640	175	25	628
Eaves-trough hanger	J. P. Abbott	276,654	May 1	142	36	23	1650
Eaves-trough hanger	J. P. Abbott	285,371	Sept. 25	1485	419	24	1181
Eaves-trough hanger	J. Bear and H. Whitenbarger	290,731	Dec. 25	1737	480	25	1214
Eaves-trough hanger	H. J. Erwin	270,038	Jan. 2	250	72	23	51
Eaves-trough hanger	D. Gottschalk	288,793	Nov. 20	1268	347	25	743
Eaves-trough hanger	C. D. Hyre	283,892	Aug. 28	1720	485	24	835
Eaves-trough hanger	T. McMaster	285,292	Sept. 15	1386	392	24	1158
Eaves-trough support	W. R. Wilcox	272,925	Feb. 27	1711	479	23	761
Eccentric	R. R. Angell	272,511	Feb. 20	1170	327	23	659
Eccentric	C. W. Barnaby	287,406	Oct. 30	2061	500	25	400
Eccentric	C. Johnson	282,327	July 31	2526	692	24	460
Eccentric	C. Johnson	287,440	Oct. 30	2100	571	25	408
Eccentric and strap for steam-engines	N. Hunt	275,659	Apr. 10	1038	281	23	1411
Eccentric bearing	D. H. Lord	281,197	July 10	1064	293	24	198



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Eccentric-coupling for shakers .....	A. Sconller .....	284,907	Sept. 11	917	258	24	1068
Eccentric for steam-engines. Variable .....	M. C. Bullock .....	274,436	Mar. 20	1531	421	23	1113
Edge-setting machine .....	E. Patten .....	285,303	Sept. 18	1399	395	24	1160
Edger .....	J. A. Robb .....	290,358	Dec. 18	1225	{ 344 345 }	25	1118
Edger attachment .....	S. W. Viets .....	289,184	Nov. 27	1745	485	25	836
Edger. Gang- .....	T. J. Neacy .....	282,213	July 31	2382	{ 655 656 }	24	435
Edgers. Adjustable roller-frame for .....	G. F. Burton .....	283,752	Aug. 28	1557	439	24	807
Educational apparatus .....	P. E. Lamberet and A. M. Billoud .....	281,770	July 24	1809	494	24	334
Educational device .....	S. F. Enos .....	288,628	Nov. 20	1060	291	25	707
Egg and flour mixer .....	A. Doll .....	270,642	Jan. 16	1007	290	23	213
Egg and fruit carrier .....	O. L. Parmenter .....	276,273	Apr. 24	1795	{ 499 500 }	23	1558
Egg-beater .....	L. Burnham .....	277,218	May 8	886	236	23	1784
Egg-beater .....	L. Burnham .....	277,219	May 8	887	236	23	1784
Egg-beater .....	W. W. Carter .....	270,015	Jan. 2	223	64	23	46
Egg-beater .....	F. Earl .....	280,019	June 26	1743	489	23	2442
Egg-beater .....	K. A. Livingood .....	282,738	Aug. 7	324	92	24	556
Egg-beater .....	C. Schreiber .....	276,290	Apr. 24	1817	506	23	1562
Egg-boiler. Automatic .....	W. P. and W. B. O'Brien, Jr .....	284,051	Aug. 28	1934	541	24	872
Egg-carrier .....	J. H. Batchelder .....	283,954	Aug. 28	1799	509	24	850
Egg-carrier .....	A. L. Hill .....	272,548	Feb. 20	1210	338	23	667
Egg-carrier .....	C. W. Hunter .....	281,696	July 24	1708	464	24	316
Egg-carrier .....	J. W. Palmer .....	285,429	Sept. 25	1559	439	24	1193
Egg-carrier .....	J. L. Stevens .....	279,199	June 12	735	201	23	2259
Egg cell-case .....	J. Lynam .....	289,010	Nov. 27	1527	422	25	797
Egg-crate .....	W. O. Smith .....	284,252	Sept. 4	123	33	24	925
Egg-crate .....	F. F. Ward and F. Lindsey .....	282,810	Aug. 7	400	113	24	570
Egg. Desiccated .....	C. A. La Mont .....	283,618	Aug. 21	1380		24	762
Egg or batter beater .....	S. Short .....	273,173	Feb. 27	2010	565	23	813
Egg-preserver. Rotary .....	A. R. P. Robinson .....	271,658	Feb. 6	88	24	23	455
Egg-preserving apparatus .....	T. Lee .....	269,866	Jan. 2	53	17	23	13
Egg-preserving mixture .....	G. A. Curtice .....	274,283	Mar. 20	1335		23	1079
Egg rack and holder .....	J. C. Rundlett .....	283,285	Aug. 14	974	272	24	681
Egg-shelf .....	H. M. Lindenthal .....	276,612	May 1	83	23	23	1642
Egg-tester .....	J. P. Shaw .....	289,574	Dec. 4	254	71	25	932
Eggs. Device for handling .....	E. M. Wood .....	283,738	Aug. 21	1529	431	24	791
Eggs. Preserving .....	F. J. Praddex .....	281,555	July 17	1516		24	279
Ejector .....	L. B. Fulton .....	281,050	July 10	876	244	24	162
Ejector .....	W. Huston .....	284,962	Sept. 11	993	277	24	1080
Ejector .....	D. W. Magee .....	284,453	Sept. 4	356	99	24	964
Ejector .....	H. N. Wickersham and W. Huston .....	272,816	Feb. 20	1553	435	23	728
Ejector and injector .....	L. B. Fulton .....	280,733	July 3	477	135	24	85
Ejector. Bilge-water .....	J. P. Graham .....	271,060	Jan. 23	1523	439	23	310
Ejector. Double-headed .....	W. J. Sherriff .....	277,072	May 8	711	185	23	1753
Ejector for wells .....	W. O. Robbins .....	277,346	May 8	1036	278	23	1811
Ejector, inspirator, and injector. Convertible .....	E. W. Kremer .....	282,092	July 31	9213	608	24	409
Elastic fabric for goring .....	T. J. Mayall .....	286,037	Oct. 2	318	89	25	59
Elastic fabrics. Machine for crimping and prepar- ing .....	M. Gardner .....	290,030	Dec. 11	820	231	25	1038
Elastic or cord fabric .....	J. W. Green, Jr., and A. Smith .....	283,100	Aug. 14	749	212	24	640
Elastic roll .....	H. F. Case .....	269,828	Jan. 2	12	4	23	5
Elastic roller .....	J. W. Osborne .....	277,154	May 8	815	215	23	1772
Electric alarms. Circuit-closer for .....	L. A. Brigel .....	287,618	Oct. 30	2348	633	25	455
Electric alarms. Portable circuit-closer for .....	A. Wiswall .....	286,100	Oct. 2	356	109	25	73
Electric apparatus. Commutator for .....	W. H. Chapman .....	278,881	June 5	282	82	23	2171
Electric apparatus regulator .....	C. J. Van Depoele .....	285,528	Sept. 25	1673	471	24	1214
Electric-arc light .....	G. J. Murdoch .....	275,510	Apr. 10	844	229	23	1378
Electric-arc light .....	J. A. Wetmore .....	272,811	Feb. 20	1546	434	23	727
Electric-arc lighting system .....	R. J. Sheehy .....	279,825	June 19	1491	417	23	2392
Electric battery .....	H. A. Burns .....	284,605	Sept. 11	545	154	24	1003
Electric battery .....	A. F. DeLafield .....	287,641	Oct. 30	2371	639	25	460
Electric battery .....	P. Jablockhoff .....	273,739	Mar. 13	844	172	23	953
Electric battery .....	C. P. Orne .....	283,355	Aug. 14	1071	301	21	700
Electric battery .....	G. G. L. Velloni .....	290,654	Dec. 18	1622	446	25	1187
Electric-battery fluid .....	E. Berliner .....	270,884	Jan. 23	1309	378	23	275
Electric battery. Secondary .....	W. K. Freeman .....	270,778	Jan. 16	1183	341	23	246
Electric cable .....	P. B. Delany .....	283,763	Aug. 28	1570	444	24	810
Electric cable .....	W. Halkyard .....	280,092	Nov. 27	1632	451	25	815
Electric cable .....	W. W. Jacques .....	270,438	Jan. 9	744	218	23	154
Electric cable .....	W. J. Philips and G. L. Kitson .....	275,407	Apr. 10	714	191	23	1357
Electric cable .....	W. H. Sawyer .....	280,521	July 3	225	59	24	40
Electric cable .....	S. F. Shelbourne .....	275,424	Apr. 10	733	195	23	1360
Electric cable or conductor .....	R. S. Waring .....	290,375	Dec. 18	1245	350	25	1123
Electric cable. Subterranean .....	L. A. F. Herrmann .....	280,474	July 3	176	47	24	32
Electric-cable support .....	S. F. Shelbourne .....	275,425	Apr. 10	736	195	23	1360
Electric-cable support or hanger .....	A. Wright .....	277,528	May 15	1255	337	23	1854
Electric cable. Truck for paying off .....	A. S. Weaver .....	285,327	Sept. 18	1426	403	24	1165
Electric cables. Device for suspending .....	R. S. Waring .....	284,100	Aug. 28	1996	556	24	883
Electric cables. Joint-connection in lead-covered .....	H. C. Root and J. C. Reilly .....	278,277	May 22	2166	{ 596 597 }	23	2018
Electric cables. Machine for making .....	R. S. Waring .....	284,099	Aug. 28	1994	555	24	883
Electric cables. Machine for making .....	J. Farrell. (Reissue) .....	10,401	Nov. 6	497	138	25	594
Electric cables. Machine for making .....	J. Farrell. (Reissue) .....	10,402	Nov. 6	501	139	25	595
Electric cables. Machine for making .....	E. E. and E. G. Rafer .....	280,764	July 3	525	147	24	93
Electric cables. Machine for manufacturing .....	W. J. Philips and G. L. Kitson .....	275,408	Apr. 10	715	191	23	1357
Electric cables. Testing .....	W. J. McElroy .....	284,138	Aug. 28	2049	569	24	892
Electric cables. Testing-box for underground .....	W. J. McElroy .....	284,139	Aug. 28	2051	569	24	892
Electric call .....	J. B. Currier .....	272,862	Feb. 27	1631	457	23	748
Electric call .....	J. B. Currier and D. H. Rice .....	276,960	May 1	559	146	23	1782
Electric call and signal .....	L. S. White .....	284,348	Sept. 4	231	65	24	943
Electric call apparatus .....	C. S. Shriver .....	281,931	July 24	2009	550	24	369
Electric carbon .....	H. Frasch .....	281,048	July 10	874	243	24	162

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & Co.	Vol.	Page.
Electric circuit and apparatus for synchronizing clock-pendulums	H. L. Bailey	278,846	June 5	235	69	23	2163
Electric circuit-breaker	S. M. Plush	282,921	Aug. 7	527	149	24	594
Electric-circuit breaker	E. Weston	289,199	Nov. 27	1761	488	25	839
Electric-circuit breaker. Automatic	L. J. Phelps	281,202	July 10	1070	295	24	196
Electric-circuit changer. Automatic	C. J. Van Depoele	285,859	Oct. 2	100	29	25	20
Electric-circuit closer. Thermometric	M. Martin	286,722	Oct. 16	1189	320	25	231
Electric-circuit cut-off	A. L. Bogart	290,732	Dec. 25	1738	480	25	1214
Electric-circuit cut-out	A. L. Bogart	279,634	June 19	1275	354	23	2355
Electric circuit maker and breaker. Automatic	C. G. Perkins	290,470	Dec. 18	1386	382 383	25	1146
Electric-circuit opener. Automatic	W. H. Sawyer	279,023	June 5	499	136	23	2208
Electric-circuit switch-board	F. Blake	276,216	Apr. 24	1728	478	23	1546
Electric-circuit track-instrument	C. A. Scott	283,152	Aug. 14	806	225	24	649
Electric-circuit wires. Fastening for	H. G. Fiske	271,825	Feb. 6	290	80	23	492
Electric circuits. Automatic cut-out for	R. J. Sheehy	281,799	July 24	1849	505	24	340
Electric circuits. Circuit-breaker and lightning-arrester for	J. W. Dyer	289,630	Dec. 4	318	89	25	944
Electric circuits. Device for making and breaking	R. W. Willson	271,560	Jan. 30	2155	620	23	428
Electric circuits. Safety-catch for	C. Goddard	287,533	Oct. 30	2213	601	25	431
Electric circuits. Station-call for	T. W. Mather	288,089	Nov. 6	369	102 103	25	571
Electric commutator or switch	E. Thomson	283,167	Aug. 14	823	231	24	653
Electric conductor	F. Jacob	287,288	Oct. 23	1910	522 523	25	366
Electric conductor	J. W. Rogers	279,189	June 12	726	199	23	2257
Electric conductor	H. D. Rogers	281,223	July 10	1098	303	24	201
Electric conductor	H. D. Stanley and G. Doolittle	283,433	Aug. 21	1171	329	24	723
Electric conductor	S. Tainter	289,725	Dec. 4	445	124 125	25	964
Electric conductor. Compound	W. B. Hollingshead	284,423	Sept. 4	324	90	24	958
Electric-conductor conduit	L. Bannister	282,833	Aug. 7	427	121	24	576
Electric-conductor conduit	J. F. Martin	286,945	Oct. 16	1470	404	25	279
Electric conductor. Flexible	S. Bergmann	275,748	Apr. 10	1146	314	23	1430
Electric conductor or cable	J. W. Rogers	280,518	July 3	221	58, 59	24	40
Electric conductor or cable. Underground	J. B. Hyde	277,036	May 8	660	172	23	1745
Electric-conductor post	J. A. Devlin	286,397	Oct. 9	780	211	25	152
Electric conductor. Submarine	J. B. Hyde	290,881	Dec. 25	1918	530	25	1246
Electric conductor. Underground	J. B. Hyde	284,854	Sept. 11	854	240	24	1056
Electric conductors. Apparatus for constructing	J. B. Hyde	284,855	Sept. 11	856	241	24	1056
Electric conductors. Making	T. Eggleston	286,796	Oct. 16	1280	345	25	247
Electric conductors. Manufacture of silicious copper and bronze for making	L. Weiller	277,089	May 8	733		23	1757
Electric conductors. Underground conduit for	J. E. Giles	288,790	Nov. 20	1265	346	25	742
Electric-current regulator	C. G. Perkins	274,371	Mar. 20	1451	398	23	1099
Electric-current regulator	E. Thomson	271,948	Feb. 6	438	120 121	23	518
Electric currents. Apparatus for controlling	M. Levy	286,833	Oct. 16	1323	361 362	25	255
Electric currents. Apparatus for regulating	S. Z. De Ferranti and A. Thompson	288,315	Nov. 13	648	178 179	25	629
Electric currents. Cut-out for dangerous	F. A. Swan and C. B. Bosworth	274,150	Mar. 20	1113	321	23	1049
Electric currents from high to low tension. Apparatus for translating	T. A. Edison	278,418	May 29	2371	647 648	23	2062
Electric currents. System of generating and distributing	C. J. Van Depoele	287,347	Oct. 23	1983	541	25	379
Electric currents. System of generating and regulating	E. Weston	289,324	Nov. 27	1909	530 531	25	868
Electric cut-off	J. A. Tupper	286,158	Oct. 2	461	125	25	86
Electric cut-out	E. M. Avery	276,328	Apr. 24	1884	523	23	1572
Electric cut-out	T. H. Rhodes	276,286	Apr. 24	1811	505	23	1561
Electric cut-out	F. A. Swan and C. B. Bosworth	274,151	Mar. 20	1114	321	23	1049
Electric cut-out. Automatic	C. G. Perkins	287,320	Oct. 23	1952	533	25	373
Electric distribution. System of	T. A. Edison	287,516	Oct. 30	2194	596	25	426
Electric divining-rod	C. F. Varley	277,087	May 8	731	191 192	23	1757
Electric elevator	S. D. Field	275,179	Apr. 3	383	106	23	1292
Electric elevator	S. S. Wheeler	273,208	Feb. 27	2052	577 578	23	821
Electric force. Apparatus for regulating the transmission of	M. Levy	273,291	Mar. 6	56	17, 18	23	844
Electric generator	S. J. Wallace	274,865	Mar. 27	2077	578	23	1215
Electric generator. Dynamo	I. Fisher	280,301	June 26	2074	584	23	2502
Electric generator. Dynamo	C. C. Peck and W. H. Chapman	276,275	Apr. 24	1799	501 502	23	1550
Electric generator. Dynamo or magneto	F. Bain	287,608	Oct. 30	2332	630	25	452
Electric generators. Making elements for thermal	H. Frasch	286,288	Oct. 9	647		25	128
Electric-induction machine	A. G. Waterhouse	271,169	Jan. 23	1657	476 477	23	332
Electric light	J. G. Chassé	279,224	June 12	760	210	23	2263
Electric light	F. L. Scour	280,677	July 3	406	114	24	72
Electric light	H. A. Seymour	270,491	Jan. 9	802	234	23	167
Electric light	E. Weston	271,172	Jan. 23	1661	478	23	333
Electric light and gas-burner. Combined	W. A. Shaw	271,140	Jan. 23	1617	465	23	326
Electric-light brackets. Joint for	C. H. Hinds	282,317	Nov. 31	2507	689	24	457
Electric-light circuits. Current-regulator for	C. R. Arnold	288,393	July 13	770	208	25	648
Electric-light circuits. Safety-catch for	L. Stieringer	281,576	July 17	1541	422	24	292
Electric-light circuits. Safety self-closing shunt-switch for	E. Thomson	275,289	Apr. 3	516	142	23	1314
Electric-light circuits. Safety self-closing shunt-switch for	E. Thomson	275,290	Apr. 3	518	142	23	1314
Electric-light conductors. Support for	L. Stieringer	278,465	May 29	2431	663	23	2073
Electric-light fixtures. Connection for	S. Bergmann	275,749	Apr. 10	1146	314	23	1430
Electric light. Incandescent	T. L. Chngman	276,133	Apr. 17	1627	448	23	1521



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. <sup>o</sup>	Vol.	Page.
Electric-light joint	C. H. Hinds	282,318	July 31	2508	689	24	457
Electric-light regulator	R. J. Sheehy	281,800	July 24	1851	506	24	341
Electric-light stations. Switch-board for	R. J. Sheehy	284,247	Sept. 4	116	31, 32	24	924
Electric-light switch	T. G. Turner	275,440	Apr. 10	759	202	23	1364
Electric-light tower	B. F. Orton	280,850	July 10	637	179	24	118
Electric lights. Automatic cut-out for	A. Bernstein	283,748	Aug. 28	1551	438	24	806
Electric lights. Carbon electrode for	J. A. Moffitt	281,285	July 17	1179		24	222
Electric lights, &c. Tower for	C. D. F. Smith	287,881	Nov. 6	112	34	25	527
Electric lighting	K. W. Hedges	284,420	Sept. 4	321	89	24	957
Electric lighting	H. Van Hovenbergh	290,292	Dec. 18	1140	320	25	1103
Electric lighting apparatus	N. S. White	289,590	Dec. 4	274	77	25	935
Electric lighting for railway-trains. System of	C. E. Buell	270,735	Jan. 16	1128	323 324	23	236
Electric lighting on railway-trains. Apparatus for	W. Stroudley and E. J. Houghton	288,888	Nov. 20	1378	379 380	25	763
Electric lighting system	M. G. Farmer	285,602	Sept. 25	1763	500	24	1231
Electric lighting system	J. A. McCoy	287,040	Oct. 23	1596	439	25	305
Electric lighting systems. Indicator for	W. P. Freeman	287,654	Oct. 30	2383	644	25	463
Electric lighting systems. Recorder and register for	R. J. Sheehy	289,862	Dec. 11	614	171	25	1001
Electric lock	M. Sullivan	277,628	May 15	1376	371	23	1874
Electric machine. Dynamo	F. Bain	280,708	July 3	443	128	24	79
Electric machine. Dynamo	F. Bain	287,609	Oct. 30	2334	630	25	453
Electric machine. Dynamo	F. Bain	287,610	Oct. 30	2337	631	25	453
Electric machine. Dynamo	C. E. Ball	278,076	May 22	1900	520	23	1973
Electric machine. Dynamo	C. E. Ball	284,357	Sept. 4	243	67, 68	24	945
Electric machine. Dynamo	C. E. Ball	285,548	Sept. 25	1696	478	24	1219
Electric machine. Dynamo	C. E. Ball	285,549	Sept. 25	1696	478	24	1219
Electric machine. Dynamo	R. E. Ball	279,476	June 12	1085	300	23	2315
Electric machine. Dynamo	R. E. Ball	280,439	July 3	128	34	24	24
Electric machine. Dynamo	W. Baxter, Jr	271,972	Feb. 6	468	128	23	522
Electric machine. Dynamo	A. Bernstein	284,999	Sept. 18	1039	291 292	24	1066
Electric machine. Dynamo	A. Chertemps and L. Danden	270,017	Jan. 2	224	65, 66	23	46
Electric machine. Dynamo	W. B. Cleveland	284,277	Sept. 4	149	41	24	929
Electric machine. Dynamo	J. A. I. Craig	277,237	May 8	907	243	23	1768
Electric machine. Dynamo	J. A. I. Craig	277,238	May 8	908	244	23	1768
Electric machine. Dynamo	S. Z. De Ferranti and A. Thompson	282,446	July 31	2682	735	24	488
Electric machine. Dynamo	S. Z. De Ferranti and A. Thompson	288,316	Nov. 13	651	179 180 181	25	629
Electric machine. Dynamo	A. F. Delafield	278,516	May 29	2491	680	23	2064
Electric machine. Dynamo	J. Du Shane	290,550	Dec. 18	1492	412	25	1164
Electric machine. Dynamo	J. W. Easton	290,551	Dec. 18	1493	413	25	1164
Electric machine. Dynamo	N. H. Edgerton	279,362	June 12	938	262 263	23	2292
Electric machine. Dynamo	T. A. Edison	278,419	May 29	2372	648	23	2063
Electric machine. Dynamo	T. A. Edison	287,512	Oct. 30	2190	595	25	425
Electric machine. Dynamo	T. A. Edison	287,513	Oct. 30	2191	595	25	425
Electric machine. Dynamo	T. A. Edison	287,514	Oct. 30	2191	595	25	426
Electric machine. Dynamo	E. A. Edwards	281,985	July 24	2074	569	24	380
Electric machine. Dynamo	W. B. F. Elphinstone and C. W. Vincent	284,288	Sept. 4	159	44 45 46	24	931
Electric machine. Dynamo	W. B. F. Elphinstone and C. W. Vincent	288,042	Nov. 6	318	89, 90	25	562
Electric machine. Dynamo	F. K. Fitch	285,249	Sept. 18	1339	377	24	1149
Electric machine. Dynamo	W. P. Freeman	270,779	Jan. 16	1184	341	23	246
Electric machine. Dynamo	W. P. Freeman	270,780	Jan. 16	1184	341 342	23	246
Electric machine. Dynamo	G. W. Fuller	278,119	May 22	1957	536 537	23	1983
Electric machine. Dynamo	G. W. Fuller	278,120	May 22	1960	537	23	1983
Electric machine. Dynamo	G. W. Fuller	278,121	May 22	1963	538 539	23	1983
Electric machine. Dynamo	G. W. Fuller	278,122	May 22	1967	539 540	23	1984
Electric machine. Dynamo	G. W. Fuller	286,414	Oct. 9	798	216	25	155
Electric machine. Dynamo	G. W. Fuller	286,416	Oct. 9	801	216	25	156
Electric machine. Dynamo	J. E. Giles	281,052	July 10	878	245	24	162
Electric machine. Dynamo	J. E. H. Gordon	284,292	Sept. 4	165	46 47 48	24	932
Electric machine. Dynamo	J. Gray	285,027	Sept. 18	1080	301 302	24	1103
Electric machine. Dynamo	J. Hopkinson and A. Muirhead	280,039	June 26	1767	496 497	23	2446
Electric machine. Dynamo	E. J. Houston	272,256	Feb. 13	829	232	23	597
Electric machine. Dynamo	E. J. Houston	283,343	Aug. 14	1051	295 296	24	697
Electric machine. Dynamo	E. J. Houston	286,612	Oct. 16	1047	282 283	25	206
Electric machine. Dynamo	V. E. Keegan	275,392	Apr. 10	697	186	23	1354
Electric machine. Dynamo	A. S. Kimball	288,818	Nov. 20	1295	354 355	25	747
Electric machine. Dynamo	E. R. Knowles	282,459	July 31	2695	740 741	24	490
Electric machine. Dynamo	J. Lewis	270,230	Jan. 9	479	141 142	23	104
Electric machine. Dynamo	A. M. Loryea and C. H. Palmer	278,983	June 5	448	123	23	2200
Electric machine. Dynamo	A. M. Loryea and C. H. Palmer	283,498	Aug. 21	1250	351	24	738
Electric machine. Dynamo	J. J. and T. J. McTighe	270,325	Jan. 9	594	175	23	125
Electric machine. Dynamo	T. J. McTighe	288,829	Nov. 20	1308	358 359	26	750
Electric machine. Dynamo	W. Morava	276,063	Apr. 17	1536	422	23	1505

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Electric machine. Dynamo.....	J. Olmsted.....	290,098	Dec. 11	894	254	25	1051
Electric machine. Dynamo.....	H. Roberts.....	276,194	Apr. 24	1703	470	23	1542
Electric machine. Dynamo.....	R. J. Sheehy.....	285,691	Sept. 25	1864	532	24	1250
Electric machine. Dynamo.....	E. Thomson.....	281,416	July 17	1345	371	24	250
Electric machine. Dynamo.....	S. F. Van Choate.....	286,241	Oct. 9	500	154	25	113
Electric machine. Dynamo.....	S. F. Van Choate.....	286,242	Oct. 9	562	154 155 156	25	113
Electric machine. Dynamo.....	C. J. Van Depoele.....	275,549	Apr. 10	895	242	23	1387
Electric machine. Dynamo.....	E. Weston.....	272,366	Feb. 13	967	270	23	619
Electric machine. Dynamo.....	E. Weston.....	277,644	May 15	1392	375	23	1877
Electric machine. Dynamo.....	E. Weston.....	278,641	May 29	2643	723	23	2110
Electric machine. Dynamo.....	E. Weston.....	283,548	Aug. 21	1300	364	24	747
Electric machine. Dynamo.....	K. Ziperowsky and M. Déri.....	284,110	Aug. 28	2008	559	24	885
Electric machine. Dynamo and magneto.....	E. Gordon.....	271,979	Feb. 6	485	131	23	524
Electric machine. Dynamo and magneto.....	J. M. McMahan.....	281,904	July 24	1981	542	24	364
Electric machine. Dynamo and magneto.....	C. A. Seeley.....	271,928	Feb. 6	420	114	23	514
Electric machine. Dynamo or magneto.....	F. Bain.....	287,611	Oct. 30	2338	631	25	453
Electric machine. Dynamo or magneto.....	T. A. Edison.....	281,353	July 17	1270	353	24	237
Electric machine. Dynamo or magneto.....	T. A. Edison.....	287,521	Oct. 30	2198	597	25	427
Electric machine. Dynamo or magneto.....	T. A. Edison.....	287,523	Oct. 30	2201	598	25	428
Electric machine. Dynamo or magneto.....	J. E. Giles.....	287,661	Oct. 30	2396	646	25	466
Electric machine. Dynamo or magneto.....	P. P. Nungesser.....	287,774	Oct. 30	2553	687	25	494
Electric machine. Dynamo or magneto.....	E. Weston.....	289,200	Nov. 27	1762	489	25	839
Electric-machine governor. Dynamo.....	T. A. Edison.....	271,615	Feb. 6	38	10	23	447
Electric-machine governor. Dynamo.....	W. P. Freeman.....	290,025	Dec. 11	813	229	25	1037
Electric-machine regulator. Dynamo.....	J. S. Beeman, W. Taylor, and F. King.....	288,963	Nov. 20	1468	406	25	781
Electric-machine regulator. Dynamo.....	T. A. Edison.....	271,616	Feb. 6	39	10	23	447
Electric-machine regulator. Dynamo.....	T. A. Edison.....	273,487	Mar. 6	315	86	23	887
Electric-machine regulator. Dynamo.....	T. A. Edison.....	273,488	Mar. 6	317	86	23	887
Electric-machine regulator. Dynamo.....	T. A. Edison.....	278,413	May 29	2366	646	23	2061
Electric-machine regulator. Dynamo.....	T. A. Edison.....	278,414	May 29	2367	646	23	2062
Electric-machine regulator. Dynamo.....	T. A. Edison.....	281,349	July 17	1263	351	24	236
Electric-machine regulator. Dynamo.....	T. A. Edison.....	281,350	July 17	1264	351	24	236
Electric-machine regulator. Dynamo.....	T. A. Edison.....	287,524	Oct. 30	2202	598	25	428
Electric-machine regulator. Dynamo.....	J. E. Giles.....	290,412	Dec. 18	1293	363	25	1131
Electric-machine regulator. Dynamo.....	G. J. Murdock.....	287,565	Oct. 30	2257	612 613	25	440
Electric-machine regulator. Dynamo.....	R. J. Sheehy.....	283,155	Aug. 14	810	226	24	650
Electric-machine regulator. Dynamo.....	C. J. Van Depoele.....	287,343	Oct. 23	1977	540	25	378
Electric-machine regulator. Dynamo.....	J. F. Ott.....	271,654	Feb. 6	82	23	23	455
Electric-machine regulator. Dynamo.....	E. Weston.....	278,640	May 29	2641	722	23	2110
Electric machine regulator. Dynamo or magneto.....	T. A. Edison.....	288,318	Nov. 13	656	181 182	25	630
Electric machine regulator. Dynamo or magneto.....	E. Weston.....	289,325	Nov. 27	1910	531	25	868
Electric machines. Air-blast attachment for commutators of dynamo.....	E. Thomson.....	273,406	Mar. 6	214	58	23	870
Electric machines. Apparatus for cooling the armatures of dynamo.....	P. H. Vander Weyde.....	270,518	Jan. 9	849	247	23	176
Electric machines. Armature for dynamo.....	C. F. Brush.....	285,457	Sept. 25	1590	447	24	1199
Electric machines. Armature for dynamo.....	L. Daft.....	276,568	May 1	31	8	23	1632
Electric machines. Armature for dynamo.....	L. Daft.....	277,119	May 8	769	202	23	1763
Electric machines. Armature for dynamo.....	E. A. Edwards.....	275,169	Apr. 3	370	102	23	1290
Electric machines. Armature for dynamo.....	W. P. Freeman.....	270,781	Jan. 16	1186	342	23	246
Electric machines. Armature for dynamo.....	W. P. Freeman.....	281,049	July 10	875	243	24	162
Electric machines. Armature for dynamo.....	G. W. Fuller.....	286,415	Oct. 9	800	216	25	155
Electric machines. Armature for dynamo.....	J. E. Giles.....	288,051	Nov. 6	330	92	25	633
Electric machines. Armature for dynamo.....	E. R. Knowles and F. E. Idell.....	279,399	June 12	997	277	23	2301
Electric machines. Armature for dynamo.....	J. T. Lister.....	283,624	Aug. 21	1387	383	24	763
Electric machines. Armature for dynamo.....	T. Wolcott.....	286,247	Oct. 9	574	158	25	115
Electric machines. Automatic regulator for dynamo.....	F. S. Giel.....	282,187	July 31	2352	648	24	430
Electric machines. Combined current-indicator and commutator-adjuster for dynamo.....	R. J. Sheehy.....	279,826	June 19	1493	417 418	23	2393
Electric machines. Commutator for dynamo.....	F. M. Brown and C. B. Bosworth.....	280,288	June 26	2057	578	23	2499
Electric machines. Commutator for dynamo.....	T. J. McTighe and J. T. McConnell.....	288,830	Nov. 20	1309	359	25	750
Electric machines. Commutator for dynamo.....	E. Thomson.....	271,947	Feb. 6	436	120	23	517
Electric machines. Coupling shunt dynamo.....	R. H. Mather.....	286,325	Oct. 9	695	185	25	136
Electric machines. Device for adjusting the brushes of dynamo.....	C. J. Van Depoele.....	285,527	Sept. 25	1671	471	24	1214
Electric machines or electric motors. Armature for dynamo.....	W. K. Freeman.....	270,777	Jan. 16	1182	339 340	23	245
Electric machines. Safety-switch for dynamo.....	C. J. Van Depoele.....	287,345	Oct. 23	1980	541	25	379
Electric machines. Wiper for the commutators of dynamo.....	R. Holbon.....	287,678	Oct. 30	2417	652	25	470
Electric meter.....	W. S. Johnson.....	286,445	Oct. 9	835	226	25	162
Electric motor.....	J. B. Atwater.....	274,101	Mar. 20	1098	303 304	23	1037
Electric motor.....	C. A. Jackson.....	289,540	Dec. 4	210	59	25	923
Electric motor.....	C. A. Jackson.....	289,541	Dec. 4	211	59	25	923
Electric motor.....	F. Kühmaier.....	289,918	Dec. 11	686	191	25	1013
Electric motor.....	A. Millar.....	271,502	Jan. 30	2088	600 601	23	417
Electric motor.....	C. C. Peck and W. H. Chapman.....	279,007	June 5	477	131	23	2205
Electric motor.....	C. C. Peck and W. H. Chapman.....	279,008	June 5	479	131	23	2205
Electric motor.....	W. L. Silvey.....	269,888	Jan. 2	76	24	23	17
Electric motor.....	H. W. Spang.....	279,036	June 5	520	142	23	2212
Electric motor.....	L. W. Stockwell.....	284,255	Sept. 4	124	34	24	926
Electric motor.....	C. J. Van Depoele.....	285,837	Oct. 2	97	29	25	19
Electric motor.....	S. S. Wheeler, C. G. Curtis, and F. E. Crocker.....	271,175	Jan. 23	1667	460	23	334
Electric motors. Armature for.....	C. E. Ball.....	285,547	Sept. 25	1695	478	24	1219



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Electric motors. Speed-regulator and reversing device for	E. J. Molera and J. C. Cebrían	275,842	Apr. 17	1277	351	23	1459
Electric regulator	T. A. Edison	267,511	Oct. 30	2188	594	25	425
Electric regulator for controlling the current in electrical systems.	M. Levy	286,834	Oct. 16	1327	362 363	25	255
Electric-signal box	J. C. Wilson and M. G. Davis	288,536	Nov. 13	941	257 258	25	679
Electric signals. Apparatus for interlocking.	A. W. Hall	284,842	Sept. 11	842	236 237	24	1053
Electric signaling apparatus	C. Cummings	275,600	Apr. 10	955	259 260	23	1398
Electric signaling apparatus. Automatic.	F. B. Wood	275,006	Apr. 3	159	43	23	1253
Electric storage and supply. System of	C. E. Buell	270,734	Jan. 16	1126	303	23	235
Electric switch	W. Adams	285,778	Oct. 2	1	1	25	3
Electric switch	D. P. Heap	281,363	July 17	1292	355	24	239
Electric switch and cut-out	C. G. Perkins	287,322	Oct. 23	1954	533	25	374
Electric switch and signal apparatus	A. W. Hall	284,841	Sept. 11	839	235 236	24	1053
Electric switch. Automatic	H. W. Spang	281,937	July 24	2016	552	24	370
Electric switch-board	H. W. Breckenridge	290,845	Dec. 25	1877	518	25	1939
Electric switch-board	W. J. McElroy	278,353	May 29	2294	627	23	2049
Electric switch-board	T. J. Perrin	271,913	Feb. 6	397	109	23	511
Electric switch-board and signaling apparatus	T. W. Lane	287,300	Oct. 23	1928	527	25	369
Electric switch or circuit controller	A. Bernstein	284,715	Sept. 11	657	194	24	1026
Electric testing apparatus	C. J. H. Woodbury	274,074	Mar. 13	1060	293	23	1024
Electric time-signaling device	H. G. Van Wagenen	285,088	Sept. 18	1150	321	24	1115
Electric transmission of power. System for the	E. Weston	272,355	Feb. 13	966	269	23	619
Electric transmitter	S. D. Field	287,267	Oct. 23	1883	515	25	360
Electric underground cable	F. A. Smith	280,869	July 10	659	186	24	123
Electric underground conductor	R. M. Hunter	272,441	Feb. 20	1078	304	23	643
Electric way	E. M. Bentley	276,953	May 1	551	143	23	1720
Electric way	E. M. Bentley	276,954	May 1	552	143	23	1720
Electric way	E. M. Bentley and W. H. Knight	276,757	May 1	298	76	23	1676
Electric way	W. H. Knight and E. M. Bentley	276,829	May 1	380	101 102	23	1693
Electric wire	W. Halkyard	284,959	Sept. 11	980	276	24	1079
Electric wire	C. McIntire	278,811	June 5	180	52	23	2153
Electric-wire cable	J. Mackintosh	269,868	Jan. 2	55	17	23	13
Electric-wire conduit	B. A. Dryer	288,555	Nov. 13	963	265	25	683
Electric-wire conduit	C. H. Goebel	290,413	Dec. 18	1295	363	25	1131
Electric-wire conduit	I. M. Green and J. P. Birch	284,413	Sept. 4	310	86, 87	24	956
Electric-wire conduit	J. F. Martin	286,938	Oct. 16	1456	400	25	277
Electric-wire conduit	J. F. Martin	286,940	Oct. 16	1460	401	25	277
Electric-wire conduit	J. F. Martin	286,950	Oct. 16	1476	405	25	280
Electric-wire conduit	J. A. McHaffey	276,190	Apr. 24	1696	469	23	1541
Electric-wire conduit	S. Parker	279,977	June 26	1683	472	23	2432
Electric-wire conduit. Underground	C. H. Goebel	290,414	Dec. 18	1296	363	25	1131
Electric-wire conduit. Underground	C. H. Goebel	290,415	Dec. 18	1297	364	25	1131
Electric-wire conduit. Underground	C. H. Goebel	290,416	Dec. 18	1298	363	25	1132
Electric-wire duct. Underground	J. C. Goodridge, Jr.	278,233	May 22	2108	581	23	2008
Electric wire. Machine for covering	W. Halkyard	278,009	May 22	1829	499	23	1960
Electric-wire protector	J. O. Cottrell	278,886	June 5	287	83	23	2172
Electric wires and adjusting the wires in the same.	W. Hendley	281,220	July 10	1093	301 302	24	200
Ventilating-conduit for	J. V. Hirley	286,437	Oct. 9	826	224	25	161
Electric wires and lamps. Support for	E. C. Coolidge	273,259	Mar. 6	19	6	23	838
Electric wires. Binding-screw for	W. H. Johnstone	274,611	Mar. 27	1779	494	23	1163
Electric wires. Conduit for underground	J. Du Shane	280,919	July 10	716	201	24	133
Electric wires. Conduit for underground	E. Clark	280,995	May 22	1926	529	23	1977
Electric wires. Curbstone and sidewalk conduit for	J. F. Martin	286,942	Oct. 16	1464	402 403	25	278
Electric wires. Distributer for	J. F. Martin	286,943	Oct. 16	1474	405	25	280
Electric wires. Distributing-box for	E. Clark	287,237	Oct. 23	1848	505 506	25	354
Electric wires. Laying underground	J. Marks	277,588	May 15	1328	356	23	1665
Electric wires. Laying underground	C. D. Shrieves and J. E. Cook	276,486	Apr. 24	2071	575	23	1605
Electric wires. Safety device for	A. Bernstein	284,714	Sept. 11	656	193	24	1026
Electric wires. Subterranean line of	H. B. Cobb	288,311	Nov. 13	643	177	25	628
Electric wires. System of laying subterranean lines of	H. B. Cobb	288,310	Nov. 13	643	176	25	628
Electric wires. System of laying subterranean lines of	J. T. Goodfellow	272,833	Feb. 20	1571	442 443	23	731
Electric wires. Underground conduit for	H. Clay	275,023	Apr. 3	190	50	23	1258
Electric wires. Underground conduit for	J. S. Du Bois	272,221	Feb. 13	789	219	23	589
Electric wires. Underground conduit for	W. H. Johnstone	279,392	June 12	987	275	23	2299
Electric wires. Underground conduit for	E. Omensetter	283,807	Aug. 28	1622	457	24	818
Electric wires. Underground conduit for	W. Plankinton	273,305	Mar. 6	60	24	23	847
Electric wires. Underground distributer for	J. F. Martin	286,939	Oct. 16	1459	401	25	277
Electrical apparatus for automatic signaling	J. C. Wilson	279,065	June 5	555	152 153	23	2218
Electrical cable	H. F. Campbell	290,854	Dec. 25	1888	521	25	1241
Electrical cable	S. D. Strohm	289,164	Nov. 27	1712	477	25	830
Electrical cable	S. D. Strohm	289,165	Nov. 27	1714	477	25	831
Electrical cable	S. D. Strohm	289,166	Nov. 27	1715	478	25	831
Electrical conductor	G. F. Barker	274,699	Mar. 27	1881	524	23	1182
Electrical conductor	H. F. Campbell	290,853	Dec. 25	1887	521	25	1241
Electrical conductor	H. F. Campbell	290,971	Dec. 25	2045	562	25	1266
Electrical conductor	P. B. Delany	283,764	Aug. 28	1571	444	24	810
Electrical conductor	P. B. Delany	290,753	Dec. 25	1767	428	25	1220
Electrical conductor	P. G. Gardner, Jr., J. W. Le Roy, and G. K. Tinker	271,832	Feb. 6	299	81	23	493
Electrical conductor	F. Moore	284,970	Sept. 11	991	*279	24	1081
Electrical conductor	T. S. Reed	276,880	May 1	446	119	23	1705
Electrical conductor	T. S. Reed	286,963	Oct. 16	1491	410	25	283

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Electrical conductor .....	W. A. Shaw .....	290,121	Dec. 11	927	263	25	1053
Electrical conductor .....	S. D. Strohman .....	277,374	May 8	1066	287	23	1416
Electrical conductor .....	S. D. Strohman .....	278,289	May 22	2183	601	23	2021
Electrical conductor. Compound .....	L. Johnson .....	288,443	Nov. 13	829	225	25	660
Electrical-conductor coupling .....	P. R. Allen .....	273,429	Mar. 6	241	65	23	875
Electrical conductor. Flexible .....	H. B. Lytle .....	284,216	Sept. 4	77	22	24	918
Electrical conductor for oil-tanks .....	H. W. Spang .....	286,086	Oct. 2	376	104	25	69
Electrical conductor or cable for lighting and other systems.	W. A. Shaw .....	290,122	Dec. 11	928	263	25	1053
Electrical conductor. Underground .....	J. Kruesi .....	275,776	Apr. 10	1186	325	23	1437
Electrical conductors. Junction box and connection for .....	J. Kruesi .....	273,859	Mar. 13	807	218	23	980
Electrical conductors. Junction for .....	C. Goddard .....	287,532	Oct. 30	2211	{ 600 601 }	25	430
Electrical conductors. Metallic tip and coupling for .....	G. E. Somers .....	284,915	Sept. 11	927	261	24	1069
Electrical conductors. Protector attachment for .....	W. E. Townsend, Jr. ....	278,635	May 29	2635	721	23	2109
Electrical conductors. System of laying subterranean .....	W. R. Patterson .....	281,722	July 24	1747	{ 473 474 }	24	322
Electrical conductors. Underground conduit for .....	H. R. Meyer .....	274,213	Mar. 20	1249	344	23	1064
Electrical conductors. Underground system of laying .....	J. E. Hamilton .....	279,646	June 19	1286	358	23	2357
Electrical connector .....	H. E. Long .....	278,246	May 29	2286	625	23	2048
Electrical currents. Device for controlling .....	C. J. Van Depoele .....	270,352	Jan. 9	625	185	23	132
Electrical currents. Metallic circuit for .....	S. D. Strohman .....	272,792	Feb. 20	1523	429	23	722
Electrical distribution. Regulator for systems of .....	T. A. Edison and C. L. Clarke .....	287,525	Oct. 30	2204	{ 598 599 }	25	429
Electrical distribution. System of .....	T. A. Edison .....	274,290	Mar. 20	1346	370	23	1081
Electrical distribution. System of .....	T. A. Edison .....	280,727	July 3	466	133	24	83
Electrical distribution. System of .....	T. A. Edison .....	283,983	Aug. 28	1830	517	24	856
Electrical distribution. System of .....	T. A. Edison .....	283,984	Aug. 28	1832	517	24	856
Electrical distribution. System of .....	T. A. Edison .....	283,985	Aug. 28	1833	518	24	857
Electrical distribution. System of .....	T. A. Edison .....	283,986	Aug. 28	1835	518	24	857
Electrical distribution. System of .....	T. A. Edison .....	287,515	Oct. 30	2193	596	25	426
Electrical distribution. System of .....	T. A. Edison .....	287,517	Oct. 30	2195	596	25	427
Electrical distribution. System of .....	E. T. Greenfield .....	278,535	May 29	2514	686	23	2089
Electrical distribution. System of underground conductors for .....	T. A. Edison .....	273,828	Mar. 13	764	207	23	973
Electrical generation and distribution. System of .....	M. G. Farmer .....	290,873	Dec. 25	1907	527	25	1244
Electrical generator .....	T. A. Edison .....	281,351	July 17	1265	352	24	236
Electrical generator and motor .....	T. A. Edison .....	276,233	Apr. 24	1749	485	23	1550
Electrical generator-engines. Valve-gear for .....	T. A. Edison .....	273,493	Mar. 6	322	87	23	889
Electrical-generator regulator .....	E. Weston .....	289,326	Nov. 27	1911	531	25	869
Electrical generators. Operating and regulating .....	T. A. Edison .....	276,232	Apr. 24	1746	{ 484 485 }	23	1550
Electrical generators. Regulator for driving engines of .....	T. A. Edison .....	273,491	Mar. 6	319	87	23	888
Electrical indicators. Unison mechanism for .....	F. H. Snell .....	282,791	Aug. 7	380	{ 107 108 }	24	567
Electrical-instrument protector .....	M. D. and T. A. Connolly .....	279,713	June 19	1365	381	23	2370
Electrical machine. Frictional .....	P. Atkinson .....	275,347	Apr. 10	627	{ 168 169 }	23	1342
Electrical meter .....	E. Weston .....	283,547	Aug. 21	1299	363	24	747
Electrical or galvanic currents to beds, couches, &c. Applying .....	R. Stilwell .....	285,853	Oct. 2	89	27	25	13
Electrical purposes. Covering-wire for .....	J. J. C. Smith .....	276,725	May 1	252	65	23	1668
Electrical purposes. Machine for covering wire for .....	J. J. C. Smith .....	276,724	May 1	250	63, 64	23	1667
Electrical signal .....	E. Dummer .....	288,556	Nov. 13	964	266	25	684
Electrical signaling device .....	W. S. Johnson .....	283,736	Aug. 21	1526	431	24	790
Electrical switch-board .....	C. W. McLean .....	276,263	Apr. 24	1785	496	23	1556
Electrical switch-board .....	T. J. Persin .....	271,914	Feb. 6	399	109	23	511
Electrical switch-board plug .....	E. Flint, Jr. ....	279,557	June 19	1188	329	23	2339
Electrical synchronous mechanism .....	P. B. Delany .....	286,281	Oct. 9	635	170	25	125
Electrical synchronous movement .....	P. B. Delany .....	286,273	Oct. 9	602	165	25	120
Electrical synchronous movement .....	P. B. Delany .....	286,274	Oct. 9	605	166	25	121
Electrical synchronous movement .....	P. B. Delany .....	286,275	Oct. 9	610	166	25	122
Electrical synchronous movement .....	P. B. Delany .....	286,276	Oct. 9	615	167	25	123
Electrical synchronous movement .....	P. B. Delany .....	286,277	Oct. 9	619	{ 167 168 }	25	123
Electrical synchronous movement .....	P. B. Delany .....	286,278	Oct. 9	623	168	25	124
Electrical testing .....	C. S. Bradley .....	287,501	Oct. 30	2177	591	25	423
Electrical transmission of power. Apparatus for regulating and controlling the .....	E. Weston .....	289,198	Nov. 27	1758	488	25	839
Electrical transmission of power. Controlling the .....	E. Weston .....	273,329	Mar. 6	116	33	23	854
Electrical transmission of power. Device for regulating the .....	E. Weston .....	272,362	Feb. 13	960	267	23	618
Electrical transmission of power. Device for regulating the .....	E. Weston .....	272,363	Feb. 13	962	268	23	618
Electrical transmission of power. Device for regulating the .....	E. Weston .....	272,364	Feb. 13	964	269	23	619
Electrical-wire conduit .....	J. F. Martin .....	275,399	Apr. 10	705	188	23	1355
Electrical-wire protector .....	J. O. Cottrell .....	278,885	June 5	286	83	23	2172
Electrical wires underground. Housing and insulation of .....	C. C. Gilman .....	288,629	Nov. 20	1060	291	25	707
Electricity. Apparatus for lighting cars by .....	G. D. Burton .....	282,158	July 31	2309	634	24	423
Electro-deposition of metals upon forms. Manufacturing articles by .....	W. Wallace .....	290,949	Dec. 25	2008	553	25	1261
Electro-magnetic alarm .....	A. Wiswall .....	286,888	Oct. 16	1396	383	25	267
Electro-magnetic brake .....	L. Dart .....	289,896	Dec. 11	657	183	25	1008
Electro-magnetic engine .....	G. W. Foster .....	277,475	May 15	1191	320	23	1844
Electro-magnetic motor .....	W. M. Thomas .....	279,045	June 5	530	{ 144 145 }	23	2213
Electro-magnetic motor .....	S. F. Van Choate .....	286,873	Oct. 16	1374	377	25	263
Electro-magnetic motor .....	E. Weston .....	283,546	Aug. 21	1298	363	24	746
Electro-magnetic motor. Rotary .....	J. B. Atwater .....	278,760	June 5	103	29, 30	23	2141



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Electro-magnetic motors. Safety cut-out for.....	E. Weston.....	289,197	Nov. 27	1757	488	25	838
Electro-magnetic regulator.....	R. H. Tucker.....	272,799	Feb. 20	1531	431	23	724
Electro-magnetic retarding device.....	E. Thomson.....	272,353	Feb. 13	947	263	23	616
Electro-magnetic rheotome.....	F. L. Pope.....	284,480	Sept. 4	386	107	24	969
Electrode. Electric-battery.....	E. T. Starr.....	290,941	Dec. 25	1998	551	25	1259
Electrode. Electric-battery.....	E. T. Starr.....	290,942	Dec. 25	2000	551	25	1259
Electrode. Secondary-battery.....	N. C. Cookson.....	279,346	June 12	920	257	23	2229
Electrode. Secondary-battery.....	W. S. Platt.....	273,598	Mar. 6	462	124	23	913
Electrode. Secondary-battery.....	E. T. Starr.....	290,943	Dec. 25	2001	551	25	1260
Electrodes for secondary batteries. Forming.....	C. F. Brush.....	286,259	Oct. 9	588	161	25	118
Electrodes for secondary batteries. Making.....	W. Wallace.....	278,638	May 29	2639	721	23	2109
Electrodes. Making.....	W. E. Case.....	289,386	Dec. 4	17		25	890
Electrolier. Extension.....	L. Stiering.....	272,169	Feb. 13	723	199	23	577
Electroliers. Circuit-connection.....	H. Edmunds, Jr.....	290,407	Dec. 18	1286	361	25	1130
Electroliers. Suspending and circuit-controlling mechanism for.....	A. W. Brewtnall.....	284,805	Sept. 11	798	223	24	1045
Electroplating.....	A. Classen.....	273,467	Mar. 6	295		23	883
Electroplating bath and salts. Producing an.....	W. H. Williams.....	286,359	Oct. 9	733		25	144
Electroplating. Composition for brass.....	J. M. Thomas.....	273,324	Mar. 6	105		23	852
Electrotype or stereotype plate holder.....	H. G. Waterson.....	272,807	Feb. 20	1542	433	23	726
Electrotype-plate.....	S. S. Hoar.....	286,821	Oct. 16	1311	357	25	253
Electrotype-rollers for imitating leather, &c. Manufacturing.....	N. L. Cocbeu.....	276,777	May 1	323	84	23	1682
Elevating and carrying apparatus.....	I. Bishop.....	285,873	Oct. 2	115	34	25	22
Elevating and distributing dredged and other materials. Apparatus for.....	H. H. Gorringer.....	275,643	Apr. 10	1020	275	23	1408
Elevating devices. Friction-brake for.....	J. A. Evarts.....	287,262	Oct. 23	1877	514	25	359
Elevating hay, &c. Apparatus for.....	E. Hiatt.....	287,930	Nov. 6	176	50	25	538
Elevator: See Adjustable-elevator. Belt and bucket elevator. Coal-elevator. Corn-sheller elevator. Cotton-elevator. Electric elevator. Grain-elevator. Harvester grain-elevator. Hay-elevator. Hed-elevator. Hydraulic and other elevators.	Ice-elevator. Mail-elevator. Mine-shaft elevator. Package-elevator. Platform-elevator. Pneumatic elevator. Portable elevator. Power-elevator. Railway rail and tie elevator. Safety-elevator. Water-elevator.						
Elevator.....	E. Bachmann.....	284,352	Sept. 4	235	66	24	944
Elevator.....	E. Bachmann.....	286,760	Oct. 16	1234	333	25	239
Elevator.....	W. M. Bailey.....	269,994	Jan. 2	202	58	23	42
Elevator.....	C. W. Baldwin.....	276,339	Apr. 24	1889	524	23	1573
Elevator.....	C. H. Bidwell.....	285,788	Oct. 2	10	3	25	4
Elevator.....	J. B. and W. M. Brimer.....	277,212	May 8	880	234	23	1782
Elevator.....	G. W. Clayton.....	287,802	Nov. 6	16	5	25	510
Elevator.....	L. Dase.....	276,784	May 1	331	88	23	1683
Elevator.....	L. Dase.....	276,785	May 1	333	88	23	1684
Elevator.....	A. M. Dungan and M. Lacrone.....	280,151	June 26	1889	531 532	23	2469
Elevator.....	W. Dutemple.....	287,012	Oct. 23	1558	429	25	300
Elevator.....	W. Goddard.....	275,037	Apr. 3	206	56	23	1261
Elevator.....	J. Greenwood.....	273,273	Mar. 6	33	11	23	840
Elevator.....	W. F. Hall and P. G. Hubert.....	276,396	Apr. 24	1966	544	23	1587
Elevator.....	S. W. Hoag, Sr.....	279,648	June 19	1291	350	23	2358
Elevator.....	G. Mitchell.....	272,970	Feb. 27	1761	492	23	769
Elevator.....	C. R. Otis.....	271,353	Jan. 30	1896	549	23	382
Elevator.....	E. L. Parker and S. Peterson.....	282,763	Aug. 7	350	99	24	561
Elevator.....	R. Phillips.....	271,264	Jan. 30	1772	514	23	360
Elevator.....	G. N. Reiff.....	275,080	Apr. 3	266	73	23	1271
Elevator.....	F. M. Reynolds and G. C. Tewksbury.....	280,670	July 3	399	111	24	71
Elevator.....	W. H. Ridgway.....	276,076	Apr. 17	1549	427	23	1508
Elevator.....	E. Salon.....	285,309	Sept. 18	1404	397	24	1161
Elevator.....	B. Sewall.....	275,950	Apr. 17	1400	386	23	1482
Elevator.....	U. P. Smith.....	280,251	June 26	2009	565	23	2490
Elevator.....	W. R. Smith.....	283,431	Aug. 21	1169	328	24	723
Elevator.....	C. L. Soyer.....	276,491	Apr. 24	2079	577	23	1606
Elevator.....	G. B. Thayer.....	283,831	Aug. 28	1648	465 466	24	823
Elevator.....	C. Whittier.....	275,003	Apr. 3	151	42	23	1252
Elevator-alarm.....	A. Nickerson.....	284,654	Sept. 11	604	170	24	1012
Elevator and conveyor.....	I. N. Matlack.....	289,291	Nov. 27	1865	518	25	860
Elevator and dumb-waiter brake.....	M. J. Lawlor.....	276,052	Apr. 17	1524	419	23	1503
Elevator attachment.....	J. D. Sinclair.....	285,437	Sept. 25	1567	441	24	1194
Elevator-brake.....	R. W. Weymouth.....	290,297	Dec. 18	1146	321	25	1104
Elevator-bucket.....	N. S. Ackerly.....	288,197	Nov. 13	508	141	25	605
Elevator-bucket.....	H. W. Caldwell.....	280,909	July 10	703	198	24	131
Elevator-bucket.....	S. L. Chapman.....	286,590	Oct. 16	1017	275	25	201
Elevator-bucket.....	W. Egan.....	270,035	Jan. 2	245	71	23	51
Elevator-bucket.....	J. A. Holmes.....	290,053	Dec. 11	845	240	25	1042
Elevator-bucket.....	F. T. La Rose.....	288,581	Nov. 13	996	275	25	690
Elevator-bucket.....	R. B. Little.....	287,139	Oct. 23	1717	470	25	332
Elevator-buckets to belts. Attaching.....	F. A. Wittich and P. W. Strader.....	281,746	July 24	1773	483	24	327
Elevator-cars. Regulator for controlling the descent of.....	A. Gallinant.....	287,922	Nov. 6	166	48	25	536
Elevator-clutch. Automatic.....	E. T. Herrick.....	274,770	Mar. 27	1963	546	23	1196
Elevator-gate.....	B. C. Vanduzen.....	288,383	Nov. 13	752	204	25	646
Elevator-gate. Automatic.....	G. V. Delue.....	274,887	Mar. 27	2105	586	23	1219

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Elevator-gate. Automatic	W. L. Goffney	290,326	Dec. 18	1187	333	25	1111
Elevator-gate lock	J. W. Ellwanger and W. Eddington.	270,648	Jan. 16	1020	293	23	215
Elevator-guard	J. J. Knapp	278,974	June 5	439	120	23	2198
Elevator-guard. Automatic	R. P. Rankin	288,113	Nov. 6	401	113	25	577
Elevator-lock	G. A. Grover and E. E. Worden	287,668	Oct. 30	2406	648	25	467
Elevator-platforms. Safety apparatus for	V. W. Mason	276,849	May 1	404	107	23	1697
Elevator safety appliance	R. A. Chesbrough	286,684	Oct. 16	1141	307	25	222
Elevator safety appliance	A. Fitzroy	289,905	Dec. 11	670	187	25	1010
Elevator safety appliance	L. H. Heynemann	269,855	Jan. 2	43	14	23	11
Elevator safety appliance	J. Hodges	287,287	Oct. 23	1908	522	25	365
Elevator safety appliance	J. Hodges	288,806	Nov. 20	1279	{ 350 351 }	25	745
Elevator safety appliance	W. Pintard	286,064	Oct. 2	351	98	25	65
Elevator safety attachment	O. C. Berchthold and E. I. Laufer	290,202	Dec. 18	1028	289	25	1084
Elevator safety attachment	C. A. Carscadin and F. P. Fish	277,226	May 8	892	238	23	1785
Elevator safety attachment	N. P. Cleaves	272,413	Feb. 20	1047	294	23	638
Elevator safety attachment	E. C. L. Kunnecke	290,331	Dec. 18	1194	{ 334 335 }	25	1113
Elevator safety attachment	O. S. Nowell	285,762	Sept. 25	1964	556	24	1266
Elevator safety attachment	A. C. Rice	277,343	May 8	1032	277	23	1810
Elevator safety attachment	P. J. Singer	277,073	May 8	712	185	23	1754
Elevator safety attachment	F. W. Voerde	280,419	July 3	96	26	24	20
Elevator safety-brake	C. Lossow	285,760	Sept. 25	1962	{ 555 556 }	24	1266
Elevator safety-brake. Automatic	W. J. Seaton	279,024	June 5	503	137	23	2209
Elevator safety-catch	A. C. Hope	283,110	Aug. 14	761	214	24	642
Elevator safety device	O. E. Gaston	288,325	Nov. 13	670	184	25	632
Elevator safety device	C. C. Palmer	281,550	July 17	1509	415	24	278
Elevator safety-dog	G. Pilson	278,595	May 29	2550	704	23	2099
Elevator safety-gate	W. H. Ivers	272,552	Feb. 20	1215	340	23	667
Elevator safety-guard	W. A. Ingalls	289,350	Nov. 27	1938	538	25	873
Elevator safety-stop	F. P. Canfield	281,016	July 10	835	232	24	155
Elevator safety-stop	W. Whitley	282,817	Aug. 7	408	115	24	572
Elevator-shafts and their hatchways. Protecting	D. W. and H. D. Swift	273,323	Mar. 6	104	31	23	852
Elevator-shafts. Automatic safety-hatch for	H. Albert	285,097	Sept. 18	1159	324	24	1116
Elevator-shafts. Safety device for	E. E. Bawsel	274,257	Mar. 20	1305	359	23	1074
Elevators. Actuating mechanism and safety-brake for	C. S. Longstreet	272,965	Feb. 27	1755	490	23	768
Elevators. Follower for ram	W. R. Low	288,352	Nov. 13	706	{ 193 194 }	25	638
Ellipses. Machine for describing or cutting	J. Hottinger	288,810	Nov. 20	1284	352	25	746
Ellipsograph	C. W. Stickney	274,528	Mar. 27	1678	{ 465 466 }	23	1145
Elliptic spring	C. H. Parsons	278,175	May 22	2031	558	23	1995
Embossing-machine	A. Stirk	283,829	Aug. 28	1645	{ 463 464 }	24	822
Embossing upon plastered walls and other surfaces	J. H. Harding	278,238	May 22	2114	582	23	2009
Embroidering-machine	J. Becker	281,231	July 17	1112	307	24	210
Embroidering-machine	E. Cornely. (Reissue)	10,277	Jan. 23	1704	{ 492 493 419 }	23	340
Embroidering-machine	J. A. Groebli	283,707	Aug. 21	1489	{ 420 421 259 }	24	783
Embroidering-machine	J. Jonson	277,289	May 8	967	{ 260 261 }	23	1799
Embroidering-machines. Holding ring and frame for	B. F. Robinson	274,034	Mar. 13	1007	276	23	1014
Embroidery	K. L. Tarbox	279,042	June 5	525	143	23	2213
Embroidery-machine	C. N. Wurth	271,182	Jan. 23	1675	{ 482 483 484 }	23	335
Embroidery-patterns. Producing transferable	M. E. Bingaman	277,665	May 15	1418	.....	23	1881
Emery and corundum wheels and other tools. Composition for	S. Pulsion and M. L. Snow	275,704	Apr. 10	1088	.....	23	1420
Emery and polishing wheels. Obtaining rotating centers of	J. D. Huntington	290,056	Dec. 11	848	241	25	1043
Emery-wheel	A. Ball	277,659	May 15	1410	380	23	1880
Emery-wheel	J. McLaughlin	278,578	May 29	2560	699	23	2096
Emery-wheel	A. Persson and O. Söderberg	279,009	June 5	482	.....	23	2205
Emery-wheel for grinding twist-drills, &c	F. Landers	288,069	Nov. 6	346	97	25	566
Emery-wheel for sharpening saws	J. R. Hoffman	271,634	Feb. 6	63	18	23	451
Emery-wheel safety device	H. S. Lucas	286,210	Oct. 9	526	145	25	107
Emery-wheels. Surface-grinding table for	B. H. Hadley	280,033	June 26	1761	494	23	2445
Emery-wheels. Tool for facing	J. D. Huntington	288,638	Nov. 20	1069	294	25	709
End-gate	D. Arnold	279,687	June 19	1339	372	23	2365
End-gate	I. Eaton	280,020	June 26	1743	489	23	2442
End-gate	T. Fleming	271,198	Jan. 23	1695	489	23	338
End-gate	F. Myers	278,167	May 22	2019	555	23	1993
End-gate	J. Schaffer and A. Spanier	279,444	June 12	1047	290	23	2310
End-gate	E. H. Seibert	285,848	Oct. 2	86	25	25	17
End-gate	J. H. Werden	277,391	May 8	1084	291	23	1819
End-gate fastening. Wagon	J. Schmitt	285,078	Sept. 18	1135	317	24	1113
End-gate. Wagon	P. Andersen	270,363	Jan. 9	639	189	23	135
End-gate. Wagon	W. Beckwith	286,675	Oct. 16	1127	303	25	220
End-gate. Wagon	J. H. Frazee and G. M. Culver	281,989	July 24	2078	570	24	381
End-gate. Wagon	A. Graham	274,757	Mar. 27	1946	541	23	1193
End-gate. Wagon	T. Hunger and F. Bullenkamp, Jr.	284,853	Sept. 11	853	240	24	1056
End-gate. Wagon	R. M. Kelly	280,187	June 26	1923	541	23	2475
End-gate. Wagon	J. Lutz	277,303	May 8	986	265	23	1802
End-gate. Wagon	J. M. Morris	274,018	Mar. 13	990	271	23	1012
End-gate. Wagon	H. H. Perkins	282,361	July 31	2570	704	24	468
End-gate. Wagon	E. Prescott	277,779	May 15	1549	421	23	1906
End-gate. Wagon	P. Smith	286,647	Oct. 16	1093	294	25	214



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End-gate. Wagon	J. P. Ware	290,374	Dec. 18	1244	350	25	1122
Endless band-knife	J. A. Kay	286,706	Oct. 16	1169	314	25	227
Endless carrier and elevator	E. W. Ross	278,049	May 22	1873	512	23	1968
Endless-chain carrier and distributor for coal, &c.	J. A. Lesourd and J. Lotan	281,087	July 10	919	257	24	169
Engine:							
See Ammonia-engine.	Hot-air engine.						
Boring-engine.	Hot-air and gas engine.						
Caloric-engine.	Hydropneumatic engine.						
Compound engine.	Locomotive-engine.						
Compressing-engine.	Logging-engine.						
Cylinder-engine.	Naphtha-engine.						
Dental engine.	Pumping-engine.						
Dental or surgical engine.	Rag-engine.						
Direct-acting engine.	Road-engine.						
Direct-acting compound engine.	Rotary engine.						
Duplex engine.	Rotary steam-engine.						
Electro-magnetic engine.	Steam-engine.						
Fire-engine.	Steam and air engine.						
Gas-engine.	Steam-motor engine.						
Gas-motor engine.	Steering-engine.						
Gas-vapor engine.	Traction-engine.						
	Transportable engine.						
	Wind-engine.						
Engine	R. M. Fryer	283,704	Aug. 21	1484	418	24	783
Engine	P. F. Goodrich	270,418	Jan. 9	713	211	23	149
Engine-cylinder lubricator	J. A. Wheeler	283,176	Aug. 14	835	233	24	655
Engine-furnace	J. H. Elward	276,372	Apr. 24	1933	536	23	1581
Engine-furnace. Portable	J. H. Elward	276,374	Apr. 24	1937	537	23	1582
Engine-lubricator	W. J. Horn	269,055	Dec. 11	848	241	25	1043
Engine-register	C. Chambers, Jr.	288,976	Nov. 27	1490	413	25	791
Engine-reversing-gear	G. T. Hatch and F. W. Riesenber	257,023	Oct. 23	1576	434	25	304
Engine-reversing gear	J. V. Moore	282,753	Aug. 7	337	96	24	559
Engine-reversing-gear	F. W. Randall	270,842	Jan. 16	1255	361	23	260
Engine-reversing gear	F. G. Shepard, A. J. Hoag, and A. Thomson.	282,932	Aug. 7	538	152	24	596
Engine-running-gear. Suspension	J. H. Race	289,306	Nov. 27	1882	524	25	863
Engine-slide lubricator	M. S. Cabell	289,066	Nov. 27	1601	443	25	810
Engines. Utilizing the exhaust of	D. Renshaw	274,969	Apr. 3	113	32	23	1244
Engines. Utilizing the exhaust of	D. Renshaw	274,970	Apr. 3	114	32	23	1244
Engines. Utilizing the exhaust of	D. Renshaw	274,971	Apr. 3	115	32	23	1244
Engines. Utilizing the exhaust of	D. Renshaw	274,972	Apr. 3	116	32	23	1245
Engines. Utilizing the exhaust of	D. Renshaw	274,973	Apr. 3	116	33	23	1245
Engraver's tool	W. Brah	271,306	Jan. 30	1825	530	23	370
Engraving	J. Earle	277,412	May 8	1107	297	23	1823
Engraving-machine	S. D. Engle	275,618	Apr. 10	988	267	23	1403
Engraving-machine	R. Friebl	281,484	July 17	1437	393	24	265
Engraving-machine	J. Hope	281,509	July 17	1464	402	24	270
Engraving-machine	M. J. Salm	274,391	Mar. 20	1475	405	23	1104
Engraving-machine	A. F. Skinner	285,695	Sept. 25	1872	533	24	1252
Engraving-machine. Pantograph	J. Hope	281,510	July 17	1465	403	24	270
Engraving. Preparing blocks of wood for	W. Brah	274,556	Mar. 27	1710		23	1150
Ensilage in silos. Method of and device for preserving.	S. M. Colcord	280,352	July 3	16	5	24	5
Envelope	P. Busse	271,413	Jan. 30	1969	569	23	396
Envelope	P. L. Cuskey	279,543	June 19	1170	324	23	2336
Envelope	D. Lubin	272,725	Feb. 20	1438	403	23	707
Envelope	L. B. Plimpton	282,920	Aug. 7	526	149	24	594
Envelope	M. H. Watson	276,314	Apr. 24	1850	515	23	1567
Envelope	J. H. Weaver	286,881	Oct. 16	1385	390	25	265
Envelope. Double-address	J. E. Marshall	283,000	Aug. 14	629	178	24	618
Envelope machine	F. H. Richard	284,483	Sept. 4	390	108	24	970
Envelope-machine	W. D. Slater	288,673	Nov. 20	1114	306	25	716
Envelope-moistener	C. S. Watson	282,247	July 31	2422	666	24	443
Envelope or other box.	F. W. Field	290,223	Dec. 18	1057	297	25	1090
Envelopes and mechanism therefor. Method of making	C. F. Annan	283,945	Aug. 28	1787	505	24	848
Envelopes, &c. Device for fastening	D. E. Sweet	279,991	June 26	1699	477	23	2435
Envelopes. Machine for making	G. Sickles, Jr.	271,282	Jan. 30	1794	521	23	364
Epaulette	H. L. Crane and J. Lines	279,480	June 12	1090	301	23	2315
Erasable register	L. W. Loomis	287,837	Nov. 6	57	17	25	517
Eraser	L. Wolff	286,889	Oct. 16	1396	383	25	267
Eraser. Blackboard	D. L. Croft	274,566	Mar. 27	1723	479	23	1153
Eraser. Slate and blackboard	M. E. Ingram	287,381	Oct. 23	2024	550	25	386
Escapement.	R. J. Clay	286,685	Oct. 16	1143	307	25	223
Escapement and regulator	A. C. Clausen	286,531	Oct. 9	937	252	25	181
Ether. Apparatus for administering	S. Cooper	287,098	Oct. 23	1671	459	25	323
Evaporating apparatus	B. T. Babbitt	286,369	Oct. 9	745	200	25	145
Evaporating apparatus	O. F. Boomer	271,023	Jan. 23	1480	427	23	303
Evaporating apparatus	J. Stuart	289,785	Dec. 4	511	141	25	975
Evaporating liquids.	N. Pigeon	290,105	Dec. 11	902	256	25	1053
Evaporating or drying apparatus	A. Gilain	277,704	May 15	1460	394	23	1889
Evaporating-pan	H. O. Ames	276,324	Apr. 24	1880	522	23	1571
Evaporating-pan	J. F. Porter	285,069	Sept. 18	1126	315	24	1111
Evaporating-pan	N. Sanders	281,563	July 17	1526	418	24	280
Evaporating-pan	J. Shoemaker	272,784	Feb. 20	1510	426	23	720
Evaporating-pau	W. B. Seward	290,193	Dec. 11	1005	283	25	1072

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Evaporating-pan .....	F. P. Taber .....	277,855	May 15	1637	446	23	1921
Evaporating sirups and viscous substances. Apparatus for .....	F. B. Nichols .....	276,192	Apr. 24	1700	470	23	1541
Evaporative cooler .....	G. W. Deitzler .....	271,813	Feb. 6	277	76	23	489
Evaporator:							
See Cane-juice evaporator.	Salt-evaporator.						
Fruit-evaporator.	Sorghum-evaporator.						
Molasses-evaporator.	Sugar-evaporator.						
Evaporator .....	J. M. Duncan .....	284,952	Sept. 11	973	273	24	1077
Evaporator .....	W. A. Herring .....	287,026	Oct. 23	1579	435	25	305
Evaporator .....	J. A. Morrell .....	281,912	July 24	1989	545	24	365
Evaporator .....	I. N. Null .....	269,877	Jan. 2	63	19	23	15
Evaporator .....	W. H. Reed .....	280,514	July 3	217	57	24	39
Evaporator .....	E. Slaght .....	286,646	Oct. 16	1091	294	25	214
Evaporator .....	H. E. W. and J. A. Tupper .....	271,550	Jan. 30	2144	616	23	426
Evaporator .....	T. W. Weller .....	287,487	Oct. 30	2161	587	25	420
Evaporator .....	T. L. West .....	285,713	Sept. 25	1899	539	24	1256
Evaporator for making sugar from saccharine juices, &c. ....	O. B. Jennings .....	287,545	Oct. 30	2232	606	25	435
Excavating and apparatus therefor .....	F. Brotherhood .....	285,565	Sept. 25	1713	484	24	1222
Excavating and dredging apparatus .....	W. Smith .....	284,503	Sept. 4	422	119 129	24	975
Excavating and moving dirt, &c. Device for .....	W. Burket .....	277,455	May 15	1169	314	23	1840
Excavating and screening sand, &c. Apparatus for .....	C. A. Carpenter .....	288,545	Nov. 13	951	261	25	681
Excavating apparatus .....	T. Dougherty .....	283,703	Aug. 21	1482	417 418	24	782
Excavating apparatus .....	J. M. and L. M. Shute .....	290,488	Dec. 18	1406	389	25	1150
Excavating apparatus. Odorless .....	R. A. McCanley .....	285,288	Sept. 18	1381	390	24	1157
Excavating foundations. Pneumatic apparatus for .....	M. J. O'Connor .....	285,834	Oct. 2	63	19	25	13
Excavating-machine .....	W. S. Morton .....	287,563	Oct. 30	2253	611 612	25	439
Excavating-machine .....	S. F. Welch .....	289,734	Dec. 4	456	138 129	25	966
Excavating-machine. Hydraulic .....	R. Stone .....	281,415	July 17	1344	371	24	250
Excavating or ditching device for attachment to cars .....	D. Freel .....	270,776	Jan. 16	1181	338 339	23	245
Excavator:							
See Snow-excavator.							
Excavator .....	D. C. Baldwin .....	283,951	Aug. 28	1796	508	24	850
Excavator .....	D. Harper .....	287,671	Oct. 30	2410	649 650	25	468
Excavator .....	V. D. Sinar and J. Dale .....	278,368	May 29	2313	633	23	2052
Excavator and grader combined .....	W. C. Harrah .....	277,027	May 8	649	169	23	1742
Excavator and grapple .....	W. Burket .....	233,963	Aug. 28	1807	511	24	852
Excavator and loader .....	D. I. Calhoun .....	278,399	May 29	2347	642	23	2058
Excavator and wrecker combined .....	N. J. Cnyle .....	281,844	July 24	1906	520 521	24	351
Excavator. Earth .....	C. A. Smith .....	290,362	Dec. 18	1230	346	25	1120
Exercising and developing the muscles of mankind. Machine for .....	J. H. Trowbridge .....	282,589	Aug. 7	139	42	24	525
Exercising apparatus .....	G. Worthington .....	277,399	May 8	1093	294	23	1820
Exercising apparatus. Electrical .....	W. T. McGinnis .....	281,097	July 10	929	259	24	171
Exercising device for pianists. Finger .....	A. G. Gardner .....	272,951	Feb. 27	1742	487	23	765
Exercising. Striking-bag for .....	A. R. Runsey .....	291,015	Dec. 25	2102	579	25	1275
Exhaust. Regenerating .....	H. Gruson and R. Handrick .....	277,271	May 8	946	253 254	23	1795
Exhaust. Utilizing .....	D. Renshaw .....	290,473	Dec. 18	1389	384	25	1147
Exhibiting goods. Hanging device for .....	B. F. Zahm .....	280,434	July 3	122	32	24	23
Exhibiting illusions. Apparatus for .....	J. F. Blake .....	273,445	Mar. 6	264	71	23	878
Exit. Public-hall .....	R. C. Webster, Sr .....	290,951	Dec. 25	2010	554	25	1261
Expanding bolt .....	J. M. Cornell .....	282,501	Ang. 7	30	9	24	505
Expanding rose-bit .....	T. G. Pelton .....	270,554	Jan. 9	894	259	23	184
Expansile wheel .....	E. S. Chatfield .....	269,916	Jan. 2	109	32	23	23
Expansion-bit .....	G. Nichols .....	289,126	Nov. 27	1672	464	25	823
Expansion-joint .....	T. W. Duffy .....	282,967	Aug. 14	582	165	24	611
Explosions. Composition of matter for preventing the occurrence of .....	T. Sheehan .....	274,666	Mar. 27	1843	.....	23	1175
Explosive compound .....	S. R. Divine .....	289,756	Dec. 4	481	.....	25	970
Explosive compound .....	S. R. Divine .....	289,757	Dec. 4	482	.....	25	970
Explosive compound .....	S. R. Divine .....	289,758	Dec. 4	482	.....	25	970
Explosive compound .....	S. R. Divine .....	289,759	Dec. 4	483	.....	25	970
Explosive compound .....	S. R. Divine .....	289,760	Dec. 4	483	.....	25	971
Explosive compound .....	S. R. Divine .....	289,762	Dec. 4	486	.....	25	971
Explosive compound .....	S. R. Divine .....	289,762	Dec. 4	486	.....	25	971
Explosive compound .....	A. Nobel. (Reissue) .....	10,267	Jan. 9	912	.....	23	187
Explosive compound .....	H. D. Van Campen .....	288,516	Nov. 13	921	.....	25	675
Explosive compounds. Composition for preparing .....	S. R. Divine .....	289,765	Dec. 4	483	.....	25	971
Explosive compounds. Manufacture of .....	A. J. Lanfrey .....	276,833	May 1	387	.....	23	1694
Explosive compounds. Manufacture of .....	M. E. Sanlavlille and R. Laligant .....	281,565	July 17	1527	.....	24	280
Explosive compounds. Preparing .....	S. R. Divine .....	289,755	Dec. 4	430	.....	25	970
Express indicator. Railway .....	J. H. Dumont .....	275,009	Apr. 10	971	204	23	1400
Express-signal .....	A. Crawford .....	274,726	Mar. 27	1906	532	23	1186
Extension case or box .....	W. Rectz .....	287,473	Oct. 30	2143	582	25	417
Extension-table .....	G. W. Brenn .....	290,734	Dec. 25	1742	491	25	1215
Extension-table .....	J. Clooney .....	276,159	Apr. 24	1660	458	23	1535
Extension-table .....	W. J. Devers .....	283,582	Aug. 21	1346	376	24	755
Extension-table .....	G. A. Faas .....	290,180	Dec. 11	989	179 180	25	1070
Extension-table .....	C. N. Karstens .....	286,827	Oct. 16	1318	359	25	254
Extension-table .....	J. H. King .....	277,576	May 15	1316	353	23	1863
Extension-table .....	J. La Dow .....	279,957	June 26	1663	467	23	2428
Extension-table .....	A. Patrick .....	273,884	Mar. 13	834	226	23	945



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Extension-table.....	C. Robinson.....	270,128	Jan. 2	353	{ 102	{ 23	72
Extension-table.....	R. W. Tavenor.....	278,830	June 5	209	{ 62	{ 23	2159
Extracting juices from animal and vegetable substances. Apparatus for	A. Desgoffe and L. A. Di Giorgio.....	287,010	Oct. 23	1554	{ 428	{ 25	300
Extractor:							
See Bung-extractor.	Shell-extractor.						
Cartridge-extractor.	Spike-extractor.						
Cork-extractor.	Spoke-extractor.						
Honey-extractor.	Stump-extractor.						
Nail-extractor.	Sucker-rod extractor.						
Pulp-extractor.							
Eye-bar.....	S. M. Wickersham.....	283,730	Aug. 21	1520	428	24	789
Eye-bars. Manufacture of.....	J. H. Springer, Sr.....	270,143	Jan. 2	371	108	23	76
Eye-bars. Manufacture of.....	C. L. Strobel.....	277,373	May 8	1064	287	23	1816
Eye-disk. Gelatine.....	J. C. Wadleigh.....	273,410	Mar. 6	221	60	23	871
Eye-water.....	G. W. Scott.....	284,335	Sept. 4	217		24	941
Eyeglass.....	G. W. Wells and J. Preux.....	286,883	Oct. 16	1389	381	25	266
Eyeglass and spectacle case.....	W. B. White.....	289,946	Dec. 11	711	201	25	1018
Eyeglass-case.....	C. H. Manning.....	272,450	Feb. 20	1090	307	23	645
Eyeglass nose-piece.....	W. J. Suttie.....	284,257	Sept. 4	126	25	24	926
Eyeglasses.....	W. C. Barnes.....	282,946	Aug. 14	562	159	24	607
Eyeglasses.....	G. Johnston.....	271,712	Feb. 6	150	41	23	466
Eyelet-fastening for drawers. Metallic.	A. M. Green.....	280,032	June 26	1760	494	23	2445
Eyelet. Plastic.	W. B. Carpenter.....	271,035	Jan. 23	1492	430	23	305
Eyeletting-machine.....	A. Eppler, Jr., and E. C. Ray.....	271,049	Jan. 23	1509	435	23	308
Eyeletting-machine.....	L. D. Hawkins.....	272,382	Feb. 13	996	278	23	624
Eyeletting-machine.....	A. J. Shipley.....	284,911	Sept. 11	924	260	24	1069
Eyeletting-machine.....	G. Shipman.....	288,373	Nov. 13	742	202	25	644
Fabric:							
See Elastic fabric.	Sheet-metal fabric.						
Flocked fabric.	Spring fabric.						
Fabric.....	A. Aronson.....	281,172	July 10	1024	286	24	188
Fabric. Figured.....	A. Urbahn.....	289,582	Dec. 4	266	74	25	934
Fabric for furniture and wall coverings.	J. M. Baldwin.....	288,294	Nov. 13	623	171	25	624
Fabric for lining garments, &c.....	A. W. Straw.....	271,539	Jan. 30	2132	613	23	424
Fabric for needle-woven tapestries.....	C. T. Wheeler.....	271,174	Jan. 23	1665	{ 479	{ 23	334
Fabric for window-shades, &c.....	A. L. Jones.....	283,893	Aug. 28	1721	485	24	835
Fabric straightening and finishing machine.	I. E. Palmer.....	270,835	Jan. 16	1246	359	23	258
Fabrics. Apparatus for stretching.....	J. G. Lindemann.....	280,489	July 3	193	51	24	35
Fabrics. Delivery apparatus for machines for finishing.	I. E. Palmer.....	284,323	Sept. 4	203	57	24	938
Fabrics. Finishing woven cotton.....	F. B. Wilkins.....	270,863	Jan. 16	1283		23	265
Fabrics. Machine for folding the edges of.....	J. L. McKillan.....	278,163	May 22	2014	554	23	1992
Fabrics. Machine for pressing textile.....	G. W. Miller.....	285,052	Sept. 18	1107	309	24	1108
Fabrics. Machine for stretching or tentering woven.	J. and L. Gonrdiat.....	280,031	June 26	1756	{ 493	{ 23	2445
Fabrics. Machine for trimming.....	L. Schultz.....	273,898	Mar. 13	849	230	23	987
Fabrics. Producing open-work.....	F. Suter.....	280,094	June 26	1822	514	23	2458
Fabrics. Roller for stretching.....	J. Hawthorn, J. P. Liddell, and P. Hawthorn.....	281,503	July 17	1456	399	24	269
Fabrics. Uniting.....	S. Arnold.....	278,484	May 29	2449	668	23	2077
Face-plate for lathes, &c.....	F. C. Beard.....	282,038	July 31	2139	587	24	396
Fagot-box.....	F. E. Perkins.....	290,264	Dec. 18	1108	{ 310	{ 25	1098
Fall-block hook.....	L. T. Dickson.....	271,226	Jan. 30	1727	500	23	353
Falling bodies. Device for retarding the descent of	J. H. Long.....	285,283	Sept. 18	1376	388	24	1156
Fan.....	D. S. Cooke.....	275,804	Apr. 17	1233	337	23	1452
Fan.....	F. Kinn.....	278,799	June 5	167	49	23	2151
Fan.....	A. and W. Seitz.....	271,528	Jan. 30	2118	609	23	422
Fan.....	W. C. Spelman.....	270,611	Jan. 16	970	280	23	206
Fan.....	S. Van Campen.....	279,050	June 5	538	147	23	2215
Fan and caster-supporter. Combined table.	J. Hugo.....	281,513	July 17	1469	403	24	271
Fan attachment.....	M. Cohen.....	270,020	Jan. 2	228	66	23	47
Fan attachment.....	M. B. Crawford and C. E. Temple.....	272,416	Feb. 20	1051	295	23	638
Fan attachment.....	P. Hebner.....	275,208	Apr. 3	422	115	23	1298
Fan attachment for sewing-machines, &c.....	M. S. Bolt and J. W. Lunn.....	270,926	Jan. 23	1360	392	23	224
Fan. Automatic.....	C. H. Blanchard.....	271,311	Jan. 30	1712	496	23	350
Fan. Automatic.....	A. M. Richardson.....	288,119	Nov. 6	406	115	25	579
Fan. Automatic.....	J. M. Seymour.....	284,077	Aug. 28	1965	548	24	878
Fan. Exhaust.....	W. D. Smith.....	275,087	Apr. 3	274	75	23	1273
Fan. Exhaust or blower.....	W. W. Green.....	272,542	Feb. 20	1205	336	23	665
Fan. Fly.....	T. W. Cofer.....	288,021	Nov. 6	296	83	25	557
Fan. Fly.....	F. M. Hunt.....	278,140	May 22	1988	546	23	1988
Fan. Fly.....	L. W. Page.....	284,224	Sept. 4	88	24	24	919
Fan. Fly.....	V. Stirewalt.....	271,535	Jan. 30	2126	612	23	423
Fan for grain-separators, &c.....	J. Bachman.....	270,882	Jan. 23	1305	377	23	275
Fan. Mechanical.....	E. P. Dénéchand and J. H. Reynolds.....	281,035	July 10	859	239	24	159
Fan. Ventilating.....	C. Cockson.....	284,279	Sept. 4	151	42	24	930
Fan-wheel.....	W. Schmolz.....	279,603	June 19	1238	343	23	2348
Fanning apparatus.....	J. Reimers.....	270,123	Jan. 2	342	100	23	70
Fanning-machine.....	W. L. Hoover and J. Newcomb.....	278,795	June 5	161	47	23	2150
Fanning machinery.....	J. Geier.....	273,719	Mar. 13	612	164	23	946
Fanning-mill.....	C. S. Beebe.....	280,897	July 10	688	194	24	128
Fanning-mill.....	C. S. Beebe.....	280,898	July 10	689	194	24	128
Fanning-mill.....	D. Carpenter.....	282,050	July 31	2159	{ 592	{ 24	400
Fanning-mill.....	T. R. Rosier.....	282,568	Aug. 7	114	34	24	520
Fare-box.....	F. A. Farrell.....	270,651	Jan. 16	1022	294	23	216
Fare-box.....	T. W. Fowler.....	285,742	Sept. 25	1942	550	24	1263
Fare-box.....	J. F. Goodridge.....	272,952	Feb. 27	1743	487	23	766
Fare-box.....	M. W. Mahar.....	275,781	Apr. 10	1191	327	23	1437

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Fare-box .....	J. B. Slawson .....	272,591	Feb. 20	1270	{ 354 355 }	23	677
Fare-box. Street-car .....	J. R. Hare .....	274,319	Mar. 20	1380	379	23	1086
Fare-collector for passenger-cars .....	B. G. Fitzhugh .....	289,341	Nov. 27	1928	{ 535 536 }	25	872
Fare-recorder. Conductor's .....	J. C. Shoup .....	286,493	Oct. 9	886	240	25	171
Fare-recorders. Dial and reading-disk for .....	R. M. Rose .....	281,301	July 17	1200	332	24	236
Fare-register .....	G. D. Burton .....	284,375	Sept. 4	261	73	24	948
Fare-register .....	J. W. Fowler and D. F. Lewis .....	271,977	Feb. 6	478	130	23	524
Fare-register .....	J. W. Fowler and D. F. Lewis .....	273,675	Mar. 6	559	{ 148 149 }	23	929
Fare-register .....	J. Goodfellow .....	283,706	Aug. 21	1487	419	24	783
Fare-register .....	L. A. Touchet .....	278,754	June 5	98	28	23	2140
Fare-register and alarm .....	W. J. Richardson .....	276,713	May 1	234	59	23	1664
Fare register and recorder .....	J. W. Fowler and D. F. Lewis .....	271,976	Feb. 6	474	129	23	523
Fare register and recorder .....	R. M. Rose .....	281,302	July 17	1202	332	24	226
Farm and other gates .....	C. McMillen .....	281,544	July 17	1503	413	24	277
Farm-gate .....	S. Q. Barlow .....	289,800	Dec. 11	533	149	25	966
Farm-gate .....	J. R. Denny .....	289,998	Dec. 11	779	219	25	1030
Farm-gate .....	C. Hart .....	276,176	Apr. 24	1679	464	23	1538
Farm-gate .....	W. B. Miller .....	286,053	Oct. 2	336	93	25	62
Fastening for bags, pocket-books, &c .....	J. W. Meaker .....	278,852	May 1	409	109	23	1698
Fastening for safchels, &c .....	A. C. Frankel .....	277,259	May 8	932	259	23	1793
Fastening for straps, &c .....	R. G. Hanford, Jr .....	275,203	Apr. 3	417	114	23	1298
Fats and oils. Treating .....	M. H. Lackersteen .....	284,862	Sept. 11	863	24	1057	
Fat or oxyline. Deodorized .....	J. Hobbs .....	289,100	Nov. 27	1642	25	817	
Fats. Refining .....	J. Hobbs .....	280,822	July 10	604	24	113	
Fatty acids and glycerine. Process of and apparatus for decomposing and transforming fatty substances into .....	W. F. C. M. McCarty .....	282,547	Aug. 7	85	24	515	
Fatty acids. Process of and apparatus for treating fats and oils for obtaining .....	W. F. C. M. McCarty .....	283,266	Aug. 14	954	266	24	677
Faucet .....	W. A. Babcock .....	287,357	Oct. 23	1993	543	25	380
Faucet .....	W. J. Barr and J. L. Nelson .....	289,373	Dec. 4	4	2	25	687
Faucet .....	J. L. Berry and S. Gladney .....	269,912	Jan. 2	105	31	23	22
Faucet .....	L. Brandeis .....	288,769	Nov. 20	1238	339	25	737
Faucet .....	D. A. Brislin .....	286,256	Oct. 9	584	160	25	117
Faucet .....	W. Cassin .....	280,448	July 3	138	37	24	26
Faucet .....	G. F. Coomber .....	272,858	Feb. 27	1628	456	23	748
Faucet .....	W. S. Cooper .....	280,137	June 26	1873	528	23	2467
Faucet .....	M. Dinneen .....	272,536	Feb. 20	1200	335	23	664
Faucet .....	B. Dierstock .....	288,781	Nov. 20	1248	343	25	740
Faucet .....	W. H. Hedges .....	288,334	Nov. 13	682	188	25	634
Faucet .....	J. Kaufmann .....	279,952	June 26	1656	464	23	2427
Faucet .....	H. H. Liemke .....	270,819	Jan. 16	1229	355	23	255
Faucet .....	R. McGregor .....	270,550	Jan. 9	890	258	23	184
Faucet .....	R. Robinson .....	274,385	Mar. 20	1465	402	23	1102
Faucet .....	J. R. Rueckert and R. A. Hall .....	288,865	Nov. 20	1349	370	25	758
Faucet .....	G. Shone .....	290,124	Dec. 11	931	264	25	1059
Faucet .....	J. Sommer, Jr .....	275,727	Apr. 10	1118	306	23	1425
Faucet .....	J. O. Waddell .....	270,353	Jan. 9	627	185	23	132
Faucet and barrel-bung .....	E. T. Murphy .....	286,954	Oct. 16	1480	406	25	281
Faucet and racking-valve .....	C. A. Raggio .....	283,021	Aug. 14	657	185	24	624
Faucet attachment .....	J. P. Gruber .....	275,483	Apr. 10	815	220	23	1373
Faucet attachment .....	T. F. Ungemach and E. Oshe .....	274,996	Apr. 3	142	40	23	1250
Faucet. Beer .....	A. O'Reilly .....	285,656	Sept. 25	1823	519	24	1243
Faucet. Bottling .....	A. Rigby .....	288,859	Nov. 20	1342	369	25	756
Faucet-coupling .....	R. P. Barnstead .....	289,601	Dec. 4	286	80	25	938
Faucet-coupling .....	W. Newcomb .....	274,361	Mar. 20	1437	394	23	1097
Faucet. Double .....	F. L. Rockwell .....	284,237	Sept. 4	104	28, 29	24	922
Faucet. Filtering .....	J. Aborn .....	270,881	Jan. 23	1303	377	23	275
Faucet for beer-barrels .....	N. W. Payne .....	289,703	Dec. 4	425	119	25	960
Faucet for drawing liquids .....	F. McCabe .....	282,206	July 31	2375	653	24	434
Faucet for soda-fountains, &c .....	S. M. Way .....	290,823	Dec. 25	1853	512	25	1235
Faucet for soda-water, &c. Dispensing .....	J. Matthews .....	289,547	Dec. 4	221	62	25	925
Faucet-joint. Cast .....	N. Spofford .....	274,402	Mar. 20	1488	409	23	1106
Faucet. Lock .....	J. Sargent .....	286,077	Oct. 2	366	101	25	67
Faucet. Rotary measuring and self-closing .....	T. Weaver .....	272,176	Feb. 13	731	202	23	578
Faucet. Self-acting .....	A. Prier, C. Doherty, and P. E. Everett .....	289,710	Dec. 4	432	121	25	961
Faucet. Self-closing .....	A. Prier, C. Doherty, and P. E. Everett .....	278,597	May 29	2582	705	23	2099
Faucet. Self-closing .....	T. H. Walker .....	275,099	Apr. 3	289	79	23	1276
Faucet. Self-closing .....	R. L. Webb .....	275,300	Apr. 3	533	145	23	1316
Faucet. Siphon .....	N. A. Ellis .....	273,495	Mar. 6	324	88	23	889
Faucet. Siphon .....	N. A. Ellis .....	283,987	Aug. 28	1837	518	24	857
Faucet. Spring-compression .....	J. Zane .....	286,365	Oct. 9	741	{ 198 199 }	25	145
Faucet. Water .....	J. Graham .....	272,040	Feb. 13	567	153	23	550
Feather-crushing machine .....	W. Hammermiller .....	274,936	Apr. 3	67	18	23	1237
Feather ornaments. Frame for .....	B. Greig .....	290,679	Dec. 25	1659	457	25	1199
Feather. Initiation .....	H. S. Ortlöpp and J. C. Kloborg .....	282,661	Aug. 7	223	65	24	538
Feather-renovator .....	J. Baur .....	287,496	Oct. 30	2172	589	25	421
Feather-renovator .....	A. G. Bierbach .....	289,378	Dec. 4	8	3	25	888
Feather-renovator .....	A. C. Dudley .....	270,030	Jan. 2	240	70	23	49
Feather-renovator .....	G. F. Tallman .....	272,795	Feb. 20	1526	430	23	723
Feather splitting and grinding machine .....	A. D. Hoffman .....	279,386	June 12	979	{ 271 272 }	23	2298
Feathers and separating the down therefrom. Machine for cleaning .....	F. Cohen .....	270,180	Jan. 2	413	120	23	84
Feathers. Machine for cleaning and sorting .....	W. Hammermiller .....	280,371	July 3	39	11	24	9
Feed apparatus for engines. Boiler .....	J. A. Ayres .....	274,102	Mar. 20	1101	304	23	1037
Feed. Automatic boiler .....	J. R. Nunn and J. A. Smith .....	288,591	Nov. 13	1010	278	25	693
Feed-bag .....	H. Drescher .....	285,117	Sept. 18	1186	332	24	1121



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Feed-bag	J. W. Gedney	285,252	Sept. 18	1342	378	24	1149
Feed-bag attachment.	G. W. Horne	273,842	Mar. 13	780	211	23	976
Feed-bag attachment.	J. H. Palmer	289,129	Nov. 27	1676	465	25	824
Feed-bag for horses	J. H. Hey and A. N. Verdin	285,814	Oct. 2	40	13	25	9
Feed. Boiler.	W. B. Culver	280,721	July 3	458	131	24	82
Feed-cup	E. J. Thomas	280,532	July 3	236	63	24	42
Feed-cutter	H. A. Buck	279,533	June 19	1161	321	23	2335
Feed-cutter	A. G. Christman	282,052	July 31	2162	593	24	400
Feed-cutter	H. Floyd	288,170	Nov. 6	464	129	25	588
Feed-cutter	W. H. Hunnicutt	270,435	Jan. 9	742	218	23	154
Feed-cutter	M. Klima	279,096	June 5	597	162	23	2225
Feed-drier	E. Roat	275,858	Apr. 17	1297	357	23	1463
Feed-gate. Automatic	D. W. Marmon	281,707	July 24	1723	468	24	318
Feed-gear for animals. Automatic	E. J. B. Whitaker	288,143	Nov. 6	431	121	25	583
Feed-rack	W. W. White	285,716	Sept. 25	1905	541	24	1257
Feed-regulator. Boiler	G. W. Getchell	274,186	Mar. 20	1207	332	23	1057
Feed-trough	J. W. Manning	273,116	Feb. 27	1941	544	23	801
Feed-water alarm-indicator	D. Ellsworth	284,195	Sept. 4	49	14	24	913
Feed-water apparatus. Boiler	J. A. Ayres	274,103	Mar. 20	1103	305	23	1038
Feed-water. Apparatus for removing impurities from	D. D. Wass	272,806	Feb. 20	1541	433	23	726
Feed-water apparatus for steam-boilers	J. S. Clarke	276,354	Apr. 24	1910	530	23	1577
Feed-water for steam-boilers. Air-supply to the.	W. L. Fitch	285,884	Oct. 2	134	38	25	26
Feed-water heater	T. R. Butman	281,014	July 10	833	232	24	154
Feed-water heater	G. Cassady	274,561	Mar. 27	1718	477	23	1151
Feed-water heater	G. Cassady	288,206	Nov. 13	516	143	25	606
Feed-water heater	H. G. Eckstein	271,575	Jan. 30	2172	626	23	430
Feed-water heater	J. H. Elward	276,373	Apr. 24	1936	536	23	1582
Feed-water heater	H. Fairbanks	290,015	Dec. 11	803	226	25	1035
Feed-water heater	J. W. Heylman	272,689	Feb. 20	1392	391	23	698
Feed-water heater	J. J. Hoppes	273,084	Feb. 27	1893	531	23	792
Feed-water heater	J. O. Keleher	288,064	Nov. 6	342	95	25	565
Feed-water heater	J. Keller	282,902	Aug. 7	510	143	24	590
Feed-water heater	J. Park	289,929	Dec. 11	694	194	25	1015
Feed-water heater	R. W. Pelton	270,692	Jan. 16	1076	309	23	225
Feed-water heater	G. W. Sloane. (Reissue)	10,427	Dec. 18	1626	447	25	1187
Feed-water heater	D. C. Stillson	277,075	May 8	717	186	23	1754
Feed-water heater	E. R. Stilwell	278,196	May 22	2060	567	23	2000
Feed-water heater	A. F. Ward	279,848	June 19	1521	425	23	2397
Feed-water heater and feeder	J. Park	275,342	Apr. 3	605	163	23	1328
Feed-water heater and precipitator	D. Bourgeois	271,025	Jan. 23	1482	427	23	303
Feed-water heater and purifier	J. W. Hubber	277,285	May 8	960	258	23	1798
Feed-water heater and purifier	W. S. McKinney	281,775	July 24	1817	496	24	335
Feed-water heater and purifier.	G. W. Shamp	283,823	Aug. 28	1640	462	24	821
Feed-water heater and purifier.	E. R. Stilwell	274,048	Mar. 13	1020	279	23	1017
Feed-water heater and purifier.	W. P. Thompson	282,804	Aug. 7	394	111 112	24	569
Feed-water heater and smoke-stack combined	J. Armstrong	276,150	Apr. 24	1649	455 456	23	1533
Feed-water heater for locomotives	H. Heaton	279,383	June 12	975	270	23	2297
Feed-water heater for steam-boilers	E. J. Hall	272,684	Feb. 20	1386	389	23	697
Feed-water heaters. Overflow for	G. A. Otis	278,590	May 29	2570	702	23	2098
Feed-water. Heating.	G. L. Tucker	287,982	Nov. 6	244	69	25	550
Feed-water purifier	J. N. Booth	275,980	Apr. 17	1434	396	23	1469
Feed-water purifier	C. T. Mead	276,189	Apr. 24	1696	468	23	1541
Feed-water. Purifying	J. B. Dudley	285,591	Sept. 25	1748	495	24	1229
Feed-water. Purifying	G. S. Strong	273,778	Mar. 13	705	190	23	963
Feed-water regulator	J. Ball	278,077	May 22	1901	521	23	1973
Feed-water regulator	J. S. Clarke	276,355	Apr. 24	1912	530	23	1577
Feed-water regulator.	D. Edwards	278,112	May 22	1946	533 534	23	1981
Feed-water regulator	A. E. Osborn	290,100	Dec. 11	897	255	25	1052
Feed-water regulator	G. C. Pyle	279,014	June 5	491	133	23	2207
Feed-water regulator for steam-boilers.	G. P. Salisbury and C. W. Foster	284,762	Sept. 11	747	207	24	1037
Feed-water regulator. Balanced.	J. Woodruff	273,929	Mar. 13	888	243	23	994
Feeder. Automatic boiler-	T. W. Mather	272,730	Feb. 20	1444	405	23	708
Feeder. Automatic stock-	J. P. Milbourne	285,295	Sept. 18	1389	392	24	1158
Feeder. Boiler.	B. T. Babbitt	269,993	Jan. 2	201	58	23	42
Feeder. Boiler.	J. S. Du Bois	280,364	July 3	30	8	24	7
Feeder. Boiler.	W. H. H. Knowlton and P. Sage	281,702	July 24	1717	467	24	317
Feeder. Boiler.	R. Lauckner	281,380	July 17	1298	359	24	242
Feeder. Boiler.	J. H. Phillips	289,704	Dec. 4	426	119	25	960
Feeder. Boiler.	G. Westinghouse, Jr.	290,507	Dec. 18	1438	397	25	1155
Feeder for steam-boilers. Water-	H. Sullings	279,458	June 12	1061	294	23	2312
Feeder. Stock-	C. Mendenhall.	280,208	June 26	1951	548	23	2460
Feeder. Stock-	M. L. Tolbert	284,091	Aug. 28	1984	553	24	881
Feeding apparatus. Automatic	H. W. Rose	280,084	June 26	1820	512	23	2456
Feeding apparatus. Boiler.	J. A. Ayres	274,104	Mar. 20	1105	305	23	1038
Feeding calves. Apparatus for	C. W. Reed	274,379	Mar. 20	1458	400	23	1101
Feeding device for horses	T. L. Brooks	289,214	Nov. 27	1778	492	25	842
Feeding device. Salt	J. Goldstein	281,993	July 24	2061	571	24	331
Feeding device. Sheep-	A. and H. L. Hester	284,301	Sept. 4	179	51	24	934
Felly-jointing machine	L. D. Bullock	286,586	Oct. 16	1012	273 274	25	200
Felly-plate.	P. W. McGuire	285,290	Sept. 18	1384	391	24	1158
Felly-tightener.	A. Galbraith	270,413	Jan. 9	707	209	23	148
Felt articles. Mold for making	S. G. Alexander	281,329	July 17	1240	344	24	232
Felt covering. Hair-	H. V. Miller, Jr.	290,456	Dec. 18	1366	377	25	1142
Felt. Method of and apparatus for finishing	J. H. Neave	271,551	Jan. 30	1893	548	23	381
Felt upper for shoes or slippers	N. Moulton	275,250	Apr. 3	466	130	23	1306
Felt uppers for shoes or slippers. Making	N. Moulton	275,249	Apr. 3	466	130	23	1306
Felted and textile fabrics. Producing compound	J. Offermann and T. Jegler	288,726	Nov. 20	1189	325	25	728
Felted slugs. Manufacturing.	B. Haviland and G. P. Gunn	290,230	Dec. 18	1063	298	25	1091

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g's	Vol.	Page.
Felting-machine	W. Keenan	279,393	June 12	989	275	23	2300
Felting-machine	A. B. Waring	288,747	Nov. 20	1214	332	25	733
Fence	W. F. Ash	279,073	June 5	564	155	23	2220
Fence	M. Bailey	273,435	Mar. 6	252	63	23	877
Fence	L. D. Cather	285,570	Sept. 25	1718	486	24	1223
Fence	D. A. Cease	275,884	Apr. 17	1330	366	23	1470
Fence	C. C. Coe	275,591	Apr. 10	940	256	23	1395
Fence	F. M. Comstock and G. Q. Adams	286,785	Oct. 16	1265	342	25	244
Fence	J. H. Cunningham and N. M. Dickerson	286,182	Oct. 9	495	137	25	102
Fence	M. Dagger	275,891	Apr. 17	1336	368	23	1471
Fence	W. C. Gholson	274,118	Mar. 20	1127	311	23	1042
Fence	J. Gier	276,679	May 1	187	48	23	1656
Fence	C. Hanika	287,828	Nov. 6	47	14	25	516
Fence	T. K. Hansberry	290,578	Dec. 18	1530	421	25	1171
Fence	J. Hollister	283,606	Aug. 21	1368	382	24	760
Fence	G. S. Hosmer	283,486	Aug. 21	1237	347	24	735
Fence	J. B. Hungerford	284,207	Sept. 4	64	18	24	915
Fence	J. A. Jarratt	285,272	Sept. 18	1364	385	24	1154
Fence	L. P. Judson. (Reissue)	10,313	Apr. 10	1221	334	23	1442
Fence	D. S. Morrison	271,730	Feb. 6	172	47	23	470
Fence	J. Newton	285,427	Sept. 25	1557	438	24	1193
Fence	A. I. Osborn	284,656	Sept. 11	606	171	24	1013
Fence	D. Overhuls	286,057	Oct. 2	341	95	25	63
Fence	J. H. Pearson	275,940	Apr. 17	1391	383	23	1481
Fence	B. F. Perry	286,956	Oct. 16	1482	407	25	281
Fence	J. W. Read	285,677	Sept. 25	1547	528	24	1247
Fence	D. Reniker	277,930	May 22	1730	472	23	1943
Fence	J. W. Rigg	286,487	Oct. 9	880	238	25	170
Fence	M. N. Sevier	277,357	May 8	1049	282	23	1813
Fence	S. B. Smith	269,892	Jan. 2	83	25	23	18
Fence	J. L. Sullivan	271,665	Feb. 6	95	25	23	456
Fence	R. E. and W. A. Taylor	276,095	Apr. 17	1578	435	23	1513
Fence	G. M. Wadsworth	289,169	Nov. 27	1748	486	25	837
Fence	G. Watt	286,750	Oct. 16	1222	330	25	236
Fence	S. Williams	283,182	Aug. 14	846	237	24	657
Fence	J. Yeiter	277,821	May 15	1593	436	23	1913
Fence and telegraph post. Iron	L. Petrequin	273,887	Mar. 13	837	227	23	985
Fence-barb	J. B. Oliver	286,147	Oct. 2	448	122	25	83
Fence-barb and barbed wire	G. C. Baker	273,219	Feb. 27	2070	582	23	824
Fence-barbs. Device for making	C. B. Brainard	283,561	Aug. 21	1319	368	24	750
Fence. Barbed	J. W. Childs	285,229	Sept. 18	1316	371	24	1144
Fence. Barbed	J. Goss	282,453	July 31	2688	738	24	489
Fence. Barbed	J. W. Nadelhoffer	270,098	Jan. 2	311	92	23	63
Fence. Barbed	O. O. Phillips	280,857	July 10	643	181	24	120
Fence. Barbed	W. S. Roberts	276,883	May 1	449	120	22	1705
Fence. Barbed-wire	G. C. Bigelow	278,389	May 29	2337	639	23	2057
Fence. Barbed-wire	J. E. Evans	287,261	Oct. 23	1876	514	25	359
Fence. Barbed-wire	A. Gunderson	286,130	Oct. 2	430	117	25	80
Fence. Barbed-wire	M. Kelly	283,614	Aug. 21	1377	385	24	761
Fence. Barbed-wire	C. A. Mann	276,439	Apr. 24	2014	559	23	1595
Fence. Barbed-wire	O. M. Pond	270,116	Jan. 2	332	97	23	67
Fence. Barbed-wire	A. J. Upham	284,261	Sept. 4	130	36	24	927
Fence. Combined wire and picket.	M. H. Brown and C. F. Hyde	277,877	May 22	1671	456	23	1933
Fence. Earthen	A. Delfis	277,687	May 15	1443	389	23	1886
Fence. Farm and flood	A. L. Cottrel	290,403	Dec. 18	1281	360	25	1129
Fence. Flood	H. D. Merrill	289,682	Dec. 4	383	110	25	954
Fence. Flood	P. Roush and C. P. Tener	275,713	Apr. 10	1099	300	23	1422
Fence. Flood	M. M. Withrow	284,528	Sept. 4	451	128	24	981
Fence. Flood and suspension	J. W. Power	276,073	Apr. 17	1546	425	23	1507
Fence. Girder picket	F. Tunica	284,687	Sept. 11	650	183	24	1020
Fence. Hedge	W. Young	275,317	Apr. 3	554	151	23	1320
Fence. Iron	B. G. Devoe	271,196	Jan. 23	1692	429	23	337
Fence. Iron	H. L. Jones	281,077	July 10	910	254	24	168
Fence-lock	B. A. Welds	286,752	Oct. 16	1225	331	25	237
Fence-loom	D. E. Merrick and G. Q. Adams	270,456	Jan. 9	763	224	23	158
Fence machine. Barb-wire	T. W. Eaton and F. H. Prince	275,810	Apr. 17	1240	341	23	1453
Fence machine. Wire	F. Ash and J. Fisk	288,913	Nov. 20	1408	388	25	769
Fence-making machine	F. M. Comstock	284,385	Sept. 4	278	77, 78	24	951
Fence-making machine	W. H. Vaughn	271,165	Jan. 23	1650	474 475 464 465	23	331
Fence-making machinery	R. E. and J. B. Morris	290,699	Dec. 25	1687	465	25	1204
Fence material. Barbed	W. S. Bate	273,245	Mar. 6	3	1	23	835
Fence. Metallic	C. Hanika	289,253	Nov. 27	1818	502	25	851
Fence. Metallic	J. M. Reid	274,820	Mar. 27	2020	562	23	1206
Fence. Metallic	C. H. Salisbury	272,482	Feb. 20	1133	318	23	653
Fence nail. Wire	E. W. Bates	280,118	June 26	1853	522	23	2463
Fence nail. Wire	W. M. Clew	270,113	June 5	633	172	23	2231
Fence. Picket	M. S. Chapman	274,173	Mar. 20	1195	329	23	1055
Fence. Picket	E. F. Shellabarger	284,337	Sept. 11	218	61	24	941
Fence. Picket	W. Thomas	284,685	Sept. 11	648	183	24	1020
Fence-picket	F. M. Comstock and G. Q. Adams	286,392	Oct. 9	773	209	25	150
Fence-pickets. Machine for pointing	O. Schmachtenberger	273,614	Mar. 6	480	129	23	916
Fence. Plashed	W. Baldwin	274,895	Apr. 3	6	2	23	1228
Fence. Portable	E. H. Alden	273,001	Feb. 27	1797	503	23	776
Fence. Portable	S. Beckey	286,522	Oct. 9	926	250	25	178
Fence. Portable	J. H. Cox	281,028	July 10	851	236	24	157
Fence. Portable	J. Eastwood	271,322	Jan. 30	1849	536	23	373
Fence. Portable	S. W. Fish	285,882	Oct. 2	132	38	25	26
Fence. Portable	J. Johnson	283,114	Aug. 14	767	216	24	643
Fence. Portable	P. Toman	274,532	Mar. 27	1684	467	23	1146



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				2d.	Dr. E.	Vol.	Page.
Fence-post.....	A. A. Arthur, E. F. Spaulding, and W. Davison.....	277,657	May 15	1409	380	23	1880
Fence-post.....	A. A. Arthur, E. F. Spaulding, and W. Davison.....	277,658	May 15	1410	380	23	1880
Fence-post.....	J. W. Barton.....	270,370	Jan. 9	655	192	23	137
Fence-post.....	S. Beckwith.....	282,039	July 31	2140	587	24	397
Fence-post.....	W. P. Brooks.....	284,806	Sept. 11	799	223	24	1045
Fence-post.....	F. Brown.....	275,131	Apr. 3	334	92	23	1283
Fence-post.....	C. D. Freeland and J. A. Wharry.....	280,302	June 26	2076	584	23	2502
Fence-post.....	C. J. Gorla.....	277,708	May 15	1465	395	23	1890
Fence-post.....	C. J. Gorla.....	287,923	Nov. 6	168	48	25	537
Fence-post.....	S. E. Hyndman.....	289,349	Nov. 27	1937	538	25	873
Fence-post.....	J. Johnson.....	286,017	Oct. 2	291	82	25	55
Fence-post.....	J. H. and A. Kreidler.....	287,944	Nov. 6	146	57	25	541
Fence-post.....	E. T. Likes, H. B. Hedge, and G. C. Baker.....	277,493	May 15	1215	326	23	1848
Fence-post.....	P. and O. H. McOmber.....	286,461	Oct. 9	851	231	25	165
Fence-post.....	R. Riley, Sr.....	272,157	Feb. 13	712	195	23	575
Fence-post.....	E. Rutz.....	279,440	June 12	1044	289	23	2309
Fence-post.....	P. Schwartz.....	287,871	Nov. 6	101	30	25	525
Fence-post.....	D. Schweikhard.....	270,609	Jan. 16	969	280	23	206
Fence-post.....	G. Swingle, 4th.....	275,286	Apr. 3	513	141	23	1314
Fence-post.....	J. W. Walters.....	286,978	Oct. 16	1512	415	25	286
Fence-post.....	S. E. Young and E. F. Pugsley.....	273,334	Mar. 6	121	35	23	854
Fence-post. Iron.....	R. J. Carson.....	281,019	July 10	839	233	24	155
Fence-post. Iron.....	J. S. Fox.....	269,844	Jan. 2	31	10	23	8
Fence-post. Iron or steel.....	R. J. Carson.....	278,220	May 22	2091	575	23	2005
Fence-post. Metallic.....	G. S. Curtis.....	278,779	June 5	143	42	23	2146
Fence-post. Metallic.....	D. B. Oliver.....	280,505	July 3	209	55	24	38
Fence-post. Metallic.....	D. B. Oliver.....	281,717	July 24	1733	471	24	320
Fence-post. Metallic.....	D. B. Oliver. (Reissue).....	10,366	Aug. 14	1067	305	24	702
Fence-post. Metallic.....	D. B. Scott.....	289,149	Nov. 27	1697	471	25	827
Fence-post socket.....	G. T. Clark.....	275,801	Apr. 17	1230	337	23	1452
Fence-posts. Anchoring-socket for.....	S. D. Melrew.....	284,219	Sept. 4	81	23	24	918
Fence-posts. Barbed-wire fastening for iron.....	J. S. Fox.....	269,845	Jan. 2	32	10	23	8
Fence-posts. Machine for bending sheet-metal.....	T. R. Morgan, Sr.....	283,269	Aug. 14	958	267	24	678
Fence-posts. Machine for driving.....	H. and B. Dixon.....	281,848	July 24	1911	522	24	352
Fence-rails. Manufacture of barbed.....	W. J. Lewis.....	278,714	June 5	50	15	23	2133
Fence stay or brace.....	W. W. Worcester.....	275,007	Apr. 3	163	43	23	1254
Fence support and guard. Wire.....	T. H. Dodge.....	275,607	Apr. 10	968	263	23	1406
Fence. Wire.....	C. H. Barr.....	289,207	Nov. 27	1771	491	25	841
Fence. Wire.....	C. W. Bethae.....	289,803	Dec. 11	537	150	25	987
Fence. Wire.....	L. Dow. (Reissue).....	10,362	Aug. 7	554	156	24	599
Fence. Wire.....	J. C. Ford.....	287,372	Oct. 23	2014	548	25	384
Fence. Wire.....	C. A. Mann.....	284,218	Sept. 4	80	22	24	918
Fence. Wire.....	J. Stubbe.....	287,337	Oct. 23	1970	538	25	377
Fence. Wire.....	L. and M. Taylor.....	278,291	May 22	2185	601	23	2021
Fence-wire. Apparatus for making barbed.....	W. Wilson, Jr.....	289,950	Dec. 11	715	202	25	1019
Fence-wire. Apparatus for reeling and unreeling barbed.....	A. Gunderson.....	283,884	Aug. 28	1710	482	24	833
Fence-wire. Barbed.....	C. B. Brainard.....	287,091	Oct. 23	1663	456	25	321
Fence-wire. Barbed.....	O. P. Briggs.....	272,407	Feb. 20	1039	501	23	637
Fence-wire. Barbed.....	J. B. Cline.....	290,974	Dec. 25	2053	565	25	1267
Fence-wire. Barbed.....	W. M. Clow.....	285,014	Sept. 18	1060	296	24	1100
Fence-wire. Barbed.....	W. M. Clow.....	287,803	Nov. 6	17	6	25	510
Fence-wire. Barbed.....	H. A. Devendorf.....	272,534	Feb. 20	1198	334	23	664
Fence-wire. Barbed.....	W. Edenborn and G. Griesche.....	271,693	Feb. 6	129	35	23	462
Fence-wire. Barbed.....	W. V. Kay.....	286,987	Oct. 16	1522	419	25	288
Fence-wire. Barbed.....	E. S. Lenox.....	272,563	Feb. 20	1243	346	23	672
Fence-wire. Barbed.....	P. Miles.....	277,916	May 22	1711	468	23	1940
Fence-wire. Barbed.....	H. B. Scutt.....	287,059	Oct. 23	1620	446	25	313
Fence-wire. Barbed.....	A. W. Sproule.....	275,536	Apr. 10	878	237	23	1384
Fence-wire. Barbed.....	T. A. Weber.....	286,512	Oct. 9	914	246	25	176
Fence-wire. Machine for attaching wire barbs to.....	T. McCosh.....	290,595	Dec. 18	1546	426	25	1174
Fence-wire. Machine for barbing.....	A. Jorgensen.....	280,629	July 3	348	97	24	61
Fence-wire. Machine for making barbed.....	F. H. Treat.....	276,505	Apr. 24	2096	582	23	1610
Fence-wire. Machine for making barbed.....	T. A. Weber.....	286,511	Oct. 9	910	246	25	175
Fence-wire. Machine for manufacturing barbed.....	D. C. Stover.....	278,624	May 29	2619	715	23	2106
Fence-wire. Machine for spooling barbed.....	D. G. Wells.....	288,530	Nov. 13	936	255	25	678
Fence-wire. Machine for twisting barbed.....	S. M. Stevens.....	272,095	Feb. 13	635	173	23	561
Fence-wire. Making barbed.....	W. Hewitt.....	276,039	Apr. 17	1510	416	23	1501
Fence-wire. Making barbed.....	C. D. Rogers.....	290,272	Dec. 18	1117	314	25	1099
Fence-wire. Ornamental.....	W. R. Reynolds.....	287,391	Oct. 23	2035	552	25	388
Fence-wire with spur attachment.....	C. F. Hyde.....	277,288	May 8	966	259	23	1799
Fence-wires. Apparatus for attaching barbs to.....	C. D. Randel and W. Brockner.....	286,636	Oct. 16	1079	291	25	212
Fence-wires. Machine for applying barbs to.....	J. B. Cline.....	279,339	June 12	909	254	23	2287
Fences. Combined wires for wire.....	P. Miles.....	277,917	May 22	1712	468	23	1940
Fences. Device for erecting.....	A. Hotchkiss.....	282,895	Aug. 7	504	141	24	589
Fences. Electrical device for protecting wire.....	C. A. Brainerd.....	279,322	June 12	885	246	23	2283
Fences. Erecting wire.....	J. and W. M. Brinkerhoff.....	287,222	Oct. 23	1830	501	25	351
Fences. Implement for wiring hedge.....	W. Young.....	287,077	Oct. 23	1644	451	25	317
Fences. Machine for the manufacture of.....	J. Zengel.....	289,490	Dec. 4	149	41	25	912
Fences. Wire lock for.....	J. W. Page.....	285,660	Sept. 25	1828	521	24	1244
Fencing. Barbed metal-strip.....	A. J. Upham.....	272,923	Feb. 27	1710	478	23	761
Fencing. Barbed-metal-strip.....	A. J. Upham.....	280,100	June 26	1835	517	23	2459
Fencing. Barbed-wire.....	K. L. Shellabarger.....	272,091	Feb. 13	630	171	23	561
Fencing-clasp.....	J. D. Curtis.....	284,390	Sept. 4	284	79	24	952
Fencing. Machine for manufacturing barbed.....	R. Ellwood and A. J. Upham.....	278,523	May 29	2498	682	23	2086
Fencing. Manufacture of barbed metallic.....	T. V. Allis.....	272,934	Feb. 27	1723	481	23	763
Fencing. Manufacture of barbed metallic.....	T. V. Allis.....	272,935	Feb. 27	1725	482	23	763

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Specs.	Dr's.	Vol.	Page.
Fencing. Metallic barbed .....	T. V. Allis .....	272,936	Feb. 27	1726	482	23	763
Fencing. Metallic-strip blank for barbed .....	T. V. Allis .....	272,933	Feb. 27	1723	481	23	763
Fencing. Support and guard for .....	T. H. Dodge .....	285,979	Oct. 2	249	71	25	48
Fender: <i>See</i> Breast-strap fender. Furniture-fender. Car-fender.                      Plow-fender. Cotton, corn, and to- bacco fender.							
Fermenting liquor. Apparatus for and process of cooling and condensing the foam of .....	C. A. Mans .....	280,385	July 3	55	15	24	12
Fermented liquors. Method of and apparatus for manufacturing .....	E. Schmitt .....	277,065	May 8	701	182	23	1752
Fermenting and clarifying beer, wine, &c. Apparatus for .....	J. Sargent .....	276,635	May 1	112	30	23	1046
Fermenting-casks. Ventilating-valve for .....	H. Guth .....	275,764	Apr. 10	1175	322	23	1435
Fermenting-vessels. Apparatus for regulating the pressure in a series of .....	J. M. Pfandler. (Reissue) .....	10,284	Feb. 6	531	{ 142 143 }	23	532
Ferro-phosphorus. Production of .....	J. Reese .....	282,118	July 31	2261	.....	24	415
Ferrule for canes, &c. ....	C. Degenhart .....	281,245	July 17	1134	312	24	214
Ferrule for handles .....	J. Barker .....	277,404	May 8	1099	295	23	1821
Ferrule-shaping machine .....	H. O. Lothrop .....	290,250	Dec. 18	1084	303	25	1095
Fertilizer .....	J. B. Beck .....	285,555	Sept. 25	1703	.....	24	1920
Fertilizer .....	W. J. Courts .....	281,840	July 24	1898	.....	24	350
Fertilizer .....	J. Gould .....	277,023	May 8	646	.....	23	1742
Fertilizer .....	T. Wells .....	283,308	Aug. 14	1001	.....	24	687
Fertilizer .....	W. R. Wilkinson .....	290,829	Dec. 25	1859	.....	25	1236
Fertilizer .....	J. R. Young, Jr .....	278,383	May 29	2331	.....	23	2056
Fertilizer .....	J. R. Young, Jr .....	278,384	May 29	2331	.....	23	2056
Fertilizer .....	J. R. Young, Jr .....	278,480	May 29	2446	.....	23	2076
Fertilizer-distributor .....	J. W. Alverson .....	273,002	Feb. 27	1798	503	23	776
Fertilizer-distributor .....	J. R. Anthony .....	278,483	May 29	2449	668	23	2077
Fertilizer-distributor .....	A. Cunningham and H. Bickford .....	286,910	Oct. 16	1245	{ 391 392 }	25	271
Fertilizer-distributor .....	D. Dillon .....	284,189	Sept. 4	37	10	24	911
Fertilizer-distributor .....	T. D. Gere .....	271,533	Feb. 6	300	82	23	494
Fertilizer-distributor .....	A. Glisson .....	278,126	May 22	1971	541	23	1985
Fertilizer-distributor .....	L. Heath .....	285,483	Sept. 25	1618	454	24	1204
Fertilizer-distributor .....	J. P. Johnston .....	280,932	July 10	741	{ 206 207 }	24	136
Fertilizer-distributor .....	G. R. Lewis .....	272,716	Feb. 20	1424	399	23	704
Fertilizer-distributor .....	C. E. Patric .....	273,883	Mar. 13	833	226	23	985
Fertilizer-distributor .....	J. S. Peironnet .....	271,912	Feb. 6	396	108	23	510
Fertilizer-distributor .....	W. C. Stick .....	281,317	July 17	1226	339	24	229
Fertilizer-distributor .....	J. W. Thomas and J. D. Otstot .....	279,044	June 5	528	144	23	2213
Fertilizer-distributor .....	E. H. Wistance .....	286,361	Oct. 9	736	197	25	144
Fertilizer-distributor and grain-drill .....	A. C. Hendricks .....	272,546	Feb. 20	1208	337	23	666
Fertilizer-distributor and seeder. Combined .....	F. M. King .....	284,562	Sept. 4	487	137	24	987
Fertilizer-distributor. Force-feed .....	C. D. Aumock .....	270,198	Jan. 9	438	129	23	97
Fertilizer-distributor. Force-feed .....	C. F. Johnson .....	285,413	Sept. 25	1537	434	24	1190
Fertilizer for tobacco crops .....	A. Edwards .....	290,633	Dec. 18	1600	.....	25	1182
Fertilizers. Apparatus for desiccating .....	H. Breer .....	288,919	Nov. 20	1414	390	25	771
Fertilizers. Apparatus for desiccating animal matter for .....	H. Breer .....	274,902	Apr. 3	13	4	23	1929
Fertilizers. Apparatus for treating animal matter for .....	H. Breer .....	274,901	Apr. 3	12	3	23	1928
Fertilizer-distributing attachment for rollers .....	S. C. Meddick .....	284,461	Sept. 4	367	102	24	966
Fertilizers. Apparatus for desiccating animal matter for .....	H. Breer .....	280,790	July 10	572	159	24	107
Fertilizers from basic iron slag. Obtaining phosphatic .....	C. Scheibler .....	279,445	June 12	1048	.....	23	2310
Fertilizers from offal, &c. Apparatus for the manufacture of .....	J. N. B. Bond .....	270,003	Jan. 2	211	61	23	43
Fertilizers. Machine for mixing and grinding .....	W. H. Mercer .....	286,463	Oct. 9	853	232	25	166
Fertilizers. Manufacture of .....	C. J. F. R. de J. Menard and H. J. E. Hennebutte .....	280,320	June 26	2096	.....	23	2506
Fertilizers. Manufacturing artificial .....	E. A. Scribner .....	283,426	Aug. 21	1164	.....	24	721
Fertilizers. Manufacturing artificial .....	E. A. Scribner .....	283,427	Aug. 21	1165	.....	24	722
Fertilizers. Packing and shipping .....	A. Edwards .....	287,526	Oct. 30	3206	599	25	429
Fertilizers. Process of and apparatus for manufacturing .....	P. Hogan .....	281,693	July 24	1705	464	24	315
Fetter. Horse and cattle .....	J. C. McCollum .....	283,503	Aug. 21	1256	352	24	738
Fiber and for other purposes. Machine for obtaining .....	J. Kennedy .....	275,920	Apr. 17	1368	377	23	1476
Fiber-cutting machine .....	E. W. Ross .....	287,392	Oct. 23	2036	{ 553 554 }	25	388
Fiber for cordage, textile fabrics, &c. ....	G. L. Washington .....	272,361	Feb. 13	960	.....	23	618
Fiber for spinning, paper-making, &c. Treating certain vegetable fibrous substances for the production of .....	J. A. Graham .....	280,171	June 26	1907	.....	23	2472
Fiber-washing machine .....	J. C. L., and M. Jefferson .....	286,305	Oct. 9	666	{ 177 178 }	25	131
Fiber, wool, &c. Process of and machine for separating .....	W. S. Archer .....	283,846	Aug. 28	1666	470	24	826
Fibers of fiber-bearing leaves and plants. Machinery and apparatus for scutching or separating, washing, drying, and bleaching the .....	H. C. Smith .....	282,788	Aug. 7	375	106	24	566
Fibers of jute and cotton plants. Method of and apparatus for extracting .....	T. J. Spear .....	275,953	Apr. 17	1403	387	23	1483
Fibers, &c. Machine for obtaining .....	S. P. Smith .....	276,915	May 1	486	128	23	1711
Fibers, &c. Machine for obtaining or treating .....	G. Sanford and S. P. Smith .....	280,671	July 3	400	111	24	71
Fibers. Treating the plant genista to obtain .....	F. Globotschnig .....	284,291	Sept. 4	164	.....	24	932
Fibrous and other substances. Machine for obtaining and treating .....	S. P. Smith .....	280,968	July 10	781	216	24	143
Fibrous product of bamboo .....	W. H. Perrine .....	283,510	Aug. 21	1261	.....	24	739
Fibrous substances. Machinery for decorticating .....	P. De Puydt .....	289,999	Dec. 11	780	{ 219 220 }	25	1031



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. G.	Vol.	Page.
Fife	W. Lang	274,617	Mar. 27	1785	496	23	1164
Fifth-wheel	F. P. Bates	285,554	Sept. 25	1702	480	24	1220
Fifth-wheel	S. H. Clark and J. G. Parsons	280,350	July 3	13	4	24	4
Fifth-wheel	T. Evans	289,767	Dec. 4	489	136	25	971
Fifth-wheel	L. D. Haskell, Jr.	288,799	Nov. 20	1273	349	25	744
Fifth-wheel	V. Jeffries	275,495	Apr. 10	828	224	23	1376
Fifth-wheel	J. B. Merriam	286,464	Oct. 9	854	232	25	166
Fifth-wheel	G. P. Merrill	290,907	Dec. 25	1952	538	25	1252
Fifth-wheel	W. H. Miller	275,688	Apr. 10	1071	292	23	1417
Fifth-wheel	H. C. Ohlsen	283,139	Aug. 14	790	221	24	647
Fifth-wheel	W. C. Shipherd	281,307	July 17	1200	335	24	227
Fifth-wheel plate	C. T. Gandy	281,357	July 17	1274	354	24	238
Fifth-wheel. Vehicle	J. Allen	273,427	Mar. 6	239	64	23	875
Fifth-wheel. Vehicle	C. Comstock	279,711	June 19	1363	380	23	2370
Fifth-wheel. Vehicle	W. W. Grier	288,997	Nov. 27	1511	418	25	795
Fifth-wheel. Vehicle	C. Fallesen and J. M. Jensen	278,786	June 5	150	44	23	2148
Fifth-wheel. Vehicle	J. S. Klapperich	287,550	Oct. 30	2240	608	25	436
Fifth-wheels. Die and blank for the manufacture of	F. P. Bates	287,407	Oct. 30	2062	560	25	400
File	J. D. Crosthwaite	273,821	Mar. 13	757	205	23	972
File	M. A. Howell, Jr.	273,537	Mar. 6	380	101	23	899
File	W. Huger	274,775	Mar. 27	1970	548	23	1197
File	H. B. Thayer and T. G. Wright	283,832	Aug. 28	1650	465	24	823
File and binder. Newspaper	H. S. Williams	274,430	Mar. 20	1523	418	23	1112
File and other tools having tapering tangs	J. F. French	285,989	Oct. 2	258	73	25	49
File. Bill	M. J. David	274,729	Mar. 27	1908	533	23	1187
File. Bill	M. J. David	275,602	Apr. 10	959	260	23	1399
File. Bill	A. Henderson	281,062	July 10	889	247	24	164
File. Bill	I. S. Smith	277,170	May 8	838	221	23	1775
File. Bill	P. J. Wicks	274,688	Mar. 27	1867	520	23	1179
File, &c. Bill and letter	J. Smith	280,683	July 3	413	115	24	73
File. Bill or letter	J. M. Keep	279,170	June 12	706	192	23	2253
File-blanks. Machine for and method of cutting teeth upon	W. T. Nicholson	278,169	May 22	2024	556	23	1994
File-blanks. Machine for grinding and dressing	A. Weed	287,746	Oct. 30	2511	677	25	487
File-blanks. Machine for stripping	A. Weed	287,072	Oct. 23	1638	450	25	316
File-box	W. H. Tucker	290,498	Dec. 18	1421	393	25	1152
File-box	M. J. Wine	290,615	Dec. 18	1576	433	25	1179
File-box	M. J. Wine	290,616	Dec. 18	1577	433	25	1179
File-case	J. S. Gheen	290,570	Dec. 18	1522	419	25	1170
File-case	A. W. Voltz	289,042	Nov. 27	1572	434	25	805
File-case. Court	A. L. Ringo	274,384	Mar. 20	1464	401	23	1102
File-case. Metallic bill	J. C. Lang, (Reissue)	10,309	Apr. 10	1212	332	23	1441
File-cutting machine	H. F. W. Liebmann	271,483	Jan. 30	2067	595	23	413
File-cutting machine	W. McClellan	276,698	May 1	208	53	23	1660
File for invoices, letters, bonds, &c	E. D. Averell	273,797	Mar. 13	724	196	23	967
File-handle	J. F. French	281,626	July 17	1611	440	24	294
File-handle	G. W. Hill	275,911	Apr. 17	1358	374	23	1474
File-holder	P. M. May	282,742	Aug. 7	327	93	24	557
File-holder	E. T. Pearson	282,360	July 31	2569	704	24	468
File-holder or temporary binder	J. S. Blankman	284,534	Sept. 4	459	130	24	982
File holder. Paper	W. W. Gilman	283,596	Aug. 21	1359	379	24	758
File holder. Paper	W. Hubbard	272,260	Feb. 13	838	234	23	598
File holders. Support for bill	W. H. Tucker	290,497	Dec. 18	1419	392	25	1152
File. Letter	G. V. Nauwerth	271,258	Jan. 30	1765	512	23	359
File. Letter	G. E. Shepard	286,233	Oct. 9	551	151	25	111
File. Letter and invoice	W. A. Cooke, Jr.	282,275	July 31	2453	675	24	448
File. Paper	J. Brady	284,370	Sept. 4	256	71	24	948
File. Paper	C. A. Davis	281,466	July 17	1412	388	24	261
File. Paper	H. J. Hoffman	274,604	Mar. 27	1772	491	23	1162
File. Paper	F. Schmitz and J. Mills	283,667	Aug. 21	1437	402	24	773
File. Paper	J. S. Shannon	274,832	Mar. 27	2032	566	23	1208
Files. Manufacture of	M. A. Howell, Jr.	273,536	Mar. 6	378	101	23	899
Files or other cutting tools. Flask for carbureting	M. A. Howell, Jr.	283,396	Aug. 21	1123	317	24	715
Filing-machine. Rotary	D. H. Stephens	279,108	June 5	625	170	23	2229
Filing the teeth of rotary cutters. Machine for	J. Berry	281,960	July 24	2046	560	24	375
Filling-can	M. H. Garland	284,408	Sept. 4	305	85	24	955
Filter	W. M. Blackmer	281,336	July 17	1246	345	24	233
Filter	W. J. Burgess	285,965	Oct. 2	235	66	25	45
Filter	J. W. Callard	281,177	July 10	1039	288	24	190
Filter	J. A. Crocker	279,226	June 12	762	211	23	2263
Filter	J. S. Detrick	290,000	Dec. 11	783	221	25	1031
Filter	W. H. Harris	290,046	Dec. 11	839	237	25	1041
Filter	E. K. Haynes	276,179	Apr. 24	1683	465	23	1539
Filter	E. K. Haynes	282,313	July 31	2500	687	24	456
Filter	J. Howes	276,820	May 1	368	98, 99	23	1691
Filter	J. Howes	280,828	July 10	610	170	24	114
Filter	J. W. Hyatt	273,539	Mar. 6	383	102	23	899
Filter	J. W. Hyatt	273,540	Mar. 6	386	102	23	900
Filter	J. W. Hyatt	273,541	Mar. 6	387	103	23	900
Filter	J. W. Hyatt	273,542	Mar. 6	388	103	23	900
Filter	J. W. Hyatt	273,543	Mar. 6	391	105	23	901
Filter	S. James	284,428	Sept. 4	329	92	24	959
Filter	J. Miller	271,098	Jan. 23	1572	452	23	318
Filter	A. Roos	278,186	May 22	2045	562	23	1998
Filter and cooler. Combined water	E. C. Hall	276,533	Apr. 24	2132	593	23	1615

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Filter and cooler. Combined water	E. J. Howe	289,263	Nov. 27	1830	505	25	853
Filter and percolator cover	G. F. Burton	284,606	Sept. 11	546	155	24	1003
Filter. Coffee	J. A. Raleigh	288,491	Nov. 13	892	243	25	671
Filter, cooler, and refrigerator. Combined	W. E. Templeton	280,881	July 10	670	189	24	125
Filter. Eccentric-shaped	L. Smith	290,364	Dec. 18	1232	347	25	1120
Filter for the manufacture of sugar, &c	O. Puyrez	286,960	Oct. 16	1486	408	25	282
Filter. Liquid	J. Benson	277,203	May 8	871	231	23	1781
Filter. Oil	R. C. Clark and W. F. Beecher	287,627	Oct. 30	2356	635	25	457
Filter-press	W. G. Strype	274,406	Mar. 20	1492	411	23	1107
Filter-press. High-pressure	J. Johnson	270,807	Jan. 16	1212	350	23	252
Filter. Water	H. Hartmann	283,103	Aug. 14	754	212	24	641
Filter. Water	J. S. Smart	270,255	Jan. 9	508	149	23	109
Filtering agent	J. W. Hyatt	272,442	Feb. 20	1079	304	23	644
Filtering agent	J. W. Hyatt	263,489	Aug. 21	1240	348	24	735
Filtering and refrigerating water. Apparatus for	S. F. Reynolds	277,931	May 22	1731	472	23	1943
Filtering apparatus	R. C. Armstrong	271,396	Jan. 30	1946	563	23	391
Filtering apparatus	N. A. B. Chevallot	289,980	Dec. 11	756	213	25	1027
Filtering apparatus	W. M. Fischer	290,019	Dec. 11	807	227	25	1036
Filtering apparatus for purifying paraffine, &c.	D. T. Gray	281,491	July 17	1444	395	24	266
Filtering bag	H. Muench	272,576	Feb. 20	1256	350	23	674
Filtering compound	C. A. Baker	286,370	Oct. 9	746	200	25	146
Filtering saccharine solutions, &c	P. Casamajor	270,634	Jan. 16	999	288	23	211
Filtering water. Apparatus for	C. Houghton	272,881	Feb. 27	1665	465	23	753
Finger-ring	H. Danziger	289,511	Dec. 4	178	49	25	917
Finger-ring	H. Henrich	274,193	Mar. 20	1215	334	23	1059
Finger-ring	H. Henrich	278,959	June 5	425	116	23	2196
Finger-ring and other jewelry	L. F. Hnlen	289,912	Dec. 11	679	188	25	1012
Finger-ring and tooth-pick. Combined	M. C. Stone	272,985	Feb. 27	1779	498	23	772
Finishing-machine plates. Grinding	H. F. Case	269,915	Jan. 2	108	32	23	23
Fire-alarm	F. A. Copeland	286,393	Oct. 9	774	209	25	151
Fire-alarm	R. S. Finch	285,983	Oct. 2	253	71	25	48
Fire-alarm	A. and A. Iske	287,439	Oct. 30	2099	570	25	408
Fire-alarm	G. W. Nason	278,586	May 29	2566	701	23	2097
Fire-alarm and call-bell system. Electric	C. H. Frank	281,680	July 24	1684	459	24	312
Fire-alarm apparatus. Electric	W. C. Gordon	287,664	Oct. 30	2399	647	25	466
Fire-alarm box. Electric	B. Fresco	277,020	May 8	640	167	23	1741
Fire-alarm-box lock	F. Pearce and J. Jones	280,506	July 3	210	55	24	38
Fire-alarm indicator and recorder	F. H. Field	288,921	Nov. 13	529	147	25	609
Fire-alarm purposes. Indicator for	M. G. Crane	273,033	Feb. 27	1839	514 515	23	783
Fire-alarms. Automatic circuit-closer for electric	J. O. Wells	277,965	May 22	1772	453	23	1949
Fire and burglar alarm	B. J. Antrim	278,386	May 29	2333	638	23	2056
Fire and water proof covering for roofs, walls, &c.	R. J. Pattison	284,055	Aug. 28	1938	.....	24	873
Composition of matter for							
Fire-arm	J. H. Brown	290,740	Dec. 25	1750	483	25	1216
Fire-arm	S. J. Buzzini	284,815	Sept. 11	810	226	24	1048
Fire-arm	C. H. Eutebrook	289,521	Dec. 4	187	52	25	919
Fire-arm	A. Hyde	273,282	Mar. 6	43	13	23	842
Fire-arm	M. V. Kacer and W. J. Kriz	273,268	Mar. 6	53	16	23	844
Fire-arm. Breech-loading	F. Beesley. (Reissue)	10,281	Feb. 6	528	142	23	531
Fire-arm. Breech-loading	R. L. Brewer	279,324	June 12	887	247	23	2283
Fire-arm. Breech-loading	A. T. Brown	282,838	Aug. 7	432	122	24	577
Fire-arm. Breech-loading	J. H. Brown	290,737	Dec. 25	1745	482	25	1216
Fire-arm. Breech-loading	D. S. Cole	289,070	Nov. 27	1606	445	25	811
Fire-arm. Breech-loading	J. Deeley, Jr., and J. S. Edge, Jr.	275,605	Apr. 10	964	262	23	1399
Fire-arm. Breech-loading	F. J. Evans	283,089	Aug. 14	731	205	24	637
Fire-arm. Breech-loading	W. Gardner	285,993	Oct. 2	263	74	25	50
Fire-arm. Breech-loading	W. B. Hall	276,808	May 1	355	95	23	1688
Fire-arm. Breech-loading	I. Q. Holmes	273,684	Mar. 6	573	152	23	932
Fire-arm. Breech-loading	D. Kirkwood	289,273	Nov. 27	1839	508	25	855
Fire-arm. Breech-loading	E. L. Lako	284,213	Sept. 4	73	20, 21	24	917
Fire-arm. Breech-loading	J. H. McLean	290,905	Dec. 25	1948	538	25	1251
Fire-arm. Breech-loading	L. Nagant	286,726	Oct. 16	1193	322	25	232
Fire-arm. Breech-loading	J. Turner	287,740	Oct. 30	2505	675	25	485
Fire-arm. Breech-loading	H. Walker	284,518	Sept. 4	440	125	24	979
Fire-arm. Breech-loading	A. E. Whitmore	282,941	Aug. 7	550	155 156	24	598
Fire-arm. Breech-loading	A. E. Whitmore and J. Tonks	283,429	July 31	2656	728	24	484
Fire-arm lock	H. Goodman	288,939	Nov. 20	1438	396	25	774
Fire-arm lock	E. L. Lake	289,423	Dec. 4	61	17	25	897
Fire-arm lock	J. Randall	289,856	Dec. 11	607	169	25	1000
Fire-arm. Magazine	P. Boch	287,090	Oct. 23	1658	455 456	25	320
Fire-arm. Magazine	A. Burgess	289,972	Dec. 11	744	210 211	25	1024
Fire-arm. Magazine	A. Burgess	290,393	Dec. 18	1270	357	25	1127
Fire-arm. Magazine	A. Burgess	290,394	Dec. 18	1272	357 358	25	1127
Fire-arm. Magazine	A. Burgess	290,529	Dec. 18	1468	406	25	1160
Fire-arm. Magazine	A. Burgess	290,848	Dec. 25	1880	519	25	1239
Fire-arm. Magazine	A. Burgess	290,968	Dec. 25	2042	562	25	1265
Fire-arm. Magazine	W. H. Elliot	274,578	Mar. 27	1738	483	23	1155
Fire-arm. Magazine	W. H. Elliot	278,003	May 22	1821	498	23	1958
Fire-arm. Magazine	W. H. Elliot	278,324	May 29	2350	617	23	2041
Fire-arm. Magazine	W. H. Elliot	285,020	Sept. 18	1069	299	24	1101
Fire-arm. Magazine	J. W. Frazier	290,636	Dec. 18	1603	440 441	25	1183
Fire-arm. Magazine	H. T. Hazard	279,242	June 12	780	215	23	2267
Fire-arm. Magazine	A. S. Jones	270,808	Jan. 16	1214	350	23	253
Fire-arm. Magazine	M. V. Kacer and W. J. Kriz	282,328	July 31	2527	693	24	460
Fire-arm. Magazine	W. Mason	278,987	June 5	453	124 125	23	2200
Fire-arm. Magazine	W. Mason	289,676	Dec. 4	375	107 108	25	953



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Fire-arm. Magazine.....	P. Manser .....	270,599	Jan. 16	955	{ 276 } 277	{ 23 } 24	204
Fire-arm. Magazine.....	P. Manser .....	289,113	Nov. 27	1654	459	25	819
Fire-arm. Magazine.....	E. Whitney .....	273,654	Mar. 6	528	142	23	924
Fire-arm. Revolving.....	J. T. Aldrich .....	283,185	Aug. 14	850	238	24	657
Fire-arm. Revolving.....	F. H. Allen .....	273,335	Mar. 6	122	35	23	855
Fire-arm. Revolving.....	D. D. Smith .....	269,890	Jan. 2	82	24	23	18
Fire-arm safety-hammer ..	A. D. Hart .....	273,070	Feb. 27	1877	527	23	790
Fire-arm safety-lock .....	W. H. Bliss .....	283,854	Aug. 28	1673	472	24	827
Fire-arm safety-lock .....	J. P. Burkhard and F. Novotny ..	288,619	Nov. 20	1046	288	25	705
Fire-arm sight .....	290,739	Dec. 25	1748	483	25	1216	
Fire-arm sight .....	R. Cannon .....	274,269	Mar. 20	1317	363	23	1077
Fire-arm sight .....	J. M. Farrington .....	285,474	Sept. 25	1609	452	24	1202
Fire-arm sight .....	B. H. Williams .....	283,447	Aug. 21	1187	334	24	726
Fire-arm stock .....	G. R. Vickers, Jr. ....	287,741	Oct. 30	2506	675	25	486
Fire-arms. Combined stock and case for ..	J. Jett .....	276,593	May 1	65	18	23	1639
Fire-arms. Extractor for .....	G. H. Fox .....	273,424	May 29	2380	{ 649 } 650	{ 23 } 24	2064
Fire-arms. Fore-end for breech-loading ..	G. H. Fox .....	278,423	May 29	2379	649	23	2064
Fire-arms. Lock for revolving .....	D. B. Wesson .....	285,862	Oct. 2	104	31	25	21
Fire-arms. Magazine for .....	W. Masou .....	285,284	Sept. 18	1377	389	24	1156
Fire-arms. Recoil-cushion for .....	H. G. Piffard .....	281,725	July 24	1751	475	24	323
Fire-arms. Sight for small .....	T. Gilbert .....	289,081	Nov. 27	1618	448	25	814
Fire-arrester and fire-escape. Combined portable ..	S. Richards .....	274,977	Apr. 3	121	34	23	1246
Fire-box lining .....	E. E. Bunker .....	274,169	Mar. 20	1190	328	23	1054
Fire-engine .....	M. D. Halsey .....	285,259	Sept. 18	1351	381	24	1152
Fire-engine .....	R. Morrell .....	285,055	Sept. 18	1111	310	24	1108
Fire-engine boilers and heaters. Vacuum-relief for ..	C. Bresnahan .....	277,862	May 15	1646	449	23	1923
Fire-engine. Steam .....	W. H. Havens .....	274,321	Mar. 20	1382	380	23	1087
Fire-engine water-heater .....	W. V. Elliott .....	279,085	June 5	581	159	23	2223
Fire-engines. Coupling for uniting streams from ..	C. Callahan .....	276,131	Apr. 17	1625	447	23	1521
Fire-engines. Portable horse-power for operating ..	C. T. Unangst .....	287,891	Nov. 6	128	37, 38	25	530
Fire-engines. Water-heater for steam .....	W. V. Elliott .....	270,647	Jan. 16	1019	293	23	215
Fire-escape .....	A. L. Aldrich .....	278,651	May 29	2654	726	23	2112
Fire-escape .....	W. I. Allinder .....	290,197	Dec. 18	1019	287	25	1083
Fire-escape .....	S. J. Anderson .....	279,628	June 19	1266	351	23	2353
Fire-escape .....	R. E. Andrew .....	285,542	Sept. 25	1689	476	24	1218
Fire-escape .....	W. O. Avery .....	284,994	Sept. 18	1032	289	24	1095
Fire-escape .....	C. E. Baker .....	278,847	June 5	239	69	23	2164
Fire-escape .....	H. L. Barnard .....	278,763	June 5	106	30	23	2142
Fire-escape .....	W. H. Barnes .....	288,155	Nov. 6	444	125	25	585
Fire-escape .....	F. E. Bauer .....	284,360	Sept. 4	246	68	24	946
Fire-escape .....	L. Baumeister .....	274,080	Mar. 13	1069	295	23	1025
Fire-escape .....	A. A. Beckett .....	290,311	Dec. 18	1168	327	25	1108
Fire-escape .....	C. Bemis .....	286,523	Oct. 9	927	250	25	179
Fire-escape .....	C. F. Bierbach .....	278,310	May 29	2231	612	23	2038
Fire-escape .....	C. F. Bierbach .....	287,410	Oct. 30	2065	561	25	400
Fire-escape .....	S. H. Bills .....	278,858	June 5	254	73, 74	23	2166
Fire-escape .....	S. H. Bingaman .....	281,235	July 17	1121	309	24	211
Fire-escape .....	G. M. Bird .....	290,313	Dec. 18	1170	327	25	1109
Fire-escape .....	A. Bixby .....	290,961	Dec. 25	2023	558	25	1263
Fire-escape .....	D. F. Black .....	275,121	Apr. 3	318	89	23	1280
Fire-escape .....	G. Borst and F. Will .....	289,061	Nov. 27	1595	442	25	809
Fire-escape .....	O. R. Bowie .....	281,661	July 24	1661	453	24	308
Fire-escape .....	J. S. Bowman .....	278,768	June 5	113	32	23	2143
Fire-escape .....	M. N. Brainard .....	278,865	June 5	264	76	23	2168
Fire-escape .....	H. E. Braunfeld .....	273,807	Mar. 13	734	199	23	968
Fire-escape .....	H. E. Braunfeld .....	283,961	Aug. 28	1805	511	24	852
Fire-escape .....	O. N. Brooks .....	285,564	Sept. 25	1711	483	24	1222
Fire-escape .....	A. T. Brown .....	272,642	Feb. 20	1338	375	23	689
Fire-escape .....	E. H. Brown .....	284,808	Sept. 11	802	224	24	1046
Fire-escape .....	I. Buckman .....	287,228	Oct. 23	1838	502	25	352
Fire-escape .....	A. C. Burghardt .....	284,186	Sept. 4	29	7	24	909
Fire-escape .....	J. H. Burks .....	288,304	Nov. 13	637	174	25	627
Fire-escape .....	W. S. Cassidy .....	287,233	Oct. 23	1844	504	25	353
Fire-escape .....	R. M. Chase .....	277,992	May 22	1807	493	23	1956
Fire-escape .....	W. Chase .....	278,655	May 29	2659	727	23	2113
Fire-escape .....	R. Christie .....	285,230	Sept. 18	1317	371	24	1144
Fire-escape .....	H. B. Church .....	283,968	Aug. 28	1813	513	24	853
Fire-escape .....	T. T. Church .....	289,220	Nov. 27	1783	494	25	843
Fire-escape .....	G. A. Clapp .....	283,755	Aug. 28	1562	440	24	808
Fire-escape .....	W. F. Clerk .....	276,669	May 1	161	41	23	1653
Fire-escape .....	G. H. Clowes and E. L. Frisbie, Jr. ..	271,422	Jan. 30	1977	571	23	397
Fire-escape .....	G. H. Clowes and E. L. Frisbie, Jr. ..	283,969	Aug. 28	1813	513	24	854
Fire-escape .....	D. R. Clymer .....	290,630	Dec. 18	1596	438	25	1181
Fire-escape .....	M. Collins .....	283,763	Aug. 7	287	80	24	549
Fire-escape .....	C. Connolly .....	288,411	Nov. 13	792	215	25	653
Fire-escape .....	M. J. and O. L. Cook and F. E. Smith ..	287,365	Oct. 23	2004	546	25	382
Fire-escape .....	W. A. Cornyn .....	277,995	May 22	1811	494	23	1957
Fire-escape .....	E. A. Costigan .....	284,281	Sept. 4	153	42	24	930
Fire-escape .....	H. H. Craigie .....	271,802	Feb. 6	260	73	23	486
Fire-escape .....	J. Crawford .....	274,278	Mar. 20	1328	{ 366 } 367	{ 23 } 24	1079
Fire-escape .....	C. E. Creecy and A. B. Burns .....	279,347	June 12	921	257	23	2289
Fire-escape .....	C. E. Creecy and A. B. Burns .....	279,348	June 12	922	257	23	2289
Fire-escape .....	D. Crowley .....	276,363	Apr. 24	1920	532	23	1579
Fire-escape .....	W. F. Cullen .....	279,638	June 19	1279	355	23	2356
Fire-escape .....	J. M. Cunningham .....	290,177	Dec. 11	986	278	25	1069
Fire-escape .....	H. D. Cutler .....	283,762	Aug. 21	1481	417	24	782
Fire-escape .....	J. E. Davis .....	271,429	Jan. 30	1988	574	23	399
Fire-escape .....	J. M. Davis .....	287,910	Nov. 6	150	44	25	534
Fire-escape .....	R. J. Dearborn .....	271,809	Feb. 6	271	75	23	488
Fire-escape .....	W. H. H. Doane .....	285,471	Sept. 25	1607	451	24	1202

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Fire-escape	J. H. Downing	290,007	Dec. 11	793	223	25	1033
Fire-escape	W. W. Drake	275,608	Apr. 10	969	263	23	1400
Fire-escape	A. M. Dye	284,542	Sept. 4	464	132	24	983
Fire-escape	H. D. Eastman	275,895	Apr. 17	1341	369	23	1472
Fire-escape	D. P. Edgar	287,257	Oct. 23	1872	512	25	358
Fire-escape	J. A. Edmonds	272,129	Feb. 13	683	186	23	570
Fire-escape	A. C. Ellithorpe	277,891	May 22	1687	460	23	1936
Fire-escape	E. C. Eyl	285,740	Sept. 25	1939	549	24	1262
Fire-escape	H. Fairbanks	277,415	May 8	1112	298	23	1823
Fire-escape	J. R. Fell	285,603	Sept. 25	1766	500	24	1232
Fire-escape	J. H. Ford	285,250	Sept. 18	1340	377	24	1140
Fire-escape	P. T. Forsyth	285,606	Sept. 25	1768	501	24	1233
Fire-escape	T. H. Foster	285,806	Oct. 2	29	10	25	7
Fire-escape	J. H. Frazee and G. M. Culver	285,744	Sept. 25	1946	550	24	1263
Fire-escape	D. Friedheim	275,816	Apr. 17	1246	343	23	1454
Fire-escape	D. Galivan and J. C. Manning	285,808	Oct. 2	31	11	25	8
Fire-escape	D. L. Garver	289,080	Nov. 27	1618	448	25	813
Fire-escape	C. J. Geiger and W. T. Moore	290,567	Dec. 18	1520	418	25	1169
Fire-escape	E. Gerot	281,488	July 17	1440	394	24	265
Fire-escape	H. E. Gebble	284,627	Sept. 11	571	161	24	1007
Fire-escape	J. Godfrey	273,722	Mar. 13	614	165	23	947
Fire-escape	J. Gowdye	280,306	June 26	2078	585	23	2503
Fire-escape	H. Greene	279,744	June 19	1399	391	23	2376
Fire-escape	J. Griesenauer	289,908	Dec. 11	673	187	25	1011
Fire-escape	W. W. Griffin	275,197	Apr. 3	405	{ 111 112 }	23	1296
Fire-escape	C. C. Griswold	279,150	June 12	687	188	23	2251
Fire-escape	J. Harper	280,741	July 3	489	138	24	87
Fire-escape	J. Hart	283,391	Aug. 21	1116	316	24	714
Fire-escape	A. J. Heavner	287,540	Oct. 30	2223	{ 603 604 }	25	433
Fire-escape	G. Heidel	276,815	May 1	364	96	23	1690
Fire-escape	A. C. Hitchcock	276,969	May 1	568	148	23	1723
Fire-escape	H. Hitchcock	282,892	Aug. 7	499	140	24	588
Fire-escape	G. Hofmann, Jr., and A. D. Hoffman	276,585	May 1	55	16	23	1637
Fire-escape	W. A. Holbrook	289,101	Nov. 27	1642	455	25	817
Fire-escape	E. J. Howe	275,658	Apr. 10	1037	280	23	1411
Fire-escape	R. Howland	272,259	Feb. 13	837	233	23	598
Fire-escape	G. H. Hume	279,762	June 19	1418	396	23	2380
Fire-escape	R. S. Isard	291,014	Dec. 25	2102	579	25	1275
Fire-escape	W. S. Isley	284,740	Sept. 11	718	201	24	1032
Fire-escape	C. Ives	282,764	Oct. 30	2542	684	25	492
Fire-escape	A. Johnson	287,940	Nov. 6	191	56	25	540
Fire-escape	A. J. Johnson	286,306	Oct. 9	667	178	25	131
Fire-escape	C. Johnson	284,431	Sept. 4	332	92	24	950
Fire-escape	W. F. Jolley	274,338	Mar. 20	1412	387	23	1092
Fire-escape	D. A. Keech	284,434	Sept. 4	335	93	24	960
Fire-escape	T. K. Keith and R. Carleton	288,447	Nov. 13	833	226	25	660
Fire-escape	E. W. Kelley	270,902	Jan. 23	1331	384	23	279
Fire-escape	G. Kelly	276,973	May 1	573	150	23	1724
Fire-escape	J. Kennedy	288,448	Nov. 13	834	226	25	660
Fire-escape	J. B. Kennedy	275,772	Apr. 10	1182	{ 324 325 }	23	1436
Fire-escape	M. P. Key	270,955	Jan. 23	1402	404	23	220
Fire-escape	H. B. Kimball and C. S. Barrett	283,617	Aug. 21	1380	386	24	762
Fire-escape	W. A. King	285,756	Sept. 25	1959	554	24	1265
Fire-escape	H. A. Lee	283,620	Aug. 21	1382	386	24	763
Fire-escape	O. G. Lee	282,996	Aug. 14	624	176	24	617
Fire-escape	J. Letzkus	279,774	June 19	1431	401	23	2352
Fire-escape	M. K. Lewis and E. Sanders	290,076	Dec. 11	873	248	25	1047
Fire-escape	G. W. Lindsey and H. W. Raleigh	276,610	May 1	82	22	23	1642
Fire-escape	H. H. Little	278,249	May 22	2125	{ 585 586 }	23	2011
Fire-escape	H. W. Littlefield	288,078	Nov. 6	357	99	25	568
Fire-escape	J. Lockwood and J. Kivett	285,282	Sept. 18	1375	388	24	1156
Fire-escape	G. W. Looney, Sr.	280,937	July 10	748	208	24	137
Fire-escape	C. J. Lung	287,142	Oct. 23	1724	472	25	333
Fire-escape	D. Luscher	276,057	Apr. 17	1529	420	23	1504
Fire-escape	W. C. Lutz	290,080	Dec. 11	879	249	25	1049
Fire-escape	S. MacCarty	284,451	Sept. 4	353	98	24	964
Fire-escape	T. Macdonough	286,456	Oct. 9	846	229	25	165
Fire-escape	C. Maliphant	284,871	Sept. 11	873	245	24	1059
Fire-escape	B. C. Margileth	289,236	Nov. 27	1860	517	25	858
Fire-escape	C. F. Marskey	278,807	June 5	174	51	23	2152
Fire-escape	W. L. McCandless	290,254	Dec. 18	1088	304	25	1095
Fire-escape	W. McCaughey	270,451	Jan. 9	757	222	23	157
Fire-escape	J. H. McElroy	271,498	Jan. 30	2084	599	23	416
Fire-escape	F. Melchior	278,034	May 22	1858	507	23	1965
Fire-escape	J. Metzger	289,119	Nov. 27	1663	461	25	821
Fire-escape	C. Meyer	279,175	June 12	711	194	23	2254
Fire-escape	S. T. Mickey	277,049	May 8	676	{ 176 177 }	23	1748
Fire-escape	G. M. Miller and F. Riemer	290,908	Dec. 25	1953	539	25	1252
Fire-escape	J. A. Miller	287,560	Oct. 30	2249	610	25	438
Fire-escape	C. W. Mills	282,351	July 31	2558	701	24	466
Fire-escape	J. Moffet	285,296	Sept. 18	1390	393	24	1159
Fire-escape	M. E. Moore	280,653	July 3	377	105	24	66
Fire-escape	J. B. Morris	289,924	Dec. 11	690	193	25	1014
Fire-escape	C. Murdock	282,212	July 31	2381	655	24	435
Fire-escape	W. L. Murphy	285,832	Oct. 2	61	19	25	13
Fire-escape	W. Nack	281,549	July 17	1508	415	24	277
Fire-escape	F. Newhouse and H. Moores	277,600	May 15	1341	361	23	1867
Fire-escape	W. Newland	280,070	June 26	1801	506	23	2452
Fire-escape	W. Oldroyd	278,171	May 22	2027	557	23	1994



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Fire-escape.....	M. M. Ormsby.....	283,650	Aug. 21	1416	397	24	769
Fire-escape.....	A. Palmer.....	280,231	June 26	1984	{ 557 558	23	2486
Fire-escape.....	A. Palmer.....	290,917	Dec. 25	1962	542	25	1253
Fire-escape.....	J. Pappa.....	275,514	Apr. 10	850	230	23	1379
Fire-escape.....	S. W. Parker and H. Blackman	289,701	Dec. 4	423	118	25	959
Fire-escape.....	J. S. Parmenter.....	285,301	Sept. 18	1397	395	24	1160
Fire-escape.....	W. C. Parsels.....	287,856	Nov. 6	78	23	25	521
Fire-escape.....	P. P. Pealer.....	289,304	Nov. 27	1880	{ 523 524	25	863
Fire-escape.....	A. L. Pitney.....	277,340	May 8	1030	{ 276 277	23	1810
Fire-escape.....	N. J. Powell.....	287,467	Oct. 30	2133	579	25	414
Fire-escape.....	N. J. Powell.....	291,001	Dec. 25	2085	575	25	1272
Fire-escape.....	R. L. Pruyn.....	274,657	Mar. 27	1830	508	23	1173
Fire-escape.....	H. Redden.....	281,557	July 17	1518	417	24	279
Fire-escape.....	W. Rees.....	276,468	Apr. 24	2053	570	23	1602
Fire-escape.....	J. Reese.....	278,820	June 5	192	56	23	2155
Fire-escape.....	J. Reidy.....	288,117	Nov. 6	404	114	25	578
Fire-escape.....	H. Rensch.....	281,136	July 10	982	275	24	180
Fire-escape.....	T. W. Ricker.....	279,186	June 12	723	{ 197 198	23	2257
Fire-escape.....	J. Ripczynski and C. Tisch, Jr.	280,957	July 10	768	213	24	141
Fire-escape.....	P. P. Ripley.....	279,814	June 19	1476	414	23	2390
Fire-escape.....	E. T. Rowe.....	283,666	Aug. 21	1435	402	24	773
Fire-escape.....	A. N. Sande.....	286,850	Oct. 16	1348	369	25	259
Fire-escape.....	C. J. Savitz.....	288,122	Nov. 6	409	116	25	579
Fire-escape.....	L. Sawtell.....	287,058	Oct. 23	1619	446	25	313
Fire-escape.....	J. Schmittknecht.....	289,568	Dec. 4	248	70	25	931
Fire-escape.....	M. Scholl.....	284,763	Sept. 11	748	207	24	1037
Fire-escape.....	H. J. H. Schnett.....	275,083	Apr. 3	269	74	23	1272
Fire-escape.....	J. D. Seagrave and E. R. Fuller	286,644	Oct. 16	1085	293	25	213
Fire-escape.....	H. Small.....	287,880	Nov. 6	112	33	25	527
Fire-escape.....	J. B. Smith.....	288,131	Nov. 6	419	118	25	581
Fire-escape.....	P. Smith.....	283,158	Aug. 14	815	227	24	651
Fire-escape.....	T. B. Smith.....	289,318	Nov. 27	1895	527	25	866
Fire-escape.....	E. Solomons.....	281,154	July 10	1002	281	24	184
Fire-escape.....	C. F. Spencer.....	272,389	Feb. 13	1006	282	23	626
Fire-escape.....	C. F. Spencer.....	283,159	Aug. 14	816	228	24	651
Fire-escape.....	A. W. Sperry.....	276,090	Apr. 17	1570	432	23	1511
Fire-escape.....	J. Stever.....	270,995	Jan. 23	1450	413	23	298
Fire-escape.....	J. Stever.....	283,163	Aug. 14	820	{ 229 230	24	652
Fire-escape.....	J. Stofflet.....	285,319	Sept. 18	1416	400	24	1163
Fire-escape.....	I. L. Stover.....	283,038	Aug. 14	674	189	24	627
Fire-escape.....	L. Straehl.....	289,163	Nov. 27	1712	477	25	830
Fire-escape.....	W. H. Stuckey.....	277,376	May 8	1068	287	23	1816
Fire-escape.....	A. P. Sturtevant.....	276,730	May 1	262	67	23	1669
Fire-escape.....	N. B. Terry.....	274,410	Mar. 20	1496	412	23	1107
Fire-escape.....	G. H. Thomas.....	284,088	Aug. 28	1981	552	24	881
Fire-escape.....	J. H. Thompson.....	282,413	July 31	2630	722	24	480
Fire-escape.....	C. W. Tillett.....	289,730	Dec. 4	452	126	25	965
Fire-escape.....	A. Todd and L. H. McKee	277,433	May 8	1136	306	23	1827
Fire-escape.....	W. Torst.....	283,439	Aug. 21	1177	331	24	724
Fire-escape.....	H. R. Tracy.....	272,103	Feb. 13	652	177	23	564
Fire-escape.....	A. S. Trafton.....	277,175	May 8	842	222	23	1776
Fire-escape.....	C. H. Tweed.....	284,688	Sept. 11	651	183	24	1020
Fire-escape.....	W. Ulrich.....	275,962	Apr. 17	1413	390	23	1485
Fire-escape.....	F. Vaughan.....	279,053	June 5	542	149	23	2215
Fire-escape.....	A. Vogt.....	277,386	May 8	1080	290	23	1818
Fire-escape.....	H. B. Walbridge.....	276,736	May 1	270	68	23	1670
Fire-escape.....	A. Walker.....	284,517	Sept. 4	439	124	24	979
Fire-escape.....	M. S. Washburn.....	280,538	July 3	243	65	24	44
Fire-escape.....	J. D. Weed.....	277,389	May 8	1082	291	23	1819
Fire-escape.....	D. Welsh.....	278,301	May 22	2210	606	23	2026
Fire-escape.....	W. H. Welsh.....	287,598	Oct. 30	2317	626	25	450
Fire-escape.....	W. Wightman.....	288,902	Nov. 20	1393	384	25	766
Fire-escape.....	J. S. M. Wilcox.....	280,050	Nov. 27	1582	437	25	807
Fire-escape.....	E. Wilson.....	279,900	June 19	1583	444	23	2409
Fire-escape.....	S. D. Woodbury.....	282,478	July 31	2717	748	24	494
Fire-escape.....	F. R. Woodward.....	287,491	Oct. 30	2168	588	25	421
Fire-escape.....	F. R. Woodward.....	287,492	Oct. 30	2169	588	25	421
Fire-escape.....	C. A. Youngman.....	288,149	Nov. 6	438	123	25	584
Fire-escape.....	A. R. Yount.....	285,197	Sept. 18	1279	360	24	1138
Fire-escape.....	J. Zerr.....	286,519	Oct. 9	923	249	25	178
Fire-escape. Bed-bottom.....	L. Bloeden.....	284,802	Sept. 11	795	222	24	1045
Fire-escape cable.....	A. O. Morford.....	280,065	June 26	1795	504	23	2451
Fire-escape friction-clamp.....	J. T. Jones.....	284,305	Sept. 4	184	52	24	935
Fire-escape. Inclined-plane.....	E. H. Bailey.....	288,394	Nov. 13	771	{ 208 209	25	649
Fire-escape ladder.....	F. H. Anthony.....	288,756	Nov. 20	1224	334	25	735
Fire-escape ladder.....	W. C. Bush.....	275,135	Apr. 3	337	93	23	1284
Fire-escape ladder.....	E. A. Converse.....	271,796	Feb. 6	254	71	23	485
Fire-escape ladder.....	W. T. Covert.....	281,342	July 17	1254	349	24	234
Fire-escape ladder.....	A. C. Ferris.....	277,124	May 8	774	203	23	1764
Fire-escape ladder.....	L. Hamlin.....	275,905	Apr. 17	1351	372	23	1473
Fire-escape ladder.....	J. S. Harrison.....	282,079	July 31	2197	603	24	406
Fire-escape ladder.....	J. H. Heath.....	280,373	July 3	41	11	24	9
Fire-escape ladder.....	F. E. Josel.....	285,273	Sept. 18	1365	385	24	1154
Fire-escape ladder.....	C. T. Merritt.....	283,008	Aug. 14	637	180	24	620
Fire-escape ladder.....	A. Peteler.....	283,654	Aug. 21	1419	{ 397 398	24	770
Fire-escape ladder.....	S. J. Phreauer.....	273,386	Mar. 6	195	52	23	867
Fire-escape ladder.....	J. Riley.....	276,715	May 1	239	60	23	1665

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. to	Vol.	Page.
Fire-escape ladder	S. D. Shattuck	285,690	Sept. 25	1862	531	24	1250
Fire-escape ladder	G. A. Swartz	283,530	Aug. 21	1279	358	24	743
Fire-escape ladder	R. M. Wilson	289,876	Dec. 11	631	176	25	1003
Fire-escape ladder	T. Wyatt and J. F. Holmes	280,433	July 3	120	32	24	23
Fire-escape ladder. Flexible	W. C. Bush	277,222	May 8	888	236	23	1784
Fire-escape ladder. Flexible	D. A. Peters	282,362	July 31	2571	705	24	468
Fire-escape tower	S. J. Pardessus	277,156	May 8	813	215	23	1772
Fire-escape with an alarm attachment	J. H. Smiley	280,527	July 3	231	61	24	41
Fire-escapes. Fire-proof box for	B. C. Margileth	280,287	Nov. 27	1861	517	25	859
Fire-extinguisher	J. W. Bishop	283,196	Aug. 14	864	242	24	661
Fire-extinguisher	A. M. Burritt	270,011	Jan. 2	220	63	23	45
Fire-extinguisher	C. W. Caryl	278,879	June 5	280	81	23	2171
Fire-extinguisher	A. F. Spawm	280,410	July 3	87	23	24	18
Fire-extinguisher	P. C. E. Tabouët	286,502	Oct. 9	900	243	25	173
Fire-extinguisher	G. W. Taylor and A. R. Cox	275,731	Apr. 10	1122	307	23	1426
Fire-extinguisher	G. F. Wagner	279,054	June 5	544	149 150	23	2216
Fire-extinguisher	C. C. Walworth	281,169	July 10	1020	285	24	187
Fire-extinguisher alarm apparatus	A. M. Burritt	270,010	Jan. 2	218	63	23	45
Fire-extinguisher and alarm	C. E. Buell	275,752	Apr. 10	1154	317	23	1431
Fire-extinguisher and fire-alarm system. Electric	C. E. Buell	280,906	July 10	699	197	24	130
Fire-extinguisher apparatus	W. K. Platt	270,332	Jan. 9	601	177	23	127
Fire-extinguisher. Automatic	J. W. Birkett	280,009	June 26	1725	483	23	2440
Fire-extinguisher. Automatic	J. W. Bishop	276,343	Apr. 24	1900	527	23	1575
Fire-extinguisher. Automatic	C. E. Brennan	270,731	Jan. 16	1124	322	23	235
Fire-extinguisher. Automatic	J. R. Brown	278,215	May 22	2086	574	23	2004
Fire-extinguisher. Automatic	J. R. Brown	278,216	May 22	2087	574	23	2005
Fire-extinguisher. Automatic	J. R. Brown	278,217	May 22	2088	575	23	2005
Fire-extinguisher. Automatic	J. R. Brown	278,218	May 22	2088	575	23	2005
Fire-extinguisher. Automatic	J. R. Brown	278,219	May 22	2090	575	23	2005
Fire-extinguisher. Automatic	C. E. Buell	278,654	May 23	2658	727	23	2112
Fire-extinguisher. Automatic	C. E. Delmage	281,181	July 10	1042	289	24	191
Fire-extinguisher. Automatic	R. W. and F. Grinnell	277,481	May 15	1198	322	23	1845
Fire-extinguisher. Automatic	A. S. Harris	269,930	Jan. 2	126	38	23	26
Fire-extinguisher. Automatic	J. Hill	283,242	Aug. 14	921	256 257	24	671
Fire-extinguisher. Automatic	C. L. Horack	270,801	Jan. 16	1204	318	23	251
Fire-extinguisher. Automatic	C. L. Horack	270,952	Jan. 23	1394	402	23	289
Fire-extinguisher. Automatic	C. L. Horack	272,693	Feb. 20	1397	392	23	699
Fire-extinguisher. Automatic	C. L. Horack	288,059	Nov. 6	336	94	25	564
Fire-extinguisher. Automatic	G. W. Horton	280,376	July 3	44	12	24	10
Fire-extinguisher. Automatic	V. Vankeerberghen	272,803	Feb. 20	1536	432	23	725
Fire-extinguisher. Automatic	C. C. Walworth	271,669	Feb. 6	100	27	23	457
Fire-extinguisher. Automatic	C. C. Walworth and O. B. Hall	287,071	Oct. 23	1636	500	25	316
Fire-extinguisher. Automatic car-stove	J. F. Gyles	277,127	May 8	780	205	23	1765
Fire-extinguisher. Automatic car-stove	J. F. Gyles	278,236	May 22	2111	582	23	2009
Fire-extinguisher. Pneumatic	W. Sellers	269,965	Jan. 2	170	49	23	35
Fire-extinguishers. Hand-grenade for	J. J. Harden	282,981	Aug. 14	594	168	24	613
Fire-extinguishing and alarm system. Automatic	C. E. Buell	271,783	Feb. 6	239	67, 68	23	482
Fire-extinguishing apparatus	D. Beck	278,307	May 29	2228	611	23	2037
Fire-extinguishing apparatus	H. Molendo	285,146	Sept. 18	1224	344	24	1127
Fire-extinguishing apparatus and escape	P. H. Spelman	289,869	Dec. 11	621	173	25	1002
Fire-extinguishing compound	G. J. Crickelair	278,315	May 29	2236	611	23	2038
Fire-extinguishing system	C. E. Buell	285,459	Sept. 25	1592	447	24	1199
Fire-indicator. Thermostatic	R. N. Dyer	287,757	Oct. 30	2525	681	25	489
Fire-kindler	W. J. Babb	277,190	May 8	857	223	23	1779
Fire-kindler	W. J. Babb. (Reissue)	10,352	July 10	1100	221	24	201
Fire-kindler	N. C. Butler	285,009	Sept. 18	1053	295	24	1099
Fire-kindler	R. A. Eddy	282,868	Aug. 7	473	133	24	584
Fire-kindler	E. H. Foss	274,184	Mar. 20	1206	332	23	1057
Fire-kindler	J. H. French	270,298	Jan. 9	558	164	23	119
Fire-kindler	G. Geschwendtner	282,883	Aug. 7	488	137	24	586
Fire-kindler	A. Küchenmeister, A. Gröschel, and A. Rachenbichler	288,067	Nov. 6	344	96	25	566
Fire-kindler	A. C. Miller	271,648	Feb. 6	76	21	23	454
Fire-kindler	A. E. Osborn	290,997	Dec. 25	2081	573	25	1272
Fire-kindler	L. Piepgrass	284,057	Aug. 28	1939	542	24	873
Fire-kindler	L. D. C. Wood and T. B. Dorrell	286,103	Oct. 2	399	109	25	73
Fire-kindler attachment for stoves and grates	C. F. Allis	287,402	Oct. 30	2058	559	25	399
Fire-kindlers. Apparatus for making	D. A. Boery and N. B. Sprague	284,597	Sept. 11	536	152	24	1001
Fire-kindling composition	W. M. Koon	278,436	May 29	2297	611	23	2067
Fire-kindling substances. Press for molding	T. S. Rayner	281,923	July 24	2000	548	24	367
Fire-lighter. Automatic	J. M. Russell	284,677	Sept. 11	637	180	24	1018
Fire-mask	C. McIntosh	276,699	May 1	209	54	23	1660
Fire-place	D. S. Loc	282,740	Aug. 7	325	93	24	557
Fire-place	G. L. Morrison	275,933	Apr. 17	1381	380	23	1479
Fire-place	H. Rembert	279,433	June 12	1036	287	23	2307
Fire-place	M. Y. Thompson	274,846	Mar. 27	2045	570	23	1210
Fire-place and chimney	W. C. Hamner	278,791	June 5	157	46	23	2149
Fire-place and cooking-stove. Combined	J. Overton	286,058	Oct. 2	342	95	25	63
Fire-place lining	J. Adair	272,013	Feb. 13	535	145	23	545
Fire-proof cloth	H. W. Johns	290,238	Dec. 18	1072	300	25	1092
Fire-proof composition	C. C. Gilman. (Reissue)	10,419	Dec. 11	1008	225	25	1073
Fire-proof composition	C. C. Gilman. (Reissue)	10,420	Dec. 11	1008	225	25	1073
Fire-proof compound	K. A. Hohenstein	289,262	Nov. 27	1829	27	25	853
Fire-proof compound and sheet	N. C. Fowler	288,935	Nov. 20	1433	27	25	774
Fire-proof garment	J. E. Smith	279,669	June 19	1317	366	23	2362
Fire-proof lining for boxes, safes, doors, shutters, vaults, &c.	L. H. Miller	283,133	Aug. 14	784	24	646	
Fire-proof material	J. S. Beer	290,837	Dec. 25	1866	515	25	1237
Fire-proof material for filling safes, doors, &c.	G. Kelly	283,789	Aug. 28	1604	24	815	
Fire-proof partition-block	M. Lapersonnerie	287,552	Oct. 30	2242	608	25	436
Fire-proof structure	W. Corliss	280,294	June 26	2060	579 580	23	9299



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Fire-proof structure.....	S. Liddle.....	273,556	Mar. 6	406	109	23	903
Fireproofing and furring device.....	G. B. Phelps.....	279,011	June 5	484	132	23	2206
Fireproofing composition.....	J. H. Nolan.....	289,022	Nov. 27	1545	.....	25	800
Fire-shield.....	S. Richards.....	274,976	Apr. 3	119	33, 34	23	1246
Fire, water, and acids. Composition of matter for resisting.....	B. Rhodes.....	272,046	May 22	1870	.....	23	1967
Fires. Extinguishing.....	C. L. Garfield.....	283,996	Aug. 28	1849	521	24	859
Fires in buildings. Method of and appliance for controlling and preventing.....	W. H. Maxwell and J. M. Stearns, Jr.....	226,621	Oct. 16	1062	286	25	209
Fires in oil-tanks. Apparatus for extinguishing.....	G. and F. H. Dunham.....	290,010	Dec. 11	796	224	25	1034
Fires on vessels. Apparatus for extinguishing.....	A. F. Spawn.....	285,520	Sept. 25	1662	467	24	1212
Fire-works. Daylight.....	J. Hirayama.....	262,891	Aug. 7	498	140	24	588
Fish-egg-hatching trough.....	L. Stone.....	277,805	May 15	1578	431	23	1911
Fish for market. Preparing salt.....	O. Andrews.....	275,973	Apr. 17	1427	394	23	1488
Fish-hook.....	A. L. Dawson.....	289,508	Dec. 4	172	48	25	916
Fish-hook holder. Self-adjusting fish-shaped.....	C. Hymers.....	273,996	Mar. 13	963	265	23	1007
Fish-meal. Manufacturing.....	F. B. Nichols and C. Thomson.....	276,868	May 1	432	.....	23	1702
Fish-net sinker.....	D. Erickson.....	256,188	Oct. 9	502	138	25	103
Fish. Preserving.....	R. S. Jennings.....	273,094	Feb. 27	1918	.....	23	797
Fish-trap.....	C. Fisher.....	279,556	June 19	1188	320	23	2339
Fish-trap.....	J. M. Frazer.....	270,411	Jan. 9	705	209	23	147
Fish-trap hook.....	W. N. Greer.....	280,610	July 3	327	91	24	58
Fish-trap hook.....	M. R. Skinner.....	286,494	Oct. 9	888	240	25	172
Fish-trap or spring-hook.....	R. A. Wentworth.....	283,444	Aug. 21	1182	332	24	725
Fishway.....	C. W. Trammer.....	286,869	Oct. 16	1370	375	25	263
Fishing apparatus.....	L. Kessler.....	281,083	July 10	915	256	24	169
Fishing-float.....	R. W. E. Aldrich.....	270,358	Jan. 9	632	186	23	133
Fishing-float and manufacturing the same.....	V. Vidal, Jr.....	290,154	Dec. 11	963	272	25	1065
Fishing-lines. Rotary leader-link for.....	C. L. Bollermann.....	289,612	Dec. 4	300	84	25	940
Fishing-reel.....	J. M. Bryan.....	278,867	June 5	266	77	23	2168
Fishing-reel.....	T. H. Chubb.....	282,270	July 31	2449	674	24	447
Fishing-reel.....	J. Dreiser.....	283,084	Aug. 14	726	203	24	636
Fishing-reel.....	H. C. A. Kasschan.....	285,630	Sept. 25	1797	512	24	1238
Fishing-reel.....	A. Lang.....	283,496	Aug. 21	1248	350	24	737
Fishing-reel.....	F. Malleson.....	284,217	Sept. 4	79	22	24	918
Fishing-reel.....	G. H. Palmer.....	281,918	July 24	1994	546	24	366
Fishing-reel.....	E. C. Vom Hofe.....	271,166	Jan. 23	1653	475	23	332
Fishing-rod.....	W. Mitchell.....	270,460	Jan. 9	770	225	23	159
Fishing-rod tip.....	T. H. Chubb.....	277,230	May 8	898	239	23	1766
Fishing-rods. Device for attaching reels to.....	W. B. Doubleday.....	285,346	Sept. 18	1449	408	24	1168
Fishing-rods. Tension-equalizer for.....	R. Smith.....	279,988	June 26	1696	476	23	2434
Fishing-stake.....	D. B. Tiffany.....	279,508	June 12	1125	311	23	2321
Fishing-tackle.....	C. J. B. Gaume.....	272,232	Feb. 13	803	224	23	591
Fishing-tackle.....	H. Van Altena.....	279,206	June 12	742	203	23	2260
Fishing-tackle case.....	H. F. Price.....	275,703	Apr. 10	1087	297	23	1420
Fishing-tackle sinker.....	H. Rix.....	285,075	Sept. 18	1131	316	24	1112
Flange-union.....	T. Corris.....	280,353	July 3	19	5	24	5
Flanged clamp.....	E. S. Leaycraft.....	279,576	June 19	1209	334	23	2343
Flanging circular plates. Machine for.....	J. T. Duff.....	274,115	Mar. 20	1124	310	23	1041
Flanging-machine.....	A. Wilbur.....	274,872	Mar. 27	2086	579	23	1216
Flanging-machine.....	A. Wilbur.....	276,111	Apr. 17	1598	441	23	1516
Flask: See Dental flask. Molding-flask. Dentist's flask. Powder-flask. Drinking-flask.							
Flask or bottle.....	J. Gruenebaum.....	284,127	Aug. 28	2035	565	24	890
Flat-iron. Electric.....	R. N. Dyer and H. W. Seely.....	287,758	Oct. 30	2529	681 } 682 }	25	490
Flavoring-extract for sirup and sugar.....	J. Daily. (Reissue).....	10,285	Feb. 13	1019	.....	23	628
Flax-puller.....	A. C. Lamar.....	287,445	Oct. 30	2105	572 } 573 }	25	409
Flax, &c. Machinery for breaking and scutching.....	J. Shinn and A. F. Fuller.....	277,517	May 15	1237	333	23	1851
Fleeced fabrics. Producing.....	W. H. Crapon.....	279,932	June 26	1615	454	23	2421
Flier for roving-machines.....	E. W. Kelley.....	282,329	July 31	2529	693	24	461
Flood.....	E. D. Shepardson.....	274,333	Mar. 27	2033	566	23	1208
Flood-valve or ball-cock.....	J. E. Boyle.....	290,204	Dec. 18	1029	290	25	1085
Flocked fabric or imitation textile fabric.....	C. A. Evans.....	275,176	Apr. 3	380	.....	23	1292
Flood-gate.....	G. W. Francis.....	272,872	Feb. 27	1646	461	23	751
Flood-gate.....	E. P. Poindexter.....	290,265	Dec. 18	1109	311	25	1093
Flood-gate.....	A. L. Stout.....	281,941	July 24	2021	553	24	371
Floor. Basement or cellar.....	O. A. Smith.....	274,985	Apr. 3	130	36	23	1248
Floor-clamp.....	F. E. Allen.....	280,113	June 26	1849	521	23	2462
Floor-clamp.....	H. F. and A. W. Case.....	275,017	Apr. 3	174	47	23	1255
Floor-clamp.....	E. Caywood.....	281,968	July 24	2056	563	24	377
Floor-clamp.....	H. D. Margot.....	284,747	Sept. 11	726	203	24	1034
Floor-clamp.....	S. Raymond.....	279,808	June 19	1469	412	23	2389
Floor-covering.....	T. J. Mayall.....	286,043	Oct. 2	324	90	25	60
Floor. Fire-proof.....	A. J. Campbell.....	289,218	Nov. 27	1731	493	25	843
Floor-jack.....	J. H. Williams.....	286,981	Oct. 16	1516	416	25	287
Floor-mat.....	S. Toffler.....	276,983	May 1	584	153	23	1726
Floor-plank clamp.....	G. H. Duvall.....	280,152	June 26	1890	532	23	2460
Floor, roof, &c. Concrete.....	T. Hyatt.....	290,886	Dec. 25	1927	532	25	1248
Floors and arches. Device for constructing brick.....	A. Mattice.....	271,346	Jan. 30	1879	544	23	378
Floors and for other purposes. Cover for.....	J. D. Cheever.....	285,343	Sept. 18	1446	.....	24	1168
Floors, partitions, &c. Application of wire-gauze in the construction of.....	J. McCarroll.....	275,240	Apr. 3	458	127	23	1304
Flooring.....	A. J. B. A. Chatain.....	283,375	Aug. 21	1101	310	24	711
Flooring-jack.....	J. Himelberger.....	285,894	Oct. 2	148	42	25	29
Florist's form.....	C. A. Knehn.....	274,006	Mar. 13	978	268	23	1009
Florist's frame and stand.....	A. Le Mout.....	284,745	Sept. 11	725	202	24	1033
Flour and meal bolt.....	W. Mosher.....	285,761	Sept. 25	1963	556	24	1266
Flour bin and sifter.....	A. R. Manley.....	283,909	Aug. 28	1738	491	24	838
Flour-bolt.....	H. A. Graeter.....	273,836	Mar. 13	772	269	23	974
Flour-bolt.....	J. Nicht.....	288,845	Nov. 20	1326	364	25	753

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Flour-bolt.....	C. A. Smith.....	289,935	Dec. 11	699	196	25	1016
Flour-bolt. Centrifugal.....	A. P. Holcomb and A. Heine.....	271,846	Feb. 6	315	87	23	496
Flour-bolt. Centrifugal.....	A. P. Holcomb and A. Heine.....	280,622	July 3	342	95	24	61
Flour-bolt. Centrifugal.....	A. P. Holcomb and A. Heine.....	285,620	Sept. 25	1784	507	24	1236
Flour-bolts, &c. Conveyer for.....	G. E. Mount and E. Bassett.....	288,588	Nov. 13	1006	277	25	692
Flour-bolts, &c. Conveyer for.....	C. B. Slater.....	277,622	May 15	1370	369	23	1873
Flour-bolting and middlings-cleaning machine.....	B. T. Trimmer.....	287,890	Nov. 6	125	37	25	529
Flour-chest and cupboard. Combined.....	T. J. Corr.....	285,577	Sept. 25	1728	488	24	1225
Flour-dresser.....	L. W. Pruss.....	271,360	Jan. 30	1904	551	23	383
Flour-dressing machine.....	M. Crawford.....	287,250	Oct. 23	1864	510	25	356
Flour-dressing machine.....	W. D. Gray.....	278,702	June 5	32	9, 10	23	2130
Flour-dressing machine.....	A. Hunter and E. Kuehne.....	278,143	May 22	1991	547	23	1998
Flour-dressing machine.....	L. W. Pruss.....	271,361	Jan. 30	1908	551 552	23	384
Flour from grain. Manufacture of.....	L. Gathmann.....	278,531	May 29	2510		23	2088
Flour. Machine for mixing and aerating.....	J. D. Bangert.....	274,697	Mar. 27	1878	523 524	23	1181
Flour-mill dust-collector.....	F. Prinz.....	272,473	Feb. 20	1115	315	23	650
Flour-mill dust-collector.....	F. Prinz.....	272,474	Feb. 20	1116	315	23	650
Flour-mill feeder.....	P. Harnist.....	290,421	Dec. 18	1323	367	25	1135
Flour-mills. Roller reduction-machine for.....	H. M. Rounds.....	271,742	Feb. 6	187	52	23	473
Flour-packer.....	H. A. Barnard.....	271,878	Mar. 27	2095	582	23	1217
Flour-packer.....	J. Handy and D. H. Lord.....	277,895	May 22	1691	461	23	1936
Flour-packer.....	J. B. Martin.....	277,845	May 15	1625	443	23	1919
Flour-packer.....	C. F. Walters.....	279,678	June 19	1330	370	23	2364
Flower-pot.....	M. Holden.....	289,102	Nov. 27	1644	455	25	817
Flower-pot for artificial flowers.....	B. Löwy.....	284,706	July 24	1721	468	24	318
Flower-pot holder.....	P. Goeden.....	277,125	May 8	777	204	23	1765
Flower-pot holder and shield.....	W. A. Birch.....	286,993	Oct. 23	1535	423	25	294
Flower-stand.....	E. J. Bonett, T. Gilfillan, and A. W. Flanders.....	276,663	May 1	153	39	23	1652
Flower-stand.....	W. H. Tingle.....	284,090	Aug. 28	1983	552	24	881
Flower-stand. Revolving.....	H. Westphal.....	283,840	Aug. 28	1659	468	24	824
Flower-stand. Window.....	R. Körner.....	285,140	Sept. 18	1215	342	24	1126
Flowers. Gage for forming foundations for artificial.....	J. Lambert.....	276,430	Apr. 24	2004	555	23	1593
Flowers. Machine for making the bodies of artificial.....	L. Lafon.....	290,436	Dec. 18	1340	371	25	1138
Flue-cleaner.....	W. J. Bradshaw.....	272,640	Feb. 20	1336	375	23	689
Flue-cleaner. Boiler.....	R. P. Gerlach.....	278,699	June 5	30	8	23	2130
Flue-cleaning machine.....	H. Otto.....	290,998	Dec. 25	2082	573 574	25	1272
Flue-expander.....	J. Faessler.....	270,770	Jan. 16	1170	335	23	243
Flue for heating-stoves and furnaces. Hot-air.....	J. A. Watrous.....	288,142	Nov. 6	430	121	25	583
Flue-plugging device.....	F. Sharp.....	278,612	May 29	2600	709	23	2103
Flue scraper. Boiler.....	W. A. Gay.....	274,756	Mar. 27	1944	541	23	1193
Flue-stop.....	J. F. Lockwood.....	279,874	June 19	1554	434	23	2403
Flue-stop.....	J. W. Webster.....	274,682	Mar. 27	1859	518	23	1178
Flue-stopper.....	C. H. Williams and F. Saker.....	280,700	July 3	436	124	24	78
Flue stopper. Chimney.....	J. R. Higgins.....	282,726	Aug. 7	312	88	24	554
Flues. Making radiating.....	F. B. Nichols and C. Thomson.....	286,219	Oct. 9	536	147	25	109
Flues. Tool for expanding and beading.....	T. Crosier.....	281,346	July 17	1259	350	24	235
Fluid-can.....	W. H. and W. J. Clark.....	272,647	Feb. 20	1344	377	23	690
Fluid-meter.....	F. G. Hesse.....	282,985	Aug. 14	599	169	24	614
Fluid-meter.....	L. H. Nash.....	280,322	June 26	2099	589	23	2506
Fluid-meter.....	A. Schmid.....	288,869	Nov. 20	1353	371 372	25	758
Fluid-meter. Piston.....	C. C. Barton and J. A. Milliken.....	274,879	Mar. 27	2097	582 583	23	1218
Fluid-meter. Piston.....	C. C. Barton and J. Thomson.....	285,209	Sept. 18	1292	363 364	24	1140
Fluid-motor.....	W. J. Morton.....	271,257	Jan. 30	1763	511	23	358
Fluids, air, and water. Apparatus for utilizing the force of.....	E. E. H. Rousseau.....	276,079	Apr. 17	1553	429	23	1509
Flush-valve. Automatic.....	H. C. Lowrie.....	271,644	Feb. 6	72	20	23	453
Flushing apparatus for tanks.....	H. C. Weeden.....	274,156	Mar. 20	1171	323	23	1050
Flushing-tank. Automatic.....	M. Sexton.....	287,179	Oct. 23	1773	486	25	341
Flushing-valve.....	J. McGinley.....	290,256	Dec. 18	1091	304	25	1095
Fluting and ironing machine.....	J. V. Smith.....	277,520	May 15	1242	334	23	1852
Fluting and molding machine. Spiral.....	W. J. Tait.....	284,512	Sept. 4	432	123	24	977
Fluting-iron.....	R. Young.....	278,650	May 29	2653	726	23	2112
Flux and preparing and using the same. Welding.....	J. J. Lafitte.....	286,311	Oct. 9	671		25	132
Flux for welding metal.....	W. Mutter.....	282,464	July 31	2701		24	491
Flux. Welding.....	E. A. Whitcomb.....	277,393	May 8	1087		23	1830
Fluxing and protecting molten metals. Composition to be used in.....	F. J. Clamer and J. G. Hendrickson.....	280,349	July 3	13		24	4
Fly-paper.....	O. Thum.....	278,294	May 22	2191	603	23	2022
Fly-screen.....	C. W. Ellis.....	270,037	Jan. 2	249	72	23	51
Fly-wheel.....	H. Blank.....	284,369	Sept. 4	255	70	24	947
Fly-wheels of engines, &c. Device for turning.....	P. P. Kilcullen.....	279,652	June 19	1296	360	23	2358
Fodder-cutter.....	L. M. Batty.....	272,403	Feb. 20	1032	289	23	636
Fodder-cutter.....	J. J. Johnston.....	273,237	Feb. 27	2093	587	23	827
Fodder-frame.....	J. Lynes.....	270,233	Jan. 9	484	143	23	105
Fog-horns, &c. Apparatus for blowing.....	E. E. Swett.....	280,686	July 3	417	118	24	74
Fog-signal.....	F. Brown.....	284,807	Sept. 11	800	223 224	24	1045
Foil and paper fabric. Combined.....	H. S. and L. Crooke.....	289,505	Dec. 4	168	46	25	916
Folding, bath, and invalid chair.....	F. A. Ufer.....	286,871	Oct. 16	1371	376	25	263
Folding boat.....	C. M. Douglas.....	285,981	Oct. 2	251	71	25	48
Folding box.....	J. P. Buckingham.....	284,179	Sept. 4	28	7	24	909
Folding box.....	P. Canessa.....	280,013	June 26	1729	485	23	2440
Folding box.....	S. J. Everett.....	276,676	May 1	182	47	23	1655
Folding chair.....	J. J. Bowker.....	271,778	Feb. 6	233	65	23	481
Folding chair.....	A. Collignon.....	282,273	July 31	2452	675	24	448
Folding chair.....	W. J. Decker.....	274,730	Mar. 27	1909	533	23	1187
Folding chair.....	H. J. Harwood.....	275,206	Apr. 3	420	115	23	1292



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. et	Vol.	Page.
Folding chair .....	G. A. Leavitt, Jr. ....	272,273	Feb. 13	856	239	23	601
Folding chair .....	G. A. Stiles .....	284,921	Sept. 11	931	262	24	1070
Folding chair, camp-stool, and settee .....	C. W. Champlin and J. Bland .....	273,954	Mar. 13	917	252	23	998
Folding-machine .....	L. C. Crowell .....	277,549	May 15	1283	345	23	1858
Folding-machine .....	L. C. Crowell .....	281,619	July 17	1601	{ 438 439 }	24	292
Folding school seat and desk .....	P. L. Shepler .....	272,165	Feb. 13	720	198	23	576
Folding seat .....	E. G. Durant and E. Shupe .....	278,691	June 5	20	6	23	2128
Folding seat .....	P. L. Shepler .....	272,166	Feb. 13	721	198	23	577
Folding table .....	C. E. Abbot .....	286,891	Oct. 16	1398	384	25	267
Folding table .....	H. Benedict .....	285,101	Sept. 18	1165	336	24	1117
Folding table .....	N. Clark .....	270,388	Jan. 9	678	201	23	142
Folding table .....	M. Cook .....	283,211	Aug. 14	882	246	24	664
Folding table .....	F. Gesking .....	285,995	Oct. 2	267	75	25	50
Folding table .....	G. S. Knapp .....	283,119	Aug. 14	771	217	24	644
Folding table .....	M. Maples .....	287,306	Oct. 23	1935	528	25	370
Folding table .....	V. A. Menuez .....	281,281	July 17	1174	324	24	221
Folding table .....	V. A. Menuez .....	281,282	July 17	1175	325	24	221
Folding table .....	B. H. and B. P. Richardson .....	290,932	Dec. 25	1988	548	25	1257
Folding table .....	C. L. Shattuck .....	272,909	Feb. 27	1694	474	23	758
Folding table .....	H. A. Tobey .....	285,526	Sept. 25	1670	470	24	1214
Folding table .....	J. Tull .....	287,739	Oct. 30	2504	675	25	485
Folding table .....	C. G. Udell .....	290,500	Dec. 18	1423	394	25	1153
Folding table or flower-pot stand .....	B. Stetson .....	289,464	Dec. 4	107	31	25	906
Font made from glass, porcelain, &c. Holy-water .....	F. Malloy .....	288,085	Nov. 6	366	101	25	570
Food for infants and process of preparing the same. Granulated .....	W. Horlick .....	278,967	June 5	432	.....	23	2197
Food. Manufacture of medicated .....	C. I. Flasschoen .....	287,429	Oct. 30	2086	.....	25	405
Food. Process of and apparatus for curing articles of .....	A. J. Chase .....	275,145	Apr. 3	347	95	23	1286
Food. Producing farinaceous .....	J. Schweitzer .....	277,792	May 15	1563	426	23	1908
Foot and leg protector .....	W. Beattie .....	283,193	Aug. 14	861	241	24	660
Foot-board. Spring .....	E. N. Moore and T. N. Anderson .....	271,256	Jan. 30	1762	511	23	358
Foot-power .....	G. Davis .....	288,778	Nov. 20	1945	342	25	739
Foot-power .....	H. W. Posz .....	287,716	Oct. 30	2472	666	25	480
Foot-power machine .....	J. F. Fuller and C. H. Knowlton .....	274,185	Mar. 20	1206	332	23	1057
Foot-power machine .....	A. B. Kittson .....	285,820	Oct. 2	45	15	25	10
Foot-power mechanism .....	A. B. Kittson .....	285,819	Oct. 2	44	14, 15	25	10
Foot-rest .....	M. E. Burris and C. E. Staniels .....	277,880	May 22	1674	457	23	1933
Foot-rest .....	E. W. Dolph .....	271,434	Jan. 30	1999	577	23	401
Foot-warmer .....	J. Robinson .....	271,364	Jan. 30	1914	553	23	385
Foot-warmer .....	D. Shirley .....	287,061	Oct. 23	1622	447	25	313
Foot-warmer .....	J. T. Smith .....	284,914	Sept. 11	926	261	24	1069
Forge .....	G. Campbell .....	285,224	Sept. 18	1309	368	24	1143
Forge. Blacksmith's .....	W. Shaw .....	287,180	Oct. 23	1774	487	25	342
Forge-blast apparatus .....	B. T. Babbitt .....	273,433	Mar. 6	250	68	23	876
Forge. Portable .....	J. P. Holt .....	280,824	July 10	605	169	24	113
Forging anchors. Machine for .....	J. Nock .....	273,135	Feb. 27	1966	{ 552 553 }	23	806
Forging cutting-pliers. Method of and die for .....	J. C. Balzer .....	283,458	Aug. 21	1199	337	24	728
Fork .....	J. S. and A. Ray .....	273,154	Feb. 27	1988	559	23	810
Fork-guard .....	T. F. Curley .....	275,155	Apr. 3	359	98	23	1288
Fork-guard .....	G. H. Warren .....	286,658	Oct. 16	1104	297	25	216
Fork-guard .....	G. T. Wiswell .....	286,668	Oct. 16	1119	301	25	219
Form. Adjustable dress .....	J. Hall .....	269,851	Jan. 2	40	13	23	10
Form. Adjustable dress .....	S. M. Moschowitz .....	274,958	Apr. 3	99	27, 28	23	1242
Form. Dress .....	J. D. Richardson and F. L. Manchester .....	277,344	May 8	1034	277	23	1811
Form or stand. Dress .....	G. M. Rockwell .....	272,479	Feb. 20	1129	317	23	652
Form or stand. Dress .....	G. M. Rockwell. (Reissue) .....	10,334	May 29	2683	735	23	2117
Form. Self-fitting clothing .....	J. B. Payne .....	282,665	Aug. 7	227	66	24	539
Former .....	L. S. Billings .....	275,349	Apr. 10	633	169	23	1343
Fountain: .....							
See Ink-fountain. Printing-press ink-fountain. .....							
Fountain .....	G. A. Bush .....	286,261	Oct. 9	590	162	25	118
Fountain .....	M. M. Murray .....	277,598	May 15	1339	360	23	1867
Fountain .....	A. D. Puffer .....	278,269	May 22	2157	{ 592 593 }	23	2016
Fracture apparatus .....	P. E. Crist .....	278,101	May 22	1934	531	23	1979
Frame: .....							
See Awning-frame. Plow-frame. .....							
Blacking-frame. Printing-frame. .....							
Caster-frame. Pump-frame. .....							
Clothes-drier frame. Purse-frame. .....							
Florist's frame. Quilting-frame. .....							
Fodder-frame. Saw-frame. .....							
Glass-cutting frame. Screen-frame. .....							
Grinding-wheel frame. Sewing-machine quilting-frame. .....							
Hand-bag frame. Skylight-frame. .....							
Looking-glass frame. Slate-frame. .....							
Mattress-frame. Spinning-frame. .....							
Mosquito-bar frame. Stretcher-frame. .....							
Net-frame. Tent-frame. .....							
Numeral-frame. Window-frame. .....							
Photograph-frame. Window-screen frame. .....							
Picture-frame. .....							
Frame. Braced .....	F. H. Beattie .....	272,627	Feb. 20	1318	{ 367 368 369 370 }	23	686
Frame-corner fastening .....	J. E. Stuart .....	277,076	May 8	718	186	23	1754

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. G.	Vol.	Page.
Frame corner-plate	H. M. Jones	287,441	Oct. 30	2101	571	25	408
Frame, pedestal, vase, &c. Decorated	R. Marsh	285,423	Sept. 25	1554	437	24	1192
Frames. Back for picture and other	L. A. Deuther	270,563	Jan. 9	905	261	23	186
Frames. Back for picture and other	L. A. Deuther	274,737	Mar. 27	1917	534	23	1188
Freight. Handling	F. H. Weeks	274,235	Mar. 20	1275	352	23	1069
Friction-brake for pulleys, &c	J. C. and C. H. Tise	273,914	Mar. 13	868	236	23	991
Friction-movement	J. A. Horton	277,282	May 8	957	257	23	1797
Friction roller and box	R. Seldon	277,070	May 8	710	184	23	1753
Friezing-machine	F. C. Miller	276,855	May 1	411	110	23	1698
Frog	W. J. Morden	285,647	Sept. 25	1814	517	24	1241
Fruit and vegetable cutter	J. T. Walker	273,901	Feb. 27	2043	575	23	820
Fruit, &c. Apparatus for bleaching	J. R. Hillman	275,044	Apr. 3	213	58	23	1262
Fruit. Apparatus for drying and conserving	D. Burr	288,973	Nov. 27	1455	411	25	790
Fruit-basket	R. E. Morey	277,148	May 8	809	213	23	1771
Fruit-basket and cover. Combined	J. W. Rockefeller and P. T. B. Nevius	284,064	Aug. 28	1950	544	24	875
Fruit-bleacher	A. Brockway	287,224	Oct. 23	1833	501	25	351
Fruit-bleacher	R. E. Stone	281,940	July 24	2020	553	24	371
Fruit-can	C. F. Barter	289,374	Dec. 4	5	2	25	888
Fruit-cleaner	J. F. Hudson	281,512	July 17	1468	403	24	271
Fruit-crate	M. H. Disbrow	289,754	Dec. 4	479	135	25	970
Fruit-drier	F. S. and J. B. Belcher	285,957	Oct. 2	228	64	25	43
Fruit-drier	T. J. Brown and G. McGowan	270,278	Jan. 9	532	156	23	114
Fruit-drier	J. M. Campbell	283,202	Aug. 14	874	244	24	662
Fruit-drier	A. Crawford	279,719	June 19	1372	383	23	2372
Fruit-drier	W. C. Crozier	277,685	May 15	1440	388 } 389 }	23	1885
Fruit-drier	C. Cullen	285,018	Sept. 18	1067	298	24	1101
Fruit-drier	C. A. Curran	278,890	June 5	293	84. 85	23	2173
Fruit-drier	J. R. Dew	284,726	Sept. 11	702	196	24	1029
Fruit-drier	W. C. Doherty	277,013	May 8	626	164	23	1730
Fruit-drier	L. Granger and E. F. Sibley	278,701	June 5	31	9	23	2130
Fruit-drier	G. S. Grier	284,838	Sept. 11	836	234	24	1052
Fruit-drier	W. F. Hale	281,057	July 10	884	246	24	164
Fruit-drier	W. Z. Hampton	271,065	Jan. 23	1531	442	23	312
Fruit-drier	J. H. Hunter	287,542	Oct. 30	2227	605	25	434
Fruit-drier	W. H. Longhead and J. B. Fleming	286,936	Oct. 16	1454	399	25	276
Fruit-drier	W. R. Phillips	270,695	Jan. 16	1081	310	23	226
Fruit-drier	H. N. Reid	280,242	June 26	1999	562	23	2459
Fruit-drier	W. Schmolz	288,124	Nov. 6	412	116	25	580
Fruit-drier	E. Sheets	288,503	Nov. 13	906	247	25	673
Fruit-drier	D. Stutzman	284,922	Sept. 11	933	262	24	1070
Fruit-drier	J. M. Teasdale	279,844	June 19	1517	424	23	2397
Fruit-drier	J. J. Towle	284,579	Sept. 4	514	143	24	990
Fruit-drier	E. M. Turner	276,202	Apr. 24	1713	474	23	1544
Fruit-drier	C. W. Vetter	286,509	Oct. 9	908	245	25	175
Fruit-drier	A. W. Walker	281,167	July 10	1019	285	24	187
Fruit-drier. Solar	W. P. Kirkland	281,084	July 10	916	256	24	169
Fruit-evaporator	W. H. Albach	283,552	Aug. 21	1304	365	24	748
Fruit-evaporator	C. B. Irish	273,091	Feb. 27	1913	536	23	796
Fruit-evaporator	S. W. Lowell	284,450	Sept. 4	352	90	24	963
Fruit-evaporator	J. and J. S. Williams	272,927	Feb. 27	1714	479	23	761
Fruit-gatherer	S. S. Hickok	272,690	Feb. 20	1394	391	23	699
Fruit-gatherer	W. C. Howells	278,017	May 22	1840	501	23	1961
Fruit-gatherer	J. L. Talbott and C. J. Hiter	287,977	Nov. 6	236	67	25	549
Fruit-gathering vessel	A. Johnston	280,185	June 26	1921	540	23	2475
Fruit-jar	H. Cain	279,535	June 19	1163	322	23	2235
Fruit-jar	J. H. Cowl	282,849	Aug. 7	449	127	24	579
Fruit-jar	J. L. De Steiger	278,893	June 5	296	86	23	2174
Fruit-jar	J. L. De Steiger	288,983	Nov. 27	1497	414	25	792
Fruit-jar	L. Gallaher	278,530	May 29	2509	685	23	2087
Fruit-jar	J. Gilberds	271,328	Jan. 30	1858	539	23	375
Fruit-jar	J. Gilberds	282,188	July 31	2354	649	24	430
Fruit-jar	G. F. Hoeffler	282,193	July 31	2361	650	24	431
Fruit-jar	A. S. Lambert	289,276	Nov. 27	1843	508	25	855
Fruit-jar	G. F. Littlejohn	285,280	Sept. 18	1373	387	24	1156
Fruit-jar	P. Lyon and J. H. Bossard	274,620	Mar. 27	1787	497	23	1164
Fruit-jar	R. Malcom	288,084	Nov. 6	365	101	25	570
Fruit-jar	J. Murphinn	282,916	Aug. 7	522	146	24	593
Fruit-jar	W. A. Williamson	280,701	July 3	437	124 } 125 }	24	78
Fruit-jar cover	H. A. Hoppe	275,047	Apr. 3	216	58	23	1263
Fruit-jar cover	W. R. Van Vliet	275,793	Apr. 10	1206	330	23	1440
Fruit-jar-cover fastener	W. Cochrane	276,670	May 1	162	41	23	1653
Fruit-jar-heating case	A. Robinson	277,944	May 22	1743	475	23	1945
Fruit-jar opener	G. A. M. Liljencrantz	285,048	Sept. 18	1102	307	24	1107
Fruit-jar opener	G. A. M. Liljencrantz	286,836	Oct. 16	1331	363	25	256
Fruit-picker	W. S. Casior	282,051	July 31	2161	593	24	400
Fruit-picker	R. J. Morgan	288,096	Nov. 6	382	108	25	574
Fruit-picker	J. Sealamer	287,780	Oct. 30	2561	689	25	496
Fruit-picker	W. F. Wimpee	288,685	Nov. 20	1132	311	25	719
Fruit-pitter	C. A. Curran	276,365	Apr. 24	1923	533	23	1580
Fruit-pitter	N. B. Hicks	281,507	July 17	1459	400	24	270
Fruit-pitter	H. H. Brown	281,830	July 24	1887	515	24	348
Fruit-receptacle	J. Owen	282,215	July 31	2383	656	24	436
Fruit shipping and truck basket	F. P. Haines	288,429	Nov. 13	813	290	25	657
Fruit-squeezer	T. C. Newman	283,014	Aug. 14	643	182	24	621
Fruit-squeezer	P. H. Stein and J. Tams	280,257	June 26	2016	566	23	2491
Fruit-stoner	I. F. Betts	281,234	July 17	1119	308 } 309 }	24	211
Fruit-stoner	J. M. Harlow	269,852	Jan. 2	41	13	23	10
Fruit-stoner	L. C. Hill	272,549	Feb. 20	1210	339	23	667
Fruits and flowers. Cutter and holder for	P. McDonald	289,116	Nov. 27	1658	460	25	820
Frying-pan	O. E. Worden	283,314	Aug. 14	1008	282	24	688
Fuel. Artificial	J. B. Hyde	274,779	Mar. 27	1974		23	1198



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Fuel composition .....	J. C. Cooper .....	279,479	June 12	1089	.....	23	2315
Fuel-feeding device .....	G. Sinclair .....	288,505	Nov. 13	908	248	25	673
Fuel. Feeding pulverized .....	J. B. Hyde .....	274,778	Mar. 27	1972	549	23	1198
Fuel. Machine for twisting grass for .....	G. A. Parker .....	272,757	Feb. 20	1477	415	23	714
Fulling-mill .....	R. Eickemeyer .....	289,901	Dec. 11	663	185	25	1009
Fulling-mill .....	R. H. H. Hunt .....	280,929	July 10	735	205	24	135
Fume-arrester for chimney-flues .....	M. Freudenberg .....	276,386	Apr. 24	1953	540	23	1584
Funnel .....	H. E. Gifford .....	279,739	June 19	1395	359	23	2376
Funnel .....	A. B. Pratt .....	281,727	July 24	1752	475	24	323
Funnel and strainer .....	E. Steinhorst .....	279,989	June 26	1698	476	23	2435
Fur cape and waist .....	D. Prince .....	286,959	Oct. 16	1485	408	25	252
Fur-clipping and unhairing machine .....	T. Rasmus .....	275,077	Apr. 3	258	72	23	1270
Fur-cutting guide .....	A. Lissner .....	269,867	Jan. 2	54	17	23	13
Fur-cutting machine .....	E. H. Godshalk .....	275,640	Apr. 10	1017	274	23	1408
Fur-cutting machine .....	L. F. Zieger .....	289,504	Dec. 4	280	78	25	936
Fur garment .....	W. Keller .....	281,886	July 24	1956	534	24	360
Fur-plucking machine .....	I. Dresdner .....	269,838	Jan. 2	23	7	23	7
Fur robes. Machine for cleaning .....	F. Hesch .....	286,928	Oct. 16	1444	397	25	275
Furs. Guide for cutting .....	A. Lissner .....	284,866	Sept. 11	868	243	24	1058
Furnace:							
See Amalgamating-furnace.	Metal-melting furnace.						
Annealing-furnace.	Metallurgical furnace.						
Antimony-furnace.	Ore-furnace.						
Assay-furnace.	Ore-desulphurizing furnace.						
Bagasse-furnace.	Ore-reducing furnace.						
Blast-furnace.	Ore-roasting furnace.						
Boiler-furnace.	Oxidizing-furnace.						
Boiler or other furnace.	Plumber's charcoal-furnace.						
Charcoal-furnace.	Plumber's portable furnace.						
Coal-burning furnace.	Puddling-furnace.						
Coke-furnace.	Recuperator-furnace.						
Crucible furnace.	Regenerating-furnace.						
Cupel-furnace.	Regenerative furnace.						
Cupelling-furnace.	Regenerator-furnace.						
Cupola-furnace.	Reverberatory furnace.						
Engine-furnace.	Reverberatory smelting-furnace.						
Gas-furnace.	Roasting and reducing furnace.						
Gas-consuming furnace.	Roasting and smelting furnace.						
Gas-generating furnace.	Rotating furnace.						
Gas-retort furnace.	Saw-heating furnace.						
Glass-furnace.	Smelting-furnace.						
Glass-annealing furnace.	Smoke and gas consuming furnace.						
Glass-melting furnace.	Smoke-burning furnace.						
Hay and straw furnace.	Smoke-consuming furnace.						
Heating-furnace.	Smoke-consuming and water-heating furnace.						
Heating, tempering, and annealing furnace.	Soldering-furnace.						
Hot-air furnace.	Steel-melting furnace.						
Hydrocarbon-furnace.	Tire-heating furnace.						
Tub-heating furnace.							
Furnace .....	J. Altmeyer .....	271,393	Jan. 30	1942	562	23	391
Furnace .....	V. W. Blanchard .....	289,963	Dec. 11	732	207	25	1022
Furnace .....	G. F. Burkhardt .....	284,181	Sept. 4	31	8	24	910
Furnace .....	G. E. Buschick .....	277,407	May 8	1101	296	23	1822
Furnace .....	J. Carson .....	271,418	Jan. 30	1973	570	23	396
Furnace .....	U. Cummings .....	289,990	Dec. 11	772	217	25	1029
Furnace .....	W. Ernst .....	289,634	Dec. 4	322	90	25	944
Furnace .....	T. M. Fell .....	288,416	Nov. 13	797	216	25	655
Furnace .....	J. Flannery .....	270,773	Jan. 16	1173	336	23	244
Furnace .....	L. P. French .....	287,656	Oct. 30	2390	645	25	464
Furnace .....	G. R. Scates .....	270,989	Jan. 23	1442	416	23	297
Furnace .....	J. S. Williams .....	286,887	Oct. 16	1392	382	25	266
Furnace .....	C. H. Wilson .....	289,591	Dec. 4	275	77	25	936
Furnace air-heater .....	V. W. Blanchard .....	290,172	Dec. 11	981	277	25	1068
Furnace and hollow grate-bar .....	O. B. Morse .....	284,652	Sept. 11	602	170	24	1012
Furnace and the art of working the same .....	J. Henderson .....	281,063	July 10	889	247	24	165
Furnace and working the same .....	J. Henderson. (Reissue) .....	10,399	Oct. 30	2576	692	25	499
Furnace bridge-walls, &c. Gas combining and heating block for .....	R. R. Zell .....	273,661	Mar. 6	536	144	23	926
Furnace-chimney .....	D. M. Graham .....	290,573	Dec. 18	1526	420	25	1170
Furnace-door .....	T. R. Butman .....	273,813	Mar. 13	746	203	23	970
Furnace-door .....	E. Fox .....	286,692	Oct. 16	1153	311	25	224
Furnace fire-bar .....	J. G. Galley .....	270,582	Jan. 16	929	269	23	199
Furnace for burning culm and other fine fuel .....	F. E. Fahrig .....	289,400	Dec. 4	34	10	25	893
Furnace for burning pyrites .....	F. Mason .....	274,453	Mar. 20	1564	428	23	1119
Furnace for effecting the protection of iron and steel surfaces.	F. S. Barff, G. and A. S. Bower .....	273,799	Mar. 13	725	197	23	967
Furnace for effecting the protection of iron and steel surfaces.	G. and A. S. Bower .....	270,005	Jan. 2	212	61, 62	23	44
Furnace for glass-factories, &c. ....	J. D. Putnam .....	287,470	Oct. 30	2135	580	25	415
Furnace for ingots. Soaking .....	T. Critchlow .....	278,512	May 29	2487	679	23	2083
Furnace for manufacturing iron and steel .....	J. Henderson .....	281,764	July 24	1801	491	24	332
Furnace for steam-boilers, &c. ....	W. C. Ford .....	288,418	Nov. 13	799	217	25	655

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Furnace for the manufacture of carbon	H. Frasch	281,046	July 10	872	242	24	161
Furnace for the manufacture of iron and steel and for other purposes.	J. Henderson	282,315	July 31	2503	688	24	457
Furnace-fronts. Device for cooling.	W. S. McKenna	281,098	July 10	930	260	24	171
Furnace-grate.	C. H. Bansh	277,538	May 15	1268	340	23	1856
Furnace-grate.	W. Kearney	285,040	Sept. 18	1094	305	24	1106
Furnace-grate.	T. Kirkwood	277,491	May 15	1214	325	23	1847
Furnace-grate.	B. S. Niebell	270,100	Jan. 2	313	93	23	64
Furnace-grate.	J. A. Price	276,876	May 1	439	117	23	1704
Furnace-grate.	J. A. Price	282,565	Aug. 7	111	33	24	519
Furnace-grate.	H. Rogers	283,419	Aug. 21	1148	{ 324 325 }	24	720
Furnace grate-bar	P. W. Lamb	274,949	Apr. 3	85	23	23	1940
Furnace lining. Iron and steel	E. L. Ford	279,089	June 5	586	.....	23	2223
Furnace-linings and fire-brick. Compound for	J. Henderson	279,157	June 12	695	.....	23	2252
Furnace-linings and fire-brick. Compound for	J. Henderson	279,158	June 12	695	.....	23	2252
Furnace-linings and fire-brick. Compound for	J. Henderson	279,159	June 12	696	.....	23	2252
Furnace-linings and fire-brick. Compound for	J. Henderson	279,160	June 12	697	.....	23	2252
Furnace-linings. Manufacture of	H. Ulsmann	273,917	Mar. 13	873	.....	23	991
Furnace or stove door latch	E. J. Shields	273,172	Feb. 27	2009	565	23	813
Furnace-protector	D. R. Fraser	284,830	Sept. 11	825	230	24	1050
Furnace water-jacket	J. H. Canavan	277,989	May 22	1805	{ 492 493 }	23	1955
Furnaces. Air-injector for	J. W. Bonta	287,754	Oct. 30	2523	680	25	488
Furnaces. Air-supplying device for steam-boiler.	J. Howden	288,437	Nov. 13	821	223	25	659
Furnaces and device for operating the same. Reversing-valve for	H. Swindell	277,079	May 8	721	{ 187 188 }	23	1755
Furnaces. Apparatus for feeding fuel to	J. McMillan and W. A. Robertson	289,354	Nov. 27	1942	{ 539 540 }	25	874
Furnaces. Apparatus for feeding shavings to	J. Switter	286,344	Oct. 9	718	192	25	140
Furnaces. Burning peat, &c., in steam and hot-air.	W. E. Wright	278,209	May 22	2076	572	23	2003
Furnaces. Combustion device for steam-boiler.	W. Harman	287,670	Oct. 30	2408	649	25	468
Furnaces. Cutter for revolving pndding.	S. T. Wellman	285,861	Oct. 2	103	30, 31	25	20
Furnaces. Device for feeding air to	W. J. Bradshaw and W. W. Cowley	275,574	Apr. 10	924	250	23	1392
Furnaces. Device for promoting combustion in	J. E. Baker	282,035	July 31	2135	586	24	396
Furnaces. Device for promoting combustion in boiler.	I. W. Seaverns, Jr.	286,854	Oct. 16	1352	370	25	260
Furnaces. Draft-pipe for steam-boiler	F. Mertschneider	286,625	Oct. 16	1065	287	25	209
Furnaces. Feed-hopper and bell for blast and other.	E. Shepard	274,667	Mar. 27	1844	513	23	1175
Furnaces. Feeding air to	T. M. Fell	270,653	Jan. 16	1025	{ 294 295 }	23	216
Furnaces. Feeding straw as fuel to	W. S. Prosser	279,012	June 5	485	132	23	2206
Furnaces for receiving the dump. Attachment for cupola.	H. W. Fayette	287,527	Oct. 30	2207	599	25	429
Furnaces. Gas-seal for blast.	E. A. Uehling	273,194	Feb. 27	2033	572	23	818
Furnaces. Hydrocarbon-burner for	L. Lefferts	289,424	Dec. 4	62	18	25	897
Furnaces. Machine for pushing tubes into.	E. W. Wolfe	273,312	Apr. 3	548	149	23	1319
Furnaces. Method of and apparatus for heating the gaseous fuel of	J. H. Cremer	278,998	June 5	290	84	23	2173
Furnaces. Process of and apparatus for burning water-gas in	C. J. Eames	272,378	Feb. 13	991	277	23	623
Furniture.	E. W. Vaill	289,583	Dec. 4	266	75	25	934
Furniture and cabinet-ware. Applying straw braid to.	G. Hunzinger	273,847	Mar. 13	785	213	23	977
Furniture-feet. Self-acting clip for	E. C. Phillips	271,263	Jan. 30	1771	513	23	360
Furniture-fender.	D. C. Peck and F. L. Gaylord	290,466	Dec. 18	1379	381	25	1145
Furniture-leg fastening	H. S. Hall	270,661	Jan. 16	1034	297	23	218
Furniture-nail.	J. W. McCrillis	270,239	Jan. 9	490	145	23	106
Furniture-pad.	J. C. Pelton, Jr.	273,885	Mar. 13	835	227	23	9-5
Fuse cutter and capper	F. P. Pickering	276,459	Apr. 24	2042	567	23	1600
Fuse. Miner's.	W. Eltringham	280,158	June 26	1896	534	23	2470
Gaff for fore-and-aft vessels	W. F. C. Nindemann	280,945	July 10	757	210	24	139
Gag-runner	R. G. Hanford, Jr.	277,715	May 15	1474	398	23	1691
Gag-runner	R. G. Hanford, Jr.	277,716	May 15	1474	398	23	1891
Gag-runner	G. M. Hubbard	278,554	May 29	2535	692	23	2092
Gag-runner	W. S. Thayer	284,258	Sept. 4	127	25	24	926
Gag-runner	M. E. Zeller	271,970	Feb. 6	467	127	23	522
Gage:							
See Axle-gage.	Printing-press feed-gage.						
Caliper-gage.	Saw-shapening gage.						
Candle-mold gage.	Saw-table gage.						
Carpenter's gage.	Scratch-gage.						
Centering-gage.	Screw-cutting gage.						
Cream-gage.	Sewing-machine gage.						
Metal-sheet gage.	Shrinkage-gage.						
Micrometer-gage.	Surface-gage.						
Milk and cream gage.	Water-gage.						
Flow-gage.	Weather-board gage.						
Pressure-gage.	Weather-boarding gage.						
Gage	J. Logan	283,627	Aug. 21	1391	389	24	764
Gage	W. McCullough	270,091	Jan. 2	303	90	23	62
Gage. Adjustable	S. E. Stacy	288,375	Nov. 13	744	202	25	644
Gage for curved work. Feed-table	J. Wrigley	273,000	Feb. 27	1795	{ 502 503 }	23	775
Gage for elongation and compression of materials under strain.	W. H. Paine	285,661	Sept. 25	1829	522	24	1244
Gaiter. Congress.	N. R. Packard, 2d	287,312	Oct. 23	1942	531	25	371
Gaiters, gloves, &c. Fastening for	W. J. Walden	272,359	Feb. 13	958	267	23	618
Galley-rest	T. Day	270,207	Jan. 9	451	132	23	99
Galley type-lock	S. D. Webb	274,681	Mar. 27	1859	{ 517 518 }	23	1177
Galley type-lock	S. D. Webb, (Reissue)	10,424	Dec. 11	1012	{ 284 285 }	25	1073
Galvanic batteries. Circle-switch for	H. Lowe	274,452	Mar. 20	1563	427	23	1119
Galvanic battery	W. A. Alexander	275,797	Apr. 17	1226	335	23	1451
Galvanic battery	R. C. Anderson	289,795	Dec. 11	528	.....	25	985



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Galvanic battery.....	J. A. Barrett.....	271,299	Jan. 30	1819	527	23	368
Galvanic battery.....	S. Bergmann.....	288,916	Nov. 20	1412	389	25	770
Galvanic battery.....	F. De Lalande and G. Chaperon.....	274,110	Mar. 20	1114	308	23	1040
Galvanic battery.....	J. W. Gilbert and E. T. Starr.....	281,262	July 17	1157	320	24	218
Galvanic battery.....	A. Haid.....	286,809	Oct. 16	1292	350	25	249
Galvanic battery.....	W. W. Karsbuer.....	280,933	July 10	742	207	24	136
Galvanic battery.....	T. L. Kauffer and J. Serson.....	272,058	Feb. 13	590	159	23	554
Galvanic battery.....	T. L. Kauffer and J. Serson.....	279,872	June 19	1552	434	23	2403
Galvanic battery.....	L. D. McIntosh.....	273,751	Mar. 13	660	177	23	955
Galvanic battery.....	J. B. Odell.....	275,845	Apr. 17	1282	352	23	1460
Galvanic battery.....	F. H. Peckham, Jr.....	275,845	Sept. 18	1123	.....	24	1111
Galvanic battery.....	A. M. Rosebrugh.....	271,992	Feb. 6	502	135	23	327
Galvanic battery.....	E. F. Schlosser.....	282,784	Aug. 7	371	105	24	565
Galvanic battery.....	G. Scrivanow.....	270,702	Jan. 16	1089	312	23	228
Galvanic battery.....	J. Unger and S. O. Eiseke.....	290,149	Dec. 11	956	271	25	1063
Galvanic-battery cell.....	L. E. Felton.....	287,812	Nov. 6	27	9	25	512
Galvanic-battery pole.....	B. F. Blackall and J. C. Decker.....	274,899	Apr. 3	10	3	23	1228
Game.....	P. H. Johnson.....	282,990	Aug. 14	607	172	24	615
Game.....	E. S. Sackett.....	275,526	Apr. 10	867	234	23	1382
Game.....	E. G. Williams.....	275,308	Apr. 3	541	148	23	1318
Game apparatus.....	T. R. Boone.....	282,608	Aug. 7	161	49	24	529
Game apparatus.....	J. Doyle.....	281,348	July 17	1262	351	24	236
Game apparatus.....	A. Hicks.....	290,328	Dec. 18	1191	334	25	1112
Game apparatus.....	C. S. Thompson.....	286,868	Oct. 16	1369	375	25	262
Game apparatus.....	H. T. W. Waller.....	289,043	Nov. 27	1573	434	25	805
Game apparatus.....	T. H. Ward.....	287,352	Oct. 23	1989	542	25	380
Game apparatus for playing parlor-quoits.....	H. A. De Windt.....	285,396	Sept. 25	1519	428	24	1186
Game apparatus or toy target.....	C. Sears.....	289,032	Nov. 27	1559	430	25	803
Game apparatus to imitate base-ball.....	H. B. McCool.....	270,963	Jan. 23	1411	406	23	292
Game-ball.....	W. B. Melot.....	289,297	Nov. 27	1872	520	25	861
Game-board.....	J. L. Dibble.....	283,868	Aug. 28	1691	477	24	830
Game-board.....	J. W. Larimore.....	278,712	June 5	48	15	23	2133
Game-board.....	J. D. Spang.....	271,530	Jan. 30	2120	610	23	422
Game board or table and appurtenances thereto.....	J. L. Dibble.....	283,869	Aug. 28	1692	477	24	830
Game-box. Combination.....	J. W. Boteler.....	286,583	Oct. 16	1009	272	25	199
Game-carrier.....	A. White.....	276,945	May 1	538	139	23	1718
Game-counter.....	F. S. Heiser.....	282,725	Aug. 7	311	88	24	554
Game-counter.....	D. K. Horton.....	280,375	July 3	43	12	24	10
Game-counter.....	J. L. Knight.....	274,005	Mar. 13	976	268	23	1009
Game-counter.....	H. A. Russell.....	278,747	June 5	88	26	23	2139
Game-counter.....	W. A. Wales.....	276,101	Apr. 17	1584	437	23	1514
Game-table.....	H. F. Arff and D. Bornholdt.....	279,313	June 12	866	241	23	2281
Game-table.....	G. Calder.....	289,217	Nov. 27	1780	493	25	843
Game-table.....	F. Schlueter.....	290,360	Dec. 18	1228	345	25	1119
Game. Target and ring.....	A. Evans, Jr.....	281,624	July 17	1609	440	24	293
Garden implement.....	W. C. Moore.....	270,243	Jan. 9	494	146	23	107
Garment. Circular outer.....	T. D. Barter.....	279,211	June 12	746	205	23	9261
Garment-clasp.....	J. Buchanan.....	288,005	Nov. 6	279	79	25	555
Garment-clasp.....	T. H. Foster.....	277,700	May 15	1455	393	23	1888
Garment-clasp.....	C. E. Granniss.....	272,954	Feb. 27	1745	487	23	766
Garment-clasp.....	L. D. Minor.....	272,075	Feb. 13	610	165	23	558
Garment. Convertible.....	M. Brenner.....	285,106	Sept. 18	1170	328	24	1118
Garment-fastener.....	C. G. Dobbs.....	276,367	Apr. 24	1925	533	23	1580
Garment-hanger.....	A. Pike and S. Schlesinger.....	284,478	Sept. 4	384	106	24	969
Garment-protector.....	H. M. Chittenden.....	290,319	Dec. 18	1177	330	25	1110
Garment-protector.....	J. M. Clark.....	271,037	Jan. 23	1493	430	23	305
Garment-stand.....	W. H. Knapp.....	285,452	Nov. 13	842	228	25	662
Garment-stand.....	W. H. Knapp.....	290,990	Dec. 25	2071	570	25	1270
Garment-stretcher.....	S. E. French.....	283,994	Aug. 28	1844	520	24	859
Garment-supporter.....	W. L. Braddock.....	278,493	May 29	2465	672	23	2079
Garment-supporter.....	B. J. Greely.....	287,020	Oct. 23	1573	434	25	303
Garment-supporter clasp.....	S. Wales.....	287,349	Oct. 23	1956	542	25	380
Gas and coke kiln.....	H. H. Hall.....	287,433	Oct. 30	2091	568	25	406
Gas and electric light fixture. Combined.....	S. B. H. Vance and C. H. Hinds.....	290,152	Dec. 11	960	272	25	1064
Gas and vapor from liquid hydrocarbons. Apparatus for generating.....	H. F. Hayden.....	277,567	May 15	1305	350	23	1861
Gas and water box for streets.....	A. W. Morgan.....	283,411	Aug. 21	1138	322	24	718
Gas apparatus.....	H. Cottrell.....	270,181	Jan. 2	414	121	23	84
Gas apparatus.....	J. Hanlon.....	269,929	Jan. 2	125	37, 38	23	26
Gas. Apparatus for administering nitrous-oxide.....	J. A. Donaldson.....	282,178	July 31	2344	646	24	428
Gas. Apparatus for administering nitrous-oxide.....	L. W. Nevins.....	283,137	Aug. 14	788	221	24	647
Gas. Apparatus for generating and carbureting hydrogen.....	S. B. Bushfield.....	282,492	Aug. 7	15	4	24	503
Gas. Apparatus for generating and carbureting hydrogen.....	W. Collings.....	282,169	July 31	2328	642	24	426
Gas. Apparatus for generating and carbureting hydrogen.....	L. S. Groves.....	273,679	Mar. 6	566	150	23	930
Gas. Apparatus for generating heating or illuminating.....	J. E. Leadley.....	289,278	Nov. 27	1845	509	25	856
Gas. Apparatus for generating illuminating or heating.....	W. P. Patton.....	281,127	July 10	972	272	24	179
Gas. Apparatus for increasing the illuminating-power of.....	F. Weston.....	286,515	Oct. 9	916	247	25	177
Gas. Apparatus for making.....	H. D. Fitch.....	271,231	Jan. 30	1732	501	23	353
Gas. Apparatus for making.....	J. Hanlon.....	270,427	Jan. 9	732	215	23	152
Gas. Apparatus for manufacturing.....	G. W. Billings.....	272,848	Feb. 27	1617	452	23	746
Gas. Apparatus for manufacturing.....	A. B. Lipsey.....	282,204	July 31	2372	653	24	433
Gas. Apparatus for producing.....	E. J. Jerzmanowski.....	289,842	Dec. 11	593	164	25	997
Gas. Apparatus for producing illuminating or heating.....	J. L. Stewart.....	282,399	July 31	2612	165	24	477
Gas. Apparatus for the manufacture of.....	J. E. Bicknell.....	284,801	Sept. 11	794	222	24	1045
Gas. Apparatus for the manufacture of.....	A. Binnie.....	282,695	Aug. 7	264	76	24	545

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Gas. Apparatus for the manufacture of.....	J. E. Dowson.....	278,107	May 22	1939	532	23	1980
Gas. Apparatus for the manufacture of.....	R. H. Smith.....	288,741	Nov. 20	1206	330	25	731
Gas. Apparatus for the manufacture of air.....	D. H. Martin.....	280,201	June 26	1943	546	23	2479
Gas. Apparatus for the manufacture of illuminating or heating	F. D. Moses.....	274,637	Mar. 27	1805	502	23	1168
Gas. Apparatus for the purification of coal.....	C. C. and W. T. Walker.....	272,804	Feb. 20	1537	432	23	725
Gas-brackets. Lighting and heating attachment for.	I. W. Heyvinger.....	271,708	Feb. 6	144	40	23	465
Gas-burner.....	J. G. Beale.....	286,170	Oct. 9	476	131	25	99
Gas-burner.....	O. B. Hall, Jr.....	284,631	Sept. 11	577	162	24	1008
Gas-burner.....	A. S. Harris.....	269,931	Jan. 2	128	38	23	27
Gas-burner.....	G. F. Huntington.....	283,608	Aug. 21	1370	383	24	760
Gas-burner.....	P. Keller.....	280,482	July 3	186	49	24	34
Gas-burner.....	J. C. Kelly.....	271,641	Feb. 6	70	19	23	452
Gas-burner.....	A. B. Lipsey.....	278,568	May 29	2551	696	23	2004
Gas-burner.....	A. B. Lipsey.....	282,337	July 31	2538	695	24	462
Gas-burner.....	C. J. Luther.....	285,049	Sept. 18	1103	307	24	1107
Gas-burner.....	E. B. Regua.....	275,708	Apr. 10	1092	298	23	1421
Gas-burner.....	E. B. Regua.....	275,709	Apr. 10	1094	299	23	1421
Gas-burner.....	J. A. Wilson.....	275,311	Apr. 3	547	148	23	1319
Gas burner and pipe pliers.....	P. Mihan.....	272,573	Feb. 20	1253	349	23	674
Gas-burner apparatus.....	G. S. Grimston.....	274,592	Mar. 27	1756	487	23	1158
Gas-burner check.....	W. G. Pugh.....	279,595	June 19	1229	341	23	2347
Gas-burner. Electric.....	C. H. Hinds.....	282,890	Aug. 7	497	140	24	588
Gas-burner. Electric-lighting.....	A. L. Bogart.....	282,043	July 31	2146	569	24	398
Gas-burner for heating and metallurgic purposes	J. E. Karns.....	288,445	Nov. 13	830	225	25	660
Gas-burner for heating purposes.....	J. Burton.....	284,814	Sept. 11	808	225	24	1047
Gas-burners. Automatic safety-cock for.....	A. Archibald.....	277,975	May 22	1782	486	23	1952
Gas-burners. Base for.....	S. Nelson.....	271,653	Feb. 6	81	23	23	454
Gas-burners. Clock-holding attachment for.....	C. H. Shaw.....	272,983	Feb. 27	1777	407	23	772
Gas-burners. Cut-off for Argand.....	W. C. Boone and W. A. Whitfield.....	282,260	July 31	2436	670	24	445
Gas-burners. Exhibition-cabinet for.....	J. N. Chamberlain.....	273,952	Mar. 13	915	251	23	998
Gas-burning apparatus.....	J. W. Plunkett.....	280,666	July 3	392	109	24	69
Gas by electricity. Apparatus for lighting.....	H. J. Warren and H. F. Packard.....	284,784	Sept. 11	779	217	24	1041
Gas by electricity. Device for lighting.....	J. B. Odell.....	277,053	May 8	684	178	23	1749
Gas by electricity. Push-button and circuit for lighting	T. H. Rhodes.....	276,285	Apr. 24	1812	505	23	1561
Gas. Composition for preparing a heating and illuminating	U. K. Mayo.....	288,090	Nov. 6	372	.....	25	571
Gas-consuming furnace.....	G. Farr.....	286,286	Oct. 9	645	172	25	127
Gas-cooling apparatus.....	H. C. Rew.....	290,929	Dec. 25	1982	546	25	1256
Gas cut-off. Automatic.....	R. W. H. Kopp.....	289,274	Nov. 27	1840	508	25	855
Gas-engine.....	C. W. Baldwin.....	276,747	May 1	282	72	23	1673
Gas-engine.....	C. W. Baldwin.....	276,748	May 1	284	72, 73	23	1674
Gas-engine.....	C. W. Baldwin.....	276,749	May 1	285	73	23	1674
Gas-engine.....	C. W. Baldwin.....	276,750	May 1	288	74	23	1674
Gas-engine.....	C. W. Baldwin.....	276,751	May 1	291	74, 75	23	1675
Gas-engine.....	C. W. Baldwin.....	287,897	Nov. 6	135	40	25	531
Gas-engine.....	C. W. Baldwin.....	288,396	Nov. 13	776	209	25	650
Gas-engine.....	C. W. Baldwin.....	290,310	Dec. 18	1166	326	25	1108
Gas-engine.....	J. Charter.....	270,202	Jan. 9	441	130	23	97
Gas-engine.....	J. Charter.....	270,203	Jan. 9	445	131	23	98
Gas-engine.....	H. Denney.....	290,632	Dec. 18	1599	439	25	1182
Gas-engine.....	E. Etève and C. C. Lallement.....	272,130	Feb. 13	685	167	23	570
Gas-engine.....	J. A. Ewins.....	278,421	May 29	2374	648	23	2063
Gas-engine.....	E. J. Frost.....	273,269	Mar. 6	29	9	23	839
Gas-engine.....	W. Hammerschmidt.....	288,632	Nov. 20	1063	292	25	708
Gas-engine.....	G. M. Hopkins.....	284,555	Sept. 4	478	134	24	985
Gas-engine.....	G. M. Hopkins.....	284,556	Sept. 4	481	135	24	986
Gas-engine.....	G. M. Hopkins.....	284,557	Sept. 4	481	135	24	986
Gas-engine.....	G. M. and I. N. Hopkins.....	284,851	Sept. 11	851	239	24	1055
Gas-engine.....	J. F. Jackson and D. M. Kirkpatrick.....	283,398	Aug. 21	1125	318	24	716
Gas-engine.....	S. Marcus.....	286,030	Oct. 2	306	86, 87	25	57
Gas-engine.....	H. S. Maxim.....	273,750	Mar. 13	656	175	23	954
Gas-engine.....	H. S. Maxim.....	279,657	June 19	1300	361	23	2359
Gas-engine.....	L. H. Nash.....	271,902	Feb. 6	351	105	23	508
Gas-engine.....	L. H. Nash.....	278,255	May 22	2133	588	23	2013
Gas-engine.....	L. H. Nash.....	278,256	May 22	2142	589	23	2014
Gas-engine.....	L. H. Nash.....	289,019	Nov. 27	1537	425	25	799
Gas-engine.....	L. H. Nash.....	289,691	Dec. 4	396	113	25	956
Gas-engine.....	L. H. Nash.....	289,692	Dec. 4	402	114	25	957
Gas-engine.....	L. H. Nash.....	289,693	Dec. 4	408	115	25	957
Gas-engine.....	N. A. Otto.....	288,479	Nov. 13	880	238	25	669
Gas-engine.....	L. C. Parker. (Reissue).....	10,290	Feb. 20	1607	450	23	737
Gas-engine.....	G. H. Reynolds.....	284,061	Aug. 28	1945	543	24	875
Gas-engine.....	G. H. Reynolds.....	284,328	Sept. 4	209	58	24	940
Gas-engine.....	G. H. Reynolds.....	287,578	Oct. 30	2284	619	25	444
Gas-engine.....	J. Robson.....	278,600	May 29	2585	706	23	2100
Gas-engine.....	C. Rohn.....	280,083	June 26	1816	511	23	2456
Gas-engine.....	C. Shellburne.....	277,618	May 15	1363	367	23	1871
Gas-engine.....	F. W. Turner.....	289,362	Nov. 27	1954	543	25	876
Gas-engine and air-compressor. Combined.....	L. H. Nash.....	278,168	May 22	2020	556	23	1993
Gas-engine and carbureting apparatus. Combined.....	H. L. Müller.....	289,952	Nov. 20	1456	401	25	778



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Gas-engines. Apparatus for utilizing the waste heat of	J. V. Merrick.....	290,451	Dec. 18	1361	376	25	1141
Gas-engines. Electric igniting device for.....	L. C. Parker.....	287,855	Nov. 6	76	23	25	521
Gas-exhauster. Steam.....	J. E. Leadley and J. Hanlon.....	271,874	Feb. 6	348	97	23	502
Gas. Facilitating the passage of oil through pipes and making illuminating.	L. C. Snell.....	290,491	Dec. 18	1411	390	25	1151
Gas for electric lights. Apparatus for substituting.	P. B. Delany.....	274,181	Mar. 20	1203	331	23	1056
Gas for illuminating and heating purposes. Apparatus for the manufacture of	A. P. Chamberlain.....	278,093	May 22	1925	528	23	1977
Gas from hydrocarbon oils. Apparatus for the manufacture of	H. H. Edgerton.....	274,443	Mar. 20	1549	425	23	1116
Gas from hydrocarbon oils. Manufacture of illuminating.	H. H. Edgerton.....	274,442	Mar. 20	1547	424	23	1116
Gas from hydrocarbons and utilizing the same in furnaces. Apparatus for generating	H. F. Hayden.....	274,597	Mar. 27	1762	489	23	1160
Gas-furnace.....	G. H. Baldwin. (Reissue).....	10,329	May 22	2219	608	23	2027
Gas-furnace.....	H. F. Hayden.....	274,598	Mar. 27	1765	489	23	1160
Gas-furnace. Recuperator.	J. F. Rittweger.....	289,308	Nov. 27	1884	525	25	864
Gas. Generating.	E. J. Jerzmanowski.....	278,145	May 22	1993	548	23	1938
Gas-generating apparatus.	N. M. Langdon.....	276,432	Apr. 24	2006	556	23	1594
Gas-generating apparatus.	H. C. Shields.....	277,852	May 15	1633	445	23	1921
Gas-generating apparatus.	W. H. Taylor.....	284,776	Sept. 11	763	{ 212 213 }	24	1040
Gas-generating furnace	H. B. Van Benthuyzen.....	280,691	July 3	423	{ 119 120 }	24	75
Gas-generator.....	L. C. Beebe.....	290,627	Dec. 18	1590	437	25	1181
Gas-generator.....	F. A. Lyman.....	275,677	Apr. 10	1058	287	23	1415
Gas-generator.....	F. Phillips.....	277,926	May 22	1723	470	23	1942
Gas-generator.....	A. Stein.....	283,297	Aug. 14	988	276	24	684
Gas-generator. Electric.	C. E. Ball.....	272,187	Feb. 13	746	206	23	581
Gas-generator for furnaces	J. E. Bott.....	285,561	Sept. 25	1708	{ 482 483 }	24	1221
Gas-governor	T. C. and W. E. Hopper.....	283,245	Aug. 14	926	258	24	672
Gas-heater. Regenerative.	C. E. Hequembourg.....	286,301	Oct. 9	662	176	25	130
Gas-holder. Equilibrated.	J. F. Harrison.....	272,248	Feb. 13	822	229	23	595
Gas in gas-wells. Apparatus for regulating the flow and pressure of	W. E. Karns.....	288,446	Nov. 13	831	225	25	660
Gas-lighter.....	J. F. Carr.....	280,573	July 3	282	78	24	51
Gas-lighter. Electric	C. H. Crockett.....	281,345	July 17	1257	350	24	235
Gas-lighter. Electric	W. A. Drysdale.....	281,471	July 17	1418	389	24	262
Gas-lighter. Electric	T. H. Parker.....	286,481	Oct. 9	872	236	25	169
Gas lighting and extinguishing device. Electric	L. S. White.....	282,816	Aug. 7	406	115	24	572
Gas-lighting apparatus.	J. H. Towan.....	280,689	July 3	421	119	24	75
Gas-lighting apparatus. Electric	R. Einbigher.....	278,898	June 5	301	87	23	2175
Gas-lighting burner. Electric	C. H. Crockett.....	271,805	Feb. 6	263	73	23	487
Gas-lighting burner. Electric	A. Lungen.....	290,441	Dec. 18	1344	372	25	1139
Gas-lighting burner. Electric	D. Rousseau.....	285,682	Sept. 25	1853	529	24	1248
Gas-lighting burner. Electric	H. J. Warren.....	272,004	Feb. 6	515	138	23	529
Gas-lighting. Electric.	T. H. Rhodes.....	277,610	May 15	1354	365	23	1870
Gas-lighting system	V. Popp.....	283,020	Aug. 14	656	185	24	624
Gas-lights. Lighting and extinguishing.	D. C. Baughman.....	287,218	Oct. 23	1825	500	25	350
Gas-machine	G. P. Judd.....	273,852	Mar. 13	794	215	23	978
Gas-machine	H. S. Maxim.....	275,060	Apr. 3	233	63, 64	23	1266
Gas-machine	L. Taylor.....	286,665	Oct. 16	1364	374	25	262
Gas-machine	J. S. Wood.....	288,752	Nov. 20	1219	333	25	734
Gas-machine	J. S. Wood.....	289,593	Dec. 4	278	78	25	936
Gas machine. Air.....	J. P. Clifford.....	277,113	May 8	761	200	23	1762
Gas-making apparatus	F. C. Kniese.....	283,897	Aug. 28	1724	{ 486 487 }	24	835
Gas-making retort	M. Gross.....	277,270	May 8	944	253	23	1795
Gas. Manufacture of illuminating.	S. Hanford.....	273,068	Feb. 27	1875	527	23	789
Gas. Manufacturing	A. P. Chamberlain.....	286,589	Oct. 16	1016	275	25	201
Gas. Manufacturing illuminating.	T. G. Springer.....	287,185	Oct. 23	1779	488	25	343
Gas-meter	J. J. Myers.....	281,641	July 17	1626	444	24	286
Gas-motor.....	E. Körting and G. Lieckfeld.....	289,774	Dec. 4	497	138	25	972
Gas-motor.....	J. A. Serrell and G. M. Ward.....	285,169	Sept. 18	1249	{ 350 351 }	24	1132
Gas-motor engine	T. Ashbury, H. Sumner, W. Lees, and R. W. B. Sanderson.....	282,832	Aug. 7	426	121	24	576
Gas-motor engine	C. G. Beechey.....	280,006	June 26	1719	{ 481 482 }	23	2439
Gas-motor engine	N. A. Otto.....	288,478	Nov. 13	879	238	25	668
Gas-motor engine	H. Sumner.....	278,198	May 22	2062	{ 568 569 }	23	2001
Gas or oil burner.	J. N. Douglass.....	290,545	Dec. 18	1485	411	25	1163
Gas or vapor. Apparatus for producing illuminating	E. J. Frost.....	278,529	May 29	2508	685	23	2087
Gas or vapor engine	G. B. and W. B. Gray.....	287,666	Oct. 30	2404	648	25	467
Gas-pipes. Automatic stop-plug for.	W. F. Cosgrove.....	288,777	Nov. 20	1244	342	25	739
Gas. Process of and apparatus for making	A. B. Lipsey.....	286,454	Oct. 9	844	229	25	164
Gas. Process of and apparatus for making heating } and illuminating	T. M. Fell.....	288,701	Nov. 20	1149	{ 316 317 }	25	722
Gas. Process of and apparatus for manufacturing	J. H. Collins, Jr., and A. O. Granger.....	276,562	May 1	20	6	23	1630
Gas. Process of and apparatus for manufacturing	J. P. Gill.....	275,761	Apr. 10	1169	{ 320 321 }	23	1433
Gas. Process of and apparatus for manufacturing.	A. O. Granger and J. H. Collins, Jr.....	287,277	Oct. 23	1895	519	25	363
Gas. Process of and apparatus for manufacturing.	J. Hanlon and J. E. Leadley.....	285,614	Sept. 25	1776	{ 503 504 505 506 }	24	1234
Gas. Process of and apparatus for manufacturing. }	J. Hanlon, J. E. Leadley, and S. Gibbs.....	273,230	Feb. 27	2084	{ 585 586 }	23	896
Gas. Process of and apparatus for manufacturing	E. J. Jerzmanowski.....	278,146	May 22	1994	548	23	1989

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Gas. Process of and apparatus for manufacturing ..	J. E. Leadley .....	289,279	Nov. 27	1847	{ 510 511 512 }	25	856
Gas. Process of and apparatus for manufacturing ..	J. E. Leadley .....	289,280	Nov. 27	1850	{ 513 514 515 }	25	857
Gas. Process of and apparatus for manufacturing ..	J. E. Leadley .....	289,281	Nov. 27	1853	{ 513 514 515 }	25	857
Gas. Process of and apparatus for manufacturing ..	H. M. Pierson .....	279,010	June 5	482	{ 131 132 }	23	2205
Gas. Process of and apparatus for manufacturing ..	H. C. Rew .....	290,926	Dec. 25	1974	{ 545 546 547 }	25	1255
Gas. Process of and apparatus for manufacturing ..	T. G. Springer .....	280,770	July 3	534	{ 150 151 }	24	94
Gas. Process of and apparatus for manufacturing ..	T. G. Springer .....	284,985	Sept. 11	1006	{ 284 285 286 }	24	1064
Gas. Process of and apparatus for manufacturing } fixed	H. C. Rew .....	290,930	Dec. 25	1983	{ 547 548 549 }	25	1257
Gas. Process of and apparatus for manufacturing } water-	W. W. Gibbs and J. Y. McClintock.	283,234	Aug. 14	910	{ 254 255 256 }	24	669
Gas-pressure regulator .....	F. Pipersberg .....	271,735	Feb. 6	177	{ 48 49 50 }	23	471
Gas-producer .....	C. W. Siemens .....	282,387	July 31	2599	{ 714 715 716 }	24	474
Gas-producer .....	C. W. Siemens .....	288,877	Nov. 20	1364	{ 374 375 376 }	25	760
Gas-producer .....	J. Zellweger .....	271,673	Feb. 6	105	{ 28 29 30 }	23	458
Gas-producer .....	J. Zellweger .....	282,025	July 24	2121	{ 581 582 583 }	24	387
Gas-producer and furnace operating in connection } therewith.	C. W. Siemens .....	288,878	Nov. 20	1366	{ 376 377 378 }	25	761
Gas. Producing combustible .....	E. J. Jerczmanowski .....	289,914	Dec. 11	681	{ 189 190 191 }	25	1012
Gas-purifier .....	H. C. Rew .....	290,928	Dec. 25	1981	{ 546 547 548 }	25	1256
Gas-purifier screen or grid .....	J. R. Farnum .....	283,030	Aug. 14	732	{ 205 206 207 }	24	638
Gas-purifying screen .....	E. M. Provocchar .....	272,582	Feb. 20	1261	{ 352 353 354 }	23	675
Gas-regulator .....	L. Baumeister .....	282,150	July 31	2300	{ 632 633 634 }	24	422
Gas-regulator .....	W. Carter .....	281,449	July 17	1392	{ 383 384 385 }	24	257
Gas-regulator .....	J. S. De Palos .....	274,733	Mar. 27	1912	{ 534 535 536 }	23	1188
Gas-regulator .....	P. Keller .....	270,079	Jan. 2	293	{ 87 88 89 }	23	60
Gas-regulator .....	J. H. Luther .....	272,281	Feb. 13	864	{ 242 243 244 }	23	602
Gas-regulator .....	J. H. Luther .....	272,282	Feb. 13	865	{ 242 243 244 }	23	602
Gas-regulator .....	J. F. Maxson .....	286,326	Oct. 9	696	{ 186 187 188 }	25	136
Gas-regulator. Automatic .....	M. J. Amick .....	290,727	Dec. 25	1729	{ 477 478 479 }	25	1213
Gas-retort furnace .....	G. A. McIlhenny .....	284,458	Sept. 4	363	{ 100 101 102 }	24	965
Gas-retort furnace .....	R. Schlüter .....	275,276	Apr. 3	502	{ 138 139 140 }	23	1312
Gas-retorts. Device for fastening mouth-pieces to ..	J. Dell .....	275,162	Apr. 3	365	{ 100 101 102 }	23	1289
Gas scrubber and exhauster. Rotary .....	R. B. McLain .....	282,346	July 31	2551	{ 699 700 701 }	24	465
Gas scrubbing and washing apparatus .....	J. Laycock and T. Clapham .....	282,994	Aug. 14	610	{ 173 174 175 }	24	616
Gas scrubbing or washing apparatus .....	W. R. Beal .....	283,192	Aug. 14	859	{ 240 241 242 }	24	659
Gas-tank for vessels. Safety .....	S. R. Brick .....	283,962	Aug. 28	1806	{ 511 512 513 }	24	852
Gas-trap for sinks, urinals, &c. .....	W. Moran .....	270,602	Jan. 16	959	{ 278 279 280 }	23	205
Gas-tubing, &c. Compound for coating .....	S. Barr .....	276,998	May 8	610	{ 23 24 25 }	23	1737
Gas-valve. Automatic .....	H. A. Stearns .....	288,271	Nov. 13	603	{ 165 166 167 }	25	620
Gas-works. Hydraulic main for .....	G. A. McIlhenny .....	282,345	July 31	2548	{ 698 699 700 }	24	465
Gases and vapors. Apparatus for the manufacture } and application of	J. P. Gill .....	283,998	Aug. 28	1852	{ 523 524 525 }	24	860
Gases and vapors for heating and illuminating pur- } poses. Process of and apparatus for manufactur- ing	J. P. Gill .....	275,636	Apr. 10	1010	{ 272 273 274 }	23	1406
Gases and vapors. Process of and apparatus for } manufacturing and delivering	J. P. Gill .....	284,002	Aug. 28	1867	{ 525 526 527 }	24	861
Gases. Apparatus for reducing the density of illumi- } nating	C. F. Hovey .....	273,843	Mar. 13	781	{ 212 213 214 }	23	976
Gases or vapors. Apparatus for condensing .....	J. C. De La Vergne and W. M. Mixer.	275,367	Apr. 10	655	{ 175 176 177 }	23	1346
Gaskets. Machine for cutting oval .....	J. H. Burnett .....	287,503	Oct. 30	2179	{ 591 592 593 }	25	423
Gasoliers and chandeliers. Apparatus for raising } and lowering	M. Merichenski .....	273,576	Mar. 6	438	{ 117 118 119 }	23	909
Gasometer .....	J. Hanlon .....	273,521	Mar. 6	360	{ 96 97 98 }	23	895
Gate:							
See Automatic gate. Railway-gate.							
Automatic driving-gate. Railway-crossing gate.							
gate. Railway stock-gate.							
Caisson-gate. Railway-track gate.							
Car guard-gate. Safety-gate.							
Change-gate. Self-closing gate.							
Elevator-gate. Sewer-gate.							
Elevator safety-gate. Sliding gate.							
End-gate. Sluice or flood gate.							
Farm-gate. Swinging gate.							
Feed-gate. Tilting gate.							
Flood-gate. Turbine-wheel gate.							
Hatchway-gate.							
Gate .....	D. and D. C. Baker .....	276,330	Apr. 24	1887	{ 523 524 525 }	23	1572
Gate .....	W. N. Bowers .....	287,361	Oct. 23	2000	{ 545 546 547 }	25	382
Gate .....	D. M. Bridges .....	273,452	Mar. 6	273	{ 74 75 76 }	23	879
Gate .....	J. H. Caldwell .....	276,769	May 1	313	{ 81 82 83 }	23	1680
Gate .....	A. W. Chilcott .....	272,646	Feb. 20	1343	{ 377 378 379 }	23	690
Gate .....	M. L. Cope .....	281,026	July 10	847	{ 235 236 237 }	24	157
Gate .....	W. H. Cox .....	287,805	Nov. 6	19	{ 6 7 8 }	25	510
Gate .....	H. J. Elliott .....	290,554	Dec. 18	1499	{ 413 414 415 }	25	1166
Gate .....	M. M. Gentsler .....	286,424	Oct. 9	811	{ 220 221 222 }	25	158
Gate .....	D. Gibbons .....	270,565	Jan. 9	907	{ 262 263 264 }	23	186
Gate .....	W. Gosshorn .....	285,611	Sept. 25	1774	{ 502 503 504 }	24	1234



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Gate	J. L. James	285,751	Sept. 25	1955	553	24	1265
Gate	W. R. Kramer	275,775	Apr. 10	1185	325	23	1437
Gate	I. L. Landis	270,957	Jan. 23	1406	405	23	291
Gate	I. L. Landis	284,441	Sept. 4	343	95	24	961
Gate	I. L. Landis and J. Riddel	280,632	July 3	353	98	24	62
Gate	L. N. Loveland	290,646	Dec. 18	1612	443	25	1185
Gate	W. Mason	288,088	Nov. 6	368	102	25	570
Gate	J. B. May	287,947	Nov. 6	200	58	25	542
Gate	J. N. McKay	289,433	Dec. 4	73	21	25	899
Gate	L. D. Meckley	272,739	Feb. 20	1455	408	23	710
Gate	C. J. Moore	285,830	Oct. 2	59	18	25	12
Gate	S. D. Muse	280,754	July 3	510	144	24	90
Gate	H. Oyler	271,109	Jan. 23	1582	455	23	320
Gate	S. Peterson	280,664	July 3	390	109	24	69
Gate	W. C. Pettis	275,262	Apr. 3	482	134	23	1308
Gate	J. Robinson	282,374	July 31	2583	709	24	471
Gate	B. Selting	285,689	Sept. 25	1861	531	24	1250
Gate	B. Smith	279,832	June 19	1500	419	23	2394
Gate	I. E. Smith	287,184	Oct. 23	1779	488	25	342
Gate	H. J. Stebbins	283,677	Aug. 21	1452	408	24	776
Gate	J. E. Stong	273,186	Feb. 27	2023	569	23	816
Gate	T. Sturgin	279,039	June 5	523	142	23	2212
Gate	A. J. Sweeney	281,647	July 17	1632	446	24	297
Gate	H. W. Taylor	285,524	Sept. 25	1668	470	24	1213
Gate	J. Thompson	282,238	July 31	2413	663	24	441
Gate	T. Urie	286,092	Oct. 2	383	106	25	70
Gate	J. B. Whiteman	290,509	Dec. 18	1441	398	25	1156
Gate	J. Zook	282,026	July 24	2124	582	24	357
Gate for sheep-feeding yards	J. W. Scott	285,686	Sept. 25	1858	530	24	1249
Gate-hanger	C. Daniel	286,912	Oct. 16	1428	392	25	272
Gear	G. White	290,299	Dec. 18	1148	322	25	1104
Gear and friction-clutch. Combined differential	S. B. Benson	285,213	Sept. 18	1297	365	24	1141
Gear. Bevel	A. Vivarttas	274,862	Mar. 27	2073	577	23	1214
Gear. Clutching, unclutching, and locking	H. L. Moulton	270,096	Jan. 2	308	91	23	63
Gear-cutter	J. Brooks and W. Scully	276,346	Apr. 24	1903	528	23	1576
Gear-cutter	C. W. Crary	282,059	July 31	2170	595	24	402
Gear-cutting machine	C. E. Albro	281,820	July 24	1876	512	24	346
Gear-cutting machine	A. H. Brainard	273,451	Mar. 6	271	73	23	879
Gear-molding device	H. C. Rasner and A. Walton	284,327	Sept. 4	208	58	24	939
Gear-wheel	B. F. Bergh	272,940	Feb. 27	1730	483	23	764
Gear-wheel	J. F. Gilliland	284,290	Sept. 4	164	46	24	932
Gear-wheel	B. F. Ortman	287,711	Oct. 30	2465	664	25	478
Gear-wheel	H. Stanley and N. Cornelius	277,802	May 15	1575	430	23	1910
Gear-wheel	H. W. Stone, Jr	288,134	Nov. 6	423	119	25	582
Gear-wheels. Machine for cutting teeth of metallic	C. E. Albro	281,819	July 24	1875	512	24	345
Gear-wheels. Tool for cutting the teeth of metal	A. Vivarttas	274,860	Mar. 27	2067	575	23	1214
Gearing	R. Campbell	290,855	Dec. 25	1889	521	25	1241
Gearing	G. Murray, Jr	286,550	Oct. 9	959	258	25	185
Gearing	E. W. Ross	275,861	Apr. 17	1301	358	23	1463
Gearing and ungearing mills and other machinery.	J. R. Underwood and G. W. Daniels	272,605	Feb. 20	1289	359	23	680
Pinion-lifter or apparatus for							
Gearing for changing speed	E. C. Worthen	278,070	May 22	1893	519	23	1971
Gearing for hoisting, &c. Differential	R. Lavery	281,195	July 10	1061	292	24	194
Gearing for hoisting, &c. Differential	R. Lavery	286,206	Oct. 9	521	144	25	106
Gearing-lubricator	H. Winter	276,987	May 1	583	155	23	1727
Gearing or pulley. Friction	J. P. Creighton	286,533	Oct. 9	939	253	25	181
Gearing-tooth	A. Vivarttas	274,861	Mar. 27	2069	576	23	1214
Gearing-tooth	A. Vivarttas. (Reissue)	10,381	Sept. 11	1024	287	24	1087
Gelatine-coated sheets. Apparatus for stretching	O. Ielm	275,226	Apr. 3	442	123	23	1302
Gem-setting	D. F. Adams	270,921	Jan. 23	1353	390	23	253
Gem-setting for jewelry	C. A. Fowler	274,583	Mar. 27	1747	484	23	1157
Gems or precious stones. Manufacture of artificial.	E. Chevassus-Clément	270,018	Jan. 2	226	66	23	47
Generator:							
See Electric generator.	Magneto-electric gen-						
Electrical generator.	erator.						
Gas-generator.	Ozone-generator.						
Hydrocarbon-gen-	Steam-generator.						
erator.	Vapor-generator.						
Hydrocarbon-vapor	Vapor or gas generator.						
generator.	Vinegar-generator.						
Magneto-generator.							
Geodometer	S. Dewell	281,468	July 17	1414	388	24	261
Geometrical block	A. H. Kennedy	270,225	Jan. 9	475	139	23	103
Gib	I. C. Shaw	276,484	Apr. 24	2070	575	23	1605
Gilling and hackling machines. Tooth for	W. Crabb	287,506	Oct. 30	2183	593	25	424
Gimp-pressing machine	J. S. Lynch and M. A. Heath	282,544	Aug. 7	82	23	24	514
Gin-house	J. W., A. J., and M. H. Baldwin, } Jr., and G. A. Geise. }	283,187	Aug. 14	853	238	24	658
Girder and beam	P. H. Jackson	279,249	June 12	790	217	23	2268
Girth. Saddle	A. Ayers	289,598	Dec. 4	284	79	25	937
Gland	J. S. Park and J. W. Graham	279,499	June 12	1112	307	23	2319
Glass and machine for producing the same. Art or	J. Locke	283,625	Aug. 21	1388	388	24	764
method of indenting convex or spherical surfaces of							
Glass-annealing furnace	D. G. Barnard	285,551	Sept. 25	1698	479	24	1220
Glass-annealing leer	C. W. Brockunier and D. C. Ripley	270,929	Jan. 23	1364	393	23	285
Glass articles. Manufacture of	T. B. Atterbury	275,564	Apr. 10	913	247	23	1390
Glass articles. Manufacturing	W. M. Wallace	278,472	May 29	2438	665	23	2075
Glass articles. Mold for forming	T. B. Atterbury	275,562	Apr. 10	910	247	23	1390
Glass-batch mixer	G. S. Crotts	284,121	Aug. 25	2026	564	24	889

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. E.	Vol.	Page.
Glass batch-mixer.....	R. G. Hemingray.....	290,771	Dec. 25	1784	493	25	1223
Glass-beveling machine.....	T. F. Gilroy.....	271,836	Feb. 6	306	83	23	494
Glass-blowing apparatus.....	A. L. Eliel.....	282,870	Aug. 7	474	133	24	584
Glass bowls for water-closets. Manufacture of.....	G. E. Hatch.....	286,000	Oct. 2	271	76	25	51
Glass buttons. Manufacture of.....	A. Hamann.....	285,125	Sept. 18	1195	335	24	1122
Glass caster-stand and mold.....	D. C. Ripley.....	278,745	June 5	86	25	23	2139
Glass caster stand and mold.....	D. C. Ripley. (Reissue).....	10,397	Oct. 23	2052	558	25	391
Glass, china-ware, &c. Decorating.....	H. Schulze-Berge.....	276,896	May 1	463	.....	23	1707
Glass. Composition of matter for the manufacture of.....	R. B. Shepard.....	285,436	Sept. 25	1567	.....	24	1194
Glass. Compound for the manufacture of.....	T. H. Sindell and W. B. Stewartson.....	270,991	Jan. 23	1446	.....	23	298
Glass crock.....	A. B. Mills.....	287,846	Nov. 6	68	20	25	519
Glass-cutting frame.....	W. R. Rodman.....	270,847	Jan. 16	1260	363	23	861
Glass. Etching.....	E. Nienstädt.....	273,588	Mar. 6	452	.....	23	912
Glass for the manufacture of water, drain, and sewer pipes.....	E. N. Higley.....	288,056	Nov. 6	334	.....	25	564
Glass. Form or mold for bending.....	A. P. De Voursney.....	280,143	June 26	1882	529	23	2468
Glass-furnace.....	E. Jones.....	281,697	July 24	1709	465	24	316
Glass-furnace.....	M. V. Smith.....	285,316	Sept. 18	1412	399	24	1163
Glass. Furnace for the manufacture of.....	J. A. King and J. Little.....	279,254	June 12	795	220	23	2269
Glass. Furnace for the manufacture of.....	N. B. Scott, L. Schaub, and H. Feurhake.....	284,075	Aug. 28	1966	547 548 187	24	878
Glass, &c. Furnace for melting.....	M. V. Smith.....	280,872	July 10	662	186	24	124
Glass globe.....	J. Locke.....	288,582	Nov. 13	997	275	25	690
Glass globe and shade for gas-fixtures.....	A. N. Lindsley.....	273,371	Mar. 6	175	48	23	864
Glass grinding, smoothing, and polishing machine.....	T. Archer.....	286,672	Oct. 16	1124	302	25	320
Glass. Imitation stained.....	F. B. Herzog.....	286,434	Oct. 9	822	223	25	160
Glass. Imitation stained.....	E. E. Oudin.....	279,423	June 12	1021	283	23	2305
Glass lamp fonts or bowls. Ornamenting.....	W. Somerville.....	286,236	Oct. 9	555	152	25	112
Glass-lamp mold.....	A. H. Baggs.....	277,402	May 8	1096	294	23	1821
Glass lamps. Apparatus for making.....	W. L. Ewing.....	277,414	May 8	1110	298	23	1823
Glass lamps. Manufacture of.....	G. H. Lomax.....	288,715	Nov. 20	1166	320	25	724
Glass lamps, &c. Mold for manufacturing.....	T. B. Atterbury.....	275,563	Apr. 10	912	247	23	1390
Glass lamps. Ornamenting.....	G. H. Chinnoek.....	272,946	Feb. 27	1736	485	23	765
Glass-lined metal can.....	A. M. Graves.....	274,934	Apr. 3	65	17	23	1236
Glass manufacture. Apparatus for.....	L. E. Pfeiffer.....	280,397	July 3	70	19	24	15
Glass. Manufacture of.....	H. Frank.....	285,888	Oct. 2	138	39	25	27
Glass. Manufacture of imitation stained.....	E. E. Oudin.....	284,659	Sept. 11	608	.....	24	1013
Glass. Marbleizing.....	W. S. Cogswell.....	283,861	Aug. 28	1682	475	24	838
Glass-melting furnace.....	G. W. Blair and J. Willetts.....	283,462	Aug. 21	1204	338	24	729
Glass-melting furnace.....	G. Leuffgen.....	270,594	Jan. 16	949	274 275	23	203
Glass, metal, &c., for erosion. Preparing.....	J. Baynes.....	282,485	Aug. 7	7	.....	24	502
Glass-mold.....	A. Kribs.....	274,790	Mar. 27	1987	552	23	1200
Glass-mold and manufacture of glass articles.....	T. B. Atterbury.....	276,327	Apr. 24	1882	522	23	1571
Glass-molding press.....	W. Werts.....	270,526	Jan. 9	860	250	23	178
Glass-pot.....	T. A. Zellers.....	287,355	Oct. 23	1991	543	25	360
Glass-press.....	W. M. Wallace.....	281,740	July 24	1767	480 481	24	325
Glass press and mold.....	A. P. Brooke.....	275,984	Apr. 17	1442	397	23	1490
Glass. Production of enameled or metallized.....	J. Feix.....	276,014	Apr. 17	1476	.....	23	1496
Glass products. Manufacture of decorative.....	H. F. Miles.....	287,768	Oct. 30	2546	685	25	493
Glass roof.....	W. Ward.....	279,465	June 12	1069	296	23	2313
Glass screw-caps. Mold for forming.....	W. M. Wallace.....	270,162	Jan. 2	395	114	23	80
Glass shade.....	W. H. Brunt.....	281,609	July 17	1589	435	24	290
Glass signal-globes. Manufacture of.....	D. C. Ripley.....	276,746	June 5	87	25	23	2139
Glass-silvering apparatus.....	J. Starr.....	277,803	May 15	1576	430	23	1910
Glass. Sizing for gilding on.....	F. R. Grout.....	282,629	Aug. 7	188	.....	24	533
Glass-smoothing machine.....	C. Barbour.....	289,747	Dec. 4	473	134	25	969
Glass stands and pedestals. Manufacture of.....	S. G. Voagey.....	274,233	Mar. 20	1272	351	23	1069
Glass tiles for floors, &c. Mold for.....	L. D. Woodworth.....	286,924	Oct. 16	1519	417 418	25	287
Glass to a backing. Securing.....	J. W. Hyatt and C. S. Lockwood.....	286,541	Oct. 9	950	256	25	183
Glass tumblers. Grinding the bases of.....	O. W. Minard.....	280,941	July 10	752	209	24	138
Glass-washer.....	J. Lehr.....	274,792	Mar. 27	1988	553	23	1200
Glasses, goblets, &c. Machine for grinding drinking.....	P. E. Gauchot.....	284,834	Sept. 11	828	231 242	24	1051
Glasses, mirrors, &c. Machine for grinding elliptical.....	G. Schwarz.....	276,084	Apr. 17	1560	430	23	1509
Glassware.....	J. Locke.....	282,002	July 24	2092	573	24	383
Glassware. Apparatus used in etching.....	M. Ward and W. H. Brunt.....	270,165	Jan. 2	398	115	23	81
Glassware. Crayon for etching.....	H. Schulze-Berge.....	283,424	Aug. 21	1160	.....	24	721
Glassware. Device for handling.....	D. A. Brown.....	275,130	Apr. 3	334	92	23	1283
Glassware. Etching.....	H. Schulze-Berge.....	276,893	May 1	459	.....	23	1707
Glassware. Etching.....	H. Schulze-Berge.....	276,894	May 1	461	.....	23	1707
Glassware. Etching.....	H. Schulze-Berge.....	276,895	May 1	463	.....	23	1707
Glassware manufacture. Blown.....	E. H. Childs and C. R. Powell.....	275,999	Apr. 17	1457	402	23	1493
Glassware. Manufacture of.....	W. M. Wallace.....	275,298	Apr. 3	530	145	23	1316
Glassware. Manufacture of covered.....	T. Walton.....	286,096	Oct. 2	392	107 108	25	72
Glassware. Manufacture of open-ended.....	C. Challinor, Jr.....	275,996	Apr. 17	1454	401	23	1493
Glassware-mold.....	W. H. Brunt.....	281,610	July 17	1590	435	24	290
Glassware. Mold for pressing articles of.....	J. B. Lyon.....	285,496	Sept. 25	1633	459	24	1207
Glassware. Ornamenting.....	H. Schulze-Berge.....	276,897	May 1	465	.....	23	1707
Glassware. Process of and device for etching and decorating.....	H. Schulze-Berge.....	283,423	Aug. 21	1156	.....	24	721
Glassware. Tool for finishing hollow.....	H. Dietrich.....	285,345	Sept. 18	1448	408	24	1168
Glassware. Tool for forming the open ends of hollow.....	J. Willetts and W. Buttlear.....	280,546	July 3	251	68	24	45
Glazing-bar.....	C. H. Pennycook.....	275,261	Apr. 3	481	134	23	1308
Glazing the roofs of horticultural structures.....	T. W. Helliwell.....	284,421	Sept. 4	322	89	24	957
Gleaner and binder.....	M. G. Hubbard.....	281,367	July 17	1285	356	24	239
Globe. Automatic time.....	A. Jackson.....	273,092	Feb. 27	1914	536 537	23	796
Globe. Time.....	S. Moore and G. A. Hadley.....	270,329	Jan. 9	597	176	23	127



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Glove	A. C. Butts	290,664	Dec. 25	1640	451	25	1196
Glove	J. J. Kennedy	279,955	June 26	1661	467	23	2428
Glove	M. King	272,384	Feb. 13	1002	280	23	625
Glove	H. Urwick	276,310	Apr. 24	1844	513 514	23	1566
Glove	R. Raymond	282,667	Aug. 7	229	66, 67	24	539
Glove	E. V. Whitaker	284,150	Aug. 28	2064	572	24	894
Glove and mitten	E. Schoonmaker	289,792	Dec. 4	519	144	25	976
Glove and other fastener	E. F. Rate	275,854	Apr. 17	1291	355	23	1462
Glove, Aquatic	G. Ashman	256,106	Oct. 2	401	110	25	74
Glove-blank	J. A. Holbrook and G. Montgelas	283,605	Aug. 21	1367	382	24	760
Glove-fastener	G. E. Adams	275,796	Apr. 17	1225	335	23	1451
Glove-fastener	D. T. Chambers	281,969	July 24	2057	564	24	377
Glove-fastener	J. Hubbard	274,606	Mar. 27	1775	493	23	1162
Glove-fastener	E. J. Kraetzer	290,067	Dec. 11	860	244	25	1045
Glove-fastener	G. W. Mandrill	274,507	Mar. 27	1649	459	23	1140
Glove-fastening	W. S. Richardson	276,714	May 1	238	60	23	1665
Glove-finishing apparatus	A. C. Calderwood	276,768	May 1	312	81	23	1680
Glove, Grooming	R. W. Thompson	277,173	May 8	840	222	23	1776
Glove-holder	E. A. Franklin	273,502	Mar. 6	331	89	23	890
Glove-lacing	A. C. Mather	281,541	July 17	1500	412	24	276
Glove or mitten	L. Hoffman	280,823	July 10	605	169	24	113
Gloves, &c. Fastener for	D. T. Chambers	272,945	Feb. 27	1736	485	23	765
Gloves, &c. Fastener for	A. N. Cohen	270,019	Jan. 2	227	66	23	47
Gloves, &c. Fastener for	E. J. Kraetzer	281,376	July 17	1294	358	24	241
Gloves, Lacing	W. F. Foster	277,558	May 15	1294	348	23	1860
Gloves, Lacing	W. F. Foster	277,559	May 15	1295	348	23	1860
Gloves, shoes, &c. Fastening for	G. A. Lange	287,135	Oct. 23	1713	469	25	331
Glucose. Converting starch into	J. W. Decastro	279,354	June 12	930	.....	23	2291
Glucose. Manufacture of	A. G. Fell	270,042	Jan. 2	253	.....	23	52
Glucose. Manufacture of	H. J. Krebs	288,245	Nov. 13	565	157	25	615
Glucose or grape-sugar. Manufacture of	H. W. Bartol	276,334	Apr. 24	1892	.....	23	1573
Glucose, sugar, or similar articles. Machine for cutting blocks or cakes of solidified	C. C. Miller	277,320	May 8	1007	270	23	1805
Glue, &c. Apparatus for drying	W. A. Hoeveler	276,405	Apr. 24	1975	547	23	1588
Glue. Coloring	G. J. Lesser	276,609	May 1	81	.....	23	1642
Glue compound	C. M. Atkinson	282,034	July 31	2134	.....	24	396
Glue cutting and spreading machine	J. Schneible	282,930	Aug. 7	536	151	24	596
Glue-heater	W. C. Weatherly	280,540	July 3	245	66	24	44
Glue-size. Manufacture of	G. J. Lesser	276,608	May 1	81	.....	23	1642
Glue-stock washer	W. A. Hoeveler	276,040	Apr. 17	1511	416	23	1501
Gluing-machine	L. D. Norton	290,094	Dec. 11	891	253	25	1051
Gluten from the waste water of starch-works. Apparatus for extracting	C. D. Chase	289,979	Dec. 11	755	213	25	1027
Glycerine. Apparatus for the manufacture of	O. Laist	286,448	Oct. 9	838	227	25	163
Glycerine. Extracting	B. T. Babbitt	275,976	Apr. 17	1429	394	23	1488
Glycerine. Extracting	E. O. Baujard	278,849	June 5	241	.....	23	2164
Glycerine. Extracting	E. O. Baujard	280,894	July 10	686	.....	24	128
Glycerine from fatty matter. Extracting	M. Ams and V. Litzelmann	272,510	Feb. 20	1169	.....	23	659
Glycerine from the mother-liquor of soap-factories. Production of	J. K. Kessler	277,575	May 15	1315	.....	23	1863
Glycerine from the waste soap-liquor of soap-manufacture. Extracting	J. P. Battershall	276,551	May 1	8	.....	23	1628
Glycerine. Manufacture of	T. G. Walker	283,936	Aug. 28	1776	502	24	846
Glycerine obtained by the decomposition of fatty matters. Treating waters containing	E. Baujard	280,893	July 10	685	.....	24	128
Gold and silver from their ores and in forming amalgams. Method and apparatus employed in extracting	B. C. Malloy	290,259	Dec. 18	1094	305	25	1096
Gold and silver from their ores. Apparatus for extracting	R. Barker	273,011	Feb. 27	1810	507	23	778
Gold and silver from their ores. Apparatus for extracting	R. Barker	276,997	May 8	609	160	23	1736
Gold and silver from their ores. Apparatus for washing and separating	W. J. Tanner	285,523	Sept. 25	1666	469	24	1213
Gold and silver ores. Roasting and disintegrating	D. W. Birmingham	283,461	Aug. 21	1203	.....	24	729
Gold and silver ores. Roasting and disintegrating	D. W. Birmingham. (Reissue)	10,400	Nov. 6	496	.....	25	594
Gold for jewelry. Manufacture of	G. and F. Hartje	281,059	July 10	886	.....	24	164
Gold-leaf-carrying apparatus. Gilder's	C. A. Wright	289,486	Dec. 4	144	40	25	911
Gold-separating apparatus	J. A. Cable	274,083	Mar. 13	1073	296	23	1026
Gold-separator	N. Seymour	270,492	Jan. 9	804	234	23	167
Gold-separator	H. C. Walker and W. Bacon	288,520	Nov. 13	925	253	25	676
Gold-separator. Dry	S. C. Chaney	285,111	Sept. 18	1179	330 331	24	1120
Gold-washer	C. S. Betts and H. E. Wilson	279,122	June 12	652	178	23	2245
Gold-washer	J. P. Spencer	272,788	Feb. 20	1517	428	23	721
Gold washer and amalgamator	G. W. Kirk	270,813	Jan. 16	1222	352	23	254
Gold-washing machine	C. D. Lane	275,777	Apr. 10	1188	326	23	1437
Gong. Street-car	C. H. White	271,176	Jan. 23	1669	480	23	334
Governor	R. W. Gardner	287,822	Nov. 6	40	12	25	514
Governor	W. B. Mason	274,625	Mar. 27	1791	498	23	1165
Governor	L. O. Orton	288,728	Nov. 20	1192	325	25	728
Governor	H. Tabor	276,304	Apr. 24	1838	512	23	1565
Governor	E. Wright	283,842	Aug. 28	1661	469	24	825
Governor and cut-off. Automatic	H. H. Buffum	273,250	Mar. 6	10	3, 4	23	836
Governor and valve-gear	L. Skinner	287,879	Nov. 6	110	33	25	527
Governor attachment. Steam-engine	W. J. Buchanan	287,620	Oct. 30	2349	634	25	455
Governor. Cotton-gin-feed	J. D. Flanagan	279,367	June 12	954	265	23	2224
Governor cut-off-valve gear	I. W. Bragg	277,983	May 22	1794	469	23	1953
Governor. Electric	E. B. Parkhurst	286,841	Oct. 16	1337	365 366	25	257
Governor. Engine	G. H. Reynolds	285,679	Sept. 25	1849	528	24	1248
Governor. Engine-valve	S. E. Jarvis	273,999	Mar. 13	969	266	23	1008
Governor for mechanical powers	J. G. Rufe	276,080	Apr. 17	1556	429	23	1509

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Governor for railway-heads. Hygrometric .....	G. A. Ayers .....	278,488	May 29	2456	{ 669 670	23	2078
Governor for steam-engines. Automatic .....	T. A. Grist .....	277,710	May 15	1469	397	23	1890
Governor for steam-engines. Speed .....	J. D. Willoughby .....	282,480	Aug. 7	1	1	24	501
Governor. Marine-engine .....	C. C. Dow .....	279,861	June 19	1538	430	23	2400
Governor regulator. Engine .....	J. Williams .....	288,146	Nov. 6	433	192	25	583
Governor. Speed .....	J. C. Henry .....	270,430	Jan. 9	734	216	23	152
Governor. Speed .....	P. Wells .....	271,287	Jan. 30	1806	524	23	366
Governor. Speed .....	P. Wells .....	271,288	Jan. 30	1807	524	23	366
Governor. Steam .....	T. Malcolmson .....	289,427	Dec. 4	66	19	25	898
Governor. Steam .....	T. Malcolmson .....	289,428	Dec. 4	67	19	25	898
Governor. Steam-engine .....	F. H. Ball .....	284,164	Sept. 4	4	4	24	905
Governor. Steam-engine .....	H. R. Barnhurst and L. Skinner .....	289,801	Dec. 11	534	149	25	986
Governor. Steam-engine .....	M. I. Beaudreau .....	274,553	Mar. 27	1706	474	23	1150
Governor. Steam-engine .....	W. H. Craig .....	271,315	Jan. 30	1839	534	23	372
Governor. Steam-engine .....	C. J. Galloway and J. H. Beck- with .....	289,246	Nov. 27	1812	501	25	849
Governor. Steam-engine .....	C. S. Haskell .....	285,892	Oct. 2	146	41	25	29
Governor. Steam-engine .....	H. C. Hunt .....	270,546	Jan. 9	884	256	23	182
Governor. Steam-engine .....	S. E. Jarvis .....	280,042	June 26	1771	497	23	2447
Governor. Steam-engine .....	W. Knowles .....	279,097	June 5	599	163	23	2226
Governor. Steam-engine .....	W. Knowles .....	282,908	Aug. 7	515	144	24	592
Governor. Steam-engine .....	T. Malcolmson .....	270,684	Jan. 16	1065	305	23	223
Governor. Steam-engine .....	J. W. Nystrom .....	272,307	Feb. 13	887	{ 248 249	23	607
Governor. Steam-engine .....	J. M. Smith .....	282,789	Aug. 7	376	106	24	566
Governor. Steam-engine .....	N. W. Williams .....	280,984	July 10	798	222	24	147
Governor. Steam-engine ball .....	W. E. Badger .....	278,387	May 29	2334	638	23	2056
Governor-valve .....	W. E. Badger .....	289,954	Dec. 11	720	203	25	1020
Governor. Water-wheel .....	D. and A. Narracong .....	274,811	Mar. 27	2009	559	23	1204
Grab-operating mechanism. Counterbalance attach- ment to .....	C. W. Maclean .....	270,598	Jan. 16	953	276	23	204
Grader and scraper. Road .....	A. L. Griffith .....	276,393	Apr. 24	1963	543	23	1586
Grader and scraper. Road .....	P. Raab .....	288,261	Nov. 13	587	162	25	618
Grader. Road .....	S. Pennock .....	270,693	Jan. 16	1077	309	23	226
Grading and ditching machine .....	W. J. Edwards and G. B. Durkee .....	275,614	Apr. 10	975	{ 265 266	23	1401
Grading and leveling machine .....	J. M. Buckley .....	282,701	Aug. 7	285	89	24	549
Grading-machine .....	L. C. Gandy .....	288,420	Nov. 13	802	218	25	655
Grading-machine .....	H. T. Hays .....	276,583	May 1	53	15	23	1637
Grading-machine .....	G. H. Waldo .....	278,296	May 22	2193	{ 603 604	23	2022
Grafting-tool .....	K. McLennan .....	285,910	Oct. 2	167	48	25	33
Grain and offal drier .....	R. E. Schroeder .....	273,767	Mar. 13	691	185	23	960
Grain and seed cleaning mill .....	W. Bowen .....	272,637	Feb. 20	1333	374	23	688
Grain and seed separator and grader .....	W. Tate and W. T. Johnson .....	290,944	Dec. 25	2002	552	25	1260
Grain. Apparatus for the conversion of unmalted .....	E. Luck .....	278,985	June 5	450	{ 123 124	23	2200
Grain. Apparatus for the gradual reduction of .....	W. D. Gray .....	271,331	Jan. 30	1861	{ 540 541	23	375
Grain. Apparatus for the reduction of .....	H. F. Saint Requier .....	277,790	May 15	1561	425	23	1908
Grain, &c. Apparatus for transferring .....	L. Smith .....	289,316	Nov. 27	1891	527	25	865
Grain-binder .....	W. Aldrich .....	274,692	Mar. 27	1874	522	23	1180
Grain-binder .....	H. Amundson and A. Olson .....	279,309	June 12	860	{ 239 240	23	2280
Grain-binder .....	J. F. Appleby .....	275,114	Apr. 3	304	85, 86	23	1278
Grain-binder .....	J. F. Appleby .....	276,519	Apr. 24	2114	{ 587 588	23	1612
Grain-binder .....	H. D. W. Bailey .....	283,456	Aug. 21	1196	336	24	728
Grain-binder .....	H. D. W. Bailey .....	283,457	Aug. 21	1198	336	24	728
Grain-binder .....	W. R. Baker .....	283,744	Aug. 28	1542	{ 436 437	24	804
Grain-binder .....	J. P. Bullock .....	272,828	Feb. 20	1566	440	23	739
Grain-binder .....	J. P. Bullock .....	274,883	Mar. 27	2101	584	23	1218
Grain-binder .....	J. P. Bullock .....	286,899	Oct. 16	1410	{ 387 388	25	269
Grain-binder .....	W. W. Burson .....	273,811	Mar. 13	738	{ 200 201 202	23	969
Grain-binder .....	A. S. Clow .....	274,909	Apr. 3	20	6	23	1230
Grain-binder .....	J. S. Davis .....	274,441	Mar. 20	1537	{ 493 494	23	1114
Grain-binder .....	J. Deering and D. R. Symonds .....	274,111	Mar. 20	1116	308	23	1040
Grain-binder .....	O. Ferguson .....	286,799	Oct. 16	1282	346	25	247
Grain-binder .....	E. S. Frost .....	280,461	July 3	159	43, 44	24	29
Grain-binder .....	J. F. Gordon .....	283,096	Aug. 14	740	{ 207 208	24	639
Grain-binder .....	R. M. Hunter .....	273,089	Feb. 27	1906	{ 534 535	23	794
Grain-binder .....	E. W. Jenkins .....	271,074	Jan. 23	1543	445	23	314
Grain-binder .....	E. W. Jenkins .....	280,481	July 3	184	49	24	34
Grain-binder .....	S. A. Jones .....	280,379	July 3	47	13	24	11
Grain-binder .....	J. O. Lee .....	279,773	June 19	1428	{ 399 400	23	2382
Grain-binder .....	C. W. Levalley .....	282,335	July 31	2536	695	24	462
Grain-binder .....	C. Lidren .....	287,694	Oct. 30	2440	{ 636 657	25	474
Grain-binder .....	D. McPherson .....	279,101	June 5	607	{ 165 166	23	2227
Grain-binder .....	J. H. O'Hara .....	272,150	Feb. 13	702	193	23	573
Grain-binder .....	P. J. Olson .....	273,761	Mar. 13	678	{ 182 183	23	958
Grain-binder .....	N. T. Remy .....	276,469	Apr. 24	2054	570	23	1602
Grain-binder .....	J. F. Steward .....	272,597	Feb. 20	1277	356	23	678



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Grain-binder .....	J. F. Steward .....	272,598	Feb. 20	1279	357	23	678
Grain-binder .....	R. E. Strait .....	288,509	Nov. 13	914	250	25	674
Grain-binder .....	W. Van Horn .....	273,325	Mar. 6	106	31, 32	23	852
Grain-binder .....	J. W. Webster .....	278,639	May 29	2640	722	23	2109
Grain-binder .....	C. Whitney .....	279,297	June 12	845	234 235 236	23	2277
Grain-binder .....	C. Whitney .....	283,179	Aug. 14	838	234 235 236	24	656
Grain-binder .....	W. J. Wilkes .....	285,330	Sept. 18	1428	403 404	24	1165
Grain-binder .....	G. L. Williams and J. Dunstedter ..	279,210	June 12	745	204 205 206	23	2260
Grain-binder. Automatic .....	G. F. Green .....	277,709	May 15	1466	395 396	23	1890
Grain-binder band-securing mechanism .....	J. S. Davis .....	279,082	June 5	573	158	23	2222
Grain-binder band-securing mechanism .....	J. S. Davis .....	282,445	July 31	2676	734	24	488
Grain-binder bundle-discharger .....	J. R. Severance .....	277,356	May 8	1047	281	23	1813
Grain-binder cord grasper and cutter .....	A. Savage .....	274,828	Mar. 27	2027	564	23	1207
Grain-binder cord-knotter .....	J. B. McLeran .....	270,324	Jan. 9	591	174	23	125
Grain-binder cord-knotting apparatus .....	W. W. Burson .....	273,812	Mar. 13	744	202 203	23	970
Grain-binder cord-tying device .....	M. E. Blood .....	278,083	May 22	1907	522 523 524 525	23	1974
Grain-binder gaveling mechanism .....	J. S. Davis .....	283,866	Aug. 28	1687	476	24	829
Grain-binder knot-tying device .....	N. Jewett .....	284,430	Sept. 4	331	92	24	959
Grain-binder knotting-hook .....	G. G. Hunt .....	290,184	Dec. 11	995	281	25	1071
Grain-binder knotting mechanism .....	E. L. Bracken .....	270,378	Jan. 9	665	195	23	139
Grain-binder knotting mechanism .....	P. F. Hodges .....	286,819	Oct. 16	1306	355 356	25	252
Grain-binder knotting mechanism .....	P. F. Hodges .....	286,820	Oct. 16	1308	356 357 358	25	252
Grain-binder. Straw-band .....	H. Tuttle .....	280,335	June 26	2117	594 595	23	2509
Grain-binder twine-box .....	J. F. Appleby .....	290,658	Dec. 25	1632	449	25	1195
Grain-binder twine tension and take-up device .....	N. T. Remy .....	274,822	Mar. 27	2021	563	23	1206
Grain-binders. Bundle-discharging device for .....	C. M. Young .....	285,540	Sept. 25	1686	475	24	1217
Grain-binders. Bundle holder and dropper for .....	M. F. Sanders .....	273,317	Mar. 6	97	29	23	850
Grain-binders, &c. Endless carrier for .....	J. R. Severance .....	283,671	Aug. 21	1444	404 405 420 421	24	775
Grain-binders. Feeding and packing mechanism for .....	J. R. Severance .....	281,570	July 17	1533	421 422 423	24	281
Grain-binding apparatus .....	C. Lidren .....	287,695	Oct. 30	2442	657 658	25	474
Grain-binding machine .....	G. Esterly .....	278,524	May 29	2501	683	23	2086
Grain-binding machine .....	G. Esterly .....	281,623	July 17	1607	440	24	293
Grain-binding machine .....	J. Howard and E. T. Bousfield .....	274,772	Mar. 27	1967	547 548	23	1197
Grain-binding machine .....	P. J. Olson .....	273,760	Mar. 13	673	180 181	23	957
Grain-binding machines. Cord-tyer for .....	N. Jewett .....	277,739	May 15	1497	406	23	1895
Grain-carrier platform .....	W. R. Steiner .....	290,716	Dec. 25	1715	473	25	1210
Grain-cleaner .....	J. Burkholder .....	272,205	Feb. 13	770	213	23	585
Grain-cleaner .....	J. E. Cummins .....	274,468	Mar. 27	1580	434	23	1130
Grain-cleaner .....	J. Russell .....	284,489	Sept. 4	399	112	24	972
Grain cleaner, separator, and grader .....	W. E. Wild .....	275,104	Apr. 3	294	81	23	1277
Grain cleaner, separator, and grader .....	W. E. Wild .....	275,105	Apr. 3	296	81	23	1277
Grain-cleaning apparatus .....	W. Shaw .....	272,782	Feb. 20	1508	425	23	719
Grain-cleaning machine .....	J. R. Reynolds .....	284,672	Sept. 11	629	178	24	1016
Grain-cleaning machine .....	C. F. Shumaker .....	273,174	Feb. 27	2011	565 566	23	814
Grain-cleaning machine. Split- .....	L. Gathmann .....	283,480	Aug. 21	1224	344 345	24	733
Grain-conveyer .....	F. Bierce .....	286,764	Oct. 16	1239	334 335	25	240
Grain-cooler and drier .....	S. P. Cook .....	271,604	Feb. 6	25	7	23	445
Grain-cutting machine .....	W. Eberhard .....	283,981	Aug. 28	1828	516	24	856
Grain-cutting machine .....	R. L. Phelps .....	287,463	Oct. 30	2129	578	25	414
Grain-cutting machine .....	R. L. Phelps .....	287,464	Oct. 30	2130	578	25	414
Grain-cutting machine .....	H. E. Pryor .....	279,594	June 19	1228	341	23	2347
Grain-cutting machine .....	S. K. White .....	286,980	Oct. 16	1513	416	25	286
Grain-decorticating machine .....	J. Jürt .....	274,002	Mar. 13	972	267	23	1008
Grain-decorticator .....	S. Dedson .....	277,998	May 22	1815	496	23	1957
Grain-drier .....	A. E. Clutter .....	283,970	Aug. 28	1815	513	24	854
Grain-drier .....	J. Gregory and V. Lapham .....	288,428	Nov. 13	812	220	25	657
Grain-drier .....	J. C. Jacoby .....	286,203	Oct. 9	518	143	25	106
Grain-drier .....	J. C. Slaughter .....	282,013	July 24	2105	577	24	384
Grain drier and cooler .....	W. Beebe .....	284,266	Sept. 4	135	38	24	927
Grain-drill .....	A. C. Conner .....	282,847	Aug. 7	446	126	24	579
Grain-drill .....	M. F. Connett .....	289,893	Dec. 11	654	182	25	1008
Grain-drill .....	J. Conway .....	284,186	Sept. 4	34	9	24	910
Grain-drill .....	C. O. Gardiner .....	271,445	Jan. 30	2010	580	23	403
Grain-drill .....	H. Kuhlman .....	290,245	Dec. 18	1079	302	25	1093
Grain-drill .....	J. R. Rude and H. G. Swope .....	274,662	Mar. 27	1836	510 511	23	1174
Grain-drill .....	J. R. Rude and H. G. Swope .....	276,474	Apr. 24	2059	572	23	1603
Grain-drill .....	S. B., G. W., and J. R. Rude .....	275,862	Apr. 17	1302	358	23	1464
Grain-drill .....	A. and M. Runstetler .....	285,363	Sept. 18	1469	414	24	1172
Grain-drill .....	A. and M. Runstetler .....	287,779	Oct. 30	2559	689	25	495
Grain-drill .....	W. P., Jr., and W. P. Shortridge ..	279,027	June 5	506	137 138 139	23	2209

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Grain-drill .....	J. Smith .....	279,033	June 5	514	140	23	2211
Grain-drill .....	H. C. Starr and W. C. Vanneman .....	271,533	Jan. 30	2123	611	23	422
Grain-drill and corn-planter. Combined .....	J. L. Reed .....	281,558	July 17	1519	417	24	279
Grain-drill and cotton-planter. Space .....	J. D. Foster and V. C. Harris .....	270,048	Jan. 2	258	75	23	53
Grain-drill and fertilizer-distributor .....	D. F. Hull .....	282,456	July 31	2691	739	24	490
Grain-drill attachment .....	R. S. Carr and J. W. See .....	274,459	Mar. 27	1572	430	23	1128
Grain-drill attachment .....	H. C. Pratt .....	284,572	Sept. 4	504	141	24	989
Grain-drill fertilizer attachment .....	L. M. Watkins .....	285,711	Sept. 25	1896	538	24	1255
Grain-drill. Fertilizing .....	A. C. Hendricks .....	272,547	Feb. 20	1209	338	23	666
Grain-drill gearing .....	J. King .....	270,317	Jan. 9	578	170	23	123
Grain-drill hoe .....	E. D. Mead .....	280,496	July 3	200	53	24	36
Grain-drill. Walking .....	G. W., J. R., and S. B. Rude, and H. G. Swope. ....	274,661	Mar. 27	1834	509	23	1173
Grain-drills. Force-feed fertilizer attachment for .....	S. B. Hart .....	277,719	May 15	1476	399	23	1892
Grain-drills. Variable feed device for .....	W. F. Marks .....	277,306	May 8	991	266	23	1803
Grain. Drying .....	F. Schumacher .....	281,402	July 17	1327	367	24	247
Grain drying and cleaning and building-ventilating apparatus .....	M. A. Shepard .....	273,900	Mar. 13	851	308	23	987
Grain-drying and coffee-roasting apparatus .....	W. W. Dunn .....	284,728	Sept. 11	704	197	24	1030
Grain drying and cooling shelf .....	H. Cutler .....	277,686	May 15	1442	389	23	1885
Grain-drying machine .....	L. V. Moulton .....	288,357	Nov. 13	711	195	25	639
Grain-drying process and appliance .....	E. Thompson .....	290,719	Dec. 25	1719	474	25	1211
Grain-elevator .....	A. Bardeen .....	283,189	Aug. 14	855	239	24	659
Grain-elevator .....	J. B. Pelton .....	274,817	Mar. 27	2018	561	23	1205
Grain-elevator .....	M. F. Seeley .....	288,371	Nov. 13	737	200	25	643
Grain-elevator .....	N. G. Simonds .....	281,572	July 17	1537	421	24	282
Grain-elevator .....	J. E. Walsh .....	284,263	Sept. 4	132	37	24	927
Grain-elevator .....	W. Watson .....	281,214	July 10	1085	298	24	198
Grain-elevator .....	W. Watson .....	282,424	July 31	2648	726	24	483
Grain-elevator .....	W. Watson .....	282,425	July 31	2650	727	24	483
Grain-elevator .....	W. Watson .....	282,812	Aug. 7	402	114	24	571
Grain-elevator .....	W. Watson .....	287,595	Oct. 30	2312	625	25	449
Grain elevator and weigher. Portable .....	M. Scanlan and J. T. Hough .....	271,134	Jan. 23	1610	463	23	325
Grain elevator, conveyer, and cleaner. Combined pneumatic .....	M. Randolph .....	276,879	May 1	442	119	23	1704
Grain-elevator. Pneumatic .....	J. Lewis .....	285,047	Sept. 18	1100	307	24	1106
Grain, hay, &c. Process of and device for stowing and curing .....	O. W. Kendall .....	288,243	Nov. 13	563	156	25	614
Grain-header .....	E. Hickman .....	286,436	Oct. 9	825	223	25	160
Grain-header .....	J. A. Rumrill .....	289,144	Nov. 27	1692	469	25	826
Grain hulling and cleaning machine .....	S. K. Todd .....	290,288	Dec. 18	1137	319	25	1102
Grain hulling and granulating machine .....	G. S. Cranson .....	283,212	Aug. 14	883	246	24	664
Grain. Machine for dampening or wetting .....	J. Miller .....	278,996	June 5	466	128	23	2203
Grain. Machine for reducing wheat and other .....	O. H. Titus .....	286,973	Oct. 16	1503	413	25	285
Grain. Machine for the gradual reduction of .....	W. D. Gray .....	283,339	Aug. 14	1041	293	24	694
Grain, meal, &c. Machine for separating .....	J. Damp .....	282,707	Aug. 7	292	82, 83	24	550
Grain-meter .....	H. Griffith and L. F. Ramsey .....	287,535	Oct. 30	2216	602	25	431
Grain-meter .....	G. B. Lynch .....	283,351	Aug. 14	1064	299	24	699
Grain-meter .....	G. B. Lynch and T. J. Griffith .....	270,821	Jan. 16	1230	355	23	255
Grain-meter. Automatic .....	G. W. Sharp .....	286,645	Oct. 16	1087	293	25	213
Grain-meter. Automatic .....	E. M. Thorpe .....	281,164	July 10	1013	283	24	186
Grain. Mode of and mechanism for cleaning .....	W. L. Teter .....	286,744	Oct. 16	1215	328	25	235
Grain, ores, &c. Apparatus for pulverizing .....	F. Taggart .....	283,830	Aug. 28	1647	464	24	822
Grain. Process of and apparatus for cleaning .....	W. L. Teter. (Reissue) .....	10,275	Jan. 23	1702	492	23	339
Grain purifier and separator .....	C. F. A. Gramke .....	274,589	Mar. 27	1753	486	23	1158
Grain-scourer .....	S. Hanson and J. S. Leas .....	276,966	May 1	565	147	23	1723
Grain sconner and polisher .....	J. J. Souder .....	277,950	May 22	1751	477	23	1946
Grain-sconners. Cylinder for .....	J. H. Chase .....	288,309	Nov. 13	642	176	25	628
Grain-screen .....	J. D. Belton .....	279,215	June 12	749	203	23	2261
Grain-screen .....	C. E. Gage .....	287,637	Oct. 30	2393	645	25	465
Grain-separator .....	D. Best .....	270,001	Jan. 2	299	60	23	43
Grain-separator .....	J. B. Birdsell .....	278,082	May 22	1906	522	23	1974
Grain-separator .....	H. Campbell .....	287,756	Oct. 30	2525	681	25	489
Grain-separator .....	W. Crain .....	282,705	Aug. 7	290	82	24	550
Grain-separator .....	M. Forder and T. H. Pendergast .....	284,405	Sept. 4	301	84	24	954
Grain-separator .....	J. H. Loudonbeck .....	279,491	June 12	1102	304	23	2317
Grain-separator .....	W. Macy .....	290,592	Dec. 18	1544	425	25	1173
Grain-separator .....	J. Russell .....	284,490	Sept. 4	401	112	24	972
Grain-separator .....	P. Van Gelder .....	282,415	July 31	2634	722	24	480
Grain-separator .....	J. M. Welbourn .....	281,589	July 17	1559	427	24	285
Grain-separator .....	M. Wilcox .....	272,178	Feb. 13	736	203	23	579
Grain separator and cleaner .....	J. M. Laurenson, S. M. Staddon, and H. Laurenson. ....	270,816	Jan. 16	1225	354	23	235
Grain separator and cleaner .....	H. Parish .....	287,154	Oct. 23	1737	476	25	335
Grain separator and grader .....	P. Van Gelder .....	281,808	July 24	1859	508	24	343
Grain-separator hopper .....	J. Root .....	284,333	Sept. 4	216	60	24	941
Grain-separator riddle .....	J. H. Bell .....	280,007	June 26	1732	482	23	2439
Grain-separator shoe .....	A. H. Johnson .....	289,915	Dec. 11	682	180	25	1012
Grain-separators. Blast-regulator for .....	J. J. Moran .....	289,436	Dec. 4	77	22	25	900
Grain-shovel .....	M. W. Hanley .....	276,684	May 1	194	50	23	1637
Grain-shovel mechanism .....	J. S. Metcalf .....	278,993	June 5	460	126	23	2202
Grain-shovel mechanism. Automatic .....	C. Rinderknecht .....	270,485	Jan. 9	795	232	23	165



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Grain steaming and drying machine .....	L. V. Moulton .....	286,217	Oct. 9	533	146	25	108
Grain. Stowage of .....	T. F. Seery .....	288,500	Nov. 13	903	246	25	672
Grain-transfer apparatus. Pneumatic and automatic .....	L. Smith .....	279,034	June 5	517	141	23	2211
Grain-transferring apparatus. Mouth-piece for .....	L. Smith .....	289,315	Nov. 27	1890	526	25	865
Graining machine. Wood .....	E. Brillinger .....	288,302	Nov. 13	634	174	25	626
Graining-tool .....	J. Hammerl .....	273,519	Mar. 6	359	95	23	895
Graining-tool .....	J. Hammerl .....	285,999	Oct. 2	270	76	25	51
Grapple .....	R. L. Betts .....	276,658	May 1	147	38	23	1651
Grapple .....	J. W. Raymond .....	270,482	Jan. 9	793	232	23	165
Grapple .....	A. Sanford .....	283,422	Aug. 21	1155	327	24	721
Grapple .....	R. Stone .....	271,538	Jan. 30	2131	613	23	423
Grapple. Bowlder .....	J. Marshall .....	271,490	Jan. 30	2074	597	23	414
Grapple. Pipe .....	E. K. Green .....	281,492	July 17	1446	395	24	266
Grappling device .....	A. J. Gosnell .....	272,953	Feb. 27	1744	487	23	766
Grappling device .....	S. C. Swett and A. McCreary .....	269,971	Jan. 2	176	51	23	36
Grappling-hook for barrels, &c. .....	S. Van Patten .....	270,158	Jan. 2	390	113	23	79
Grappling-ring .....	C. H. Miller and W. P. Harrison .....	278,165	May 22	2017	555	23	1993
Grate .....	J. Ballou .....	286,574	Oct. 16	996	270	25	197
Grate .....	L. Bannister .....	272,514	Feb. 20	1173	328	23	660
Grate .....	L. Bannister .....	272,515	Feb. 20	1174	328	23	660
Grate .....	L. Bannister .....	272,937	Feb. 27	1727	482	23	763
Grate .....	L. Bannister .....	273,437	Mar. 6	254	68, 69	23	877
Grate .....	T. C. Joy .....	279,250	June 12	791	218	23	2268
Grate .....	J. Kroupa .....	286,140	Oct. 2	441	120	25	82
Grate .....	F. M. Lawrence .....	282,333	July 31	2534	694	24	462
Grate .....	T. H. Lucas .....	277,754	May 15	1519	412	23	1900
Grate .....	L. Merriman .....	285,425	Sept. 25	1556	438	24	1192
Grate .....	G. B. Mershon .....	276,616	May 1	86	24	23	1643
Grate .....	G. B. Mershon .....	281,384	July 17	1301	360	24	243
Grate .....	J. R. Robertson .....	290,476	Dec. 18	1392	385	25	1147
Grate .....	T. Rosser .....	288,864	Nov. 20	1348	370	25	758
Grate .....	S. D. Spence .....	278,191	May 22	2049	563	23	1998
Grate .....	W. A. Spicer .....	270,499	Jan. 9	814	238	23	169
Grate and lining .....	C. T. Barnes .....	281,658	July 24	1655	451	24	307
Grate attachment .....	J. C. Ogletree .....	270,246	Jan. 9	497	147	23	107
Grate. Automatic adjustable .....	F. A. Knox .....	279,770	June 19	1426	398	23	2381
Grate-bar .....	J. Elliott .....	290,672	Dec. 25	1906	526	25	1244
Grate-bar .....	W. H. Heeson .....	282,192	July 31	2360	650	24	431
Grate-bar .....	A. C. Manu .....	275,679	Apr. 10	1060	287	23	1415
Grate-bar .....	J. Ritchie .....	272,773	Feb. 20	1499	422	23	718
Grate-bar .....	C. Smith and J. Hutchinson .....	286,083	Oct. 2	374	103	25	68
Grate-bar .....	G. W. Walker. (Reissue) .....	10,296	Mar. 13	1093	301	23	1029
Grate-bar. Air-feeding .....	C. J. M. Hayna .....	276,178	Apr. 24	1682	465	23	1538
Grate-bar for furnaces, &c. ....	W. F. Newton, Jr. ....	271,508	Jan. 30	2095	602	23	418
Grate-cleaner .....	H. C. Beardley and J. M. Hopson .....	272,194	Feb. 13	754	208	23	592
Grate. Fire .....	P. Rexford .....	283,144	Aug. 14	796	222	24	648
Grate. Fire .....	B. S. Wash .....	277,526	May 15	1254	337	23	1854
Grate. Fire-place .....	A. Chase .....	286,176	Oct. 9	487	135	25	101
Grate. Fire-place .....	S. Watt .....	282,813	Aug. 7	404	114	24	571
Grate. Rotary .....	J. O'Keefe .....	284,471	Sept. 4	376	105	24	968
Grate. Self-feeding fire .....	S. Russell .....	275,525	Apr. 10	866	234	23	1382
Grate. Shaking .....	C. B. Boynton .....	278,864	June 5	263	76	23	2168
Grate. Shaking .....	J. H. McKeown .....	289,680	Dec. 4	381	109	25	954
Grate. Shaking and dumping .....	T. J. Thompson, Jr. ....	282,684	Aug. 7	251	73	24	543
Grater. Nutmeg .....	G. Wilson and E. B. Lobaack .....	274,073	Mar. 13	1060	292	23	1024
Grater. Vegetable .....	H. Rogers .....	284,487	Sept. 4	397	111	24	971
Grating. Window .....	L. N. Byar .....	284,117	Aug. 28	2022	562	24	888
Grave receptacle or vault .....	J. Legan .....	275,833	Apr. 17	1265	348	23	1457
Grease-cup .....	B. F. Ortman and L. G. Gilbert .....	278,172	May 22	2028	557	23	1994
Grease-trap .....	J. Tucker .....	286,975	Oct. 16	1505	414	25	285
Grease-trap .....	S. Wilcox .....	280,545	July 3	250	67	24	45
Grease-trap for sinks .....	J. Tucker .....	285,770	Sept. 25	1980	561	24	1268
Griddle. Cake .....	O. R. Hanchett .....	277,842	Feb. 6	311	85, 86	23	495
Griddle or pan lubricator .....	J. Potter .....	279,181	June 12	717	196	23	2256
Grinding and decorticating mill .....	R. H. Minister .....	284,466	Sept. 4	372	103	24	967
Grinding and graining device .....	C. N. Morris .....	279,001	June 5	470	129	23	2204
Grinding and polishing machine .....	W. B. Fenn .....	282,293	July 31	2468	680	24	451
Grinding and polishing machine .....	E. R. Ware .....	287,744	Oct. 30	2508	676	25	486
Grinding and polishing machine .....	E. R. Ware .....	289,323	Nov. 27	1907	530	25	868
Grinding and polishing wheel .....	J. H. Madden .....	277,144	Oct. 23	1726	472	25	333
Grinding apparatus. Portable .....	M. Lennon .....	287,447	Oct. 30	2109	573	25	409
Grinding-machine .....	A. Campbell .....	282,049	July 31	2156	591	24	399
Grinding-machine .....	J. M. Haigis .....	286,429	Oct. 9	816	221	25	159
Grinding-machine .....	A. W. McIntyre .....	288,718	Nov. 20	1172	322	25	725
Grinding-machine .....	J. Rentz .....	282,225	July 31	2395	659	24	438
Grinding-machine .....	I. N. Smith .....	281,151	July 10	1000	280	24	183
Grinding metal plates. Machine for .....	T. Settle .....	286,855	Oct. 16	1354	371	25	260
Grinding-mill .....	J. Beall .....	274,703	Mar. 27	1885	525	23	1182
Grinding-mill .....	J. M. Collier .....	270,747	Jan. 16	1145	328	23	239
Grinding-mill .....	T. O. Cutler .....	281,030	July 10	855	237	24	158
Grinding-mill .....	L. M. Devere and D. C. Stover .....	269,923	Jan. 2	117	35, 36	23	84
Grinding-mill .....	G. W. Deolittle .....	276,570	May 1	34	9, 10	23	1633
Grinding-mill .....	J. Fitzgerald .....	285,777	Sept. 25	1993	564	24	1270
Grinding-mill .....	C. A. Fredericks .....	282,068	July 31	2182	600	24	404
Grinding-mill .....	H. J. Hammond and H. S. Wilson .....	285,031	Sept. 18	1086	303	24	1104
Grinding-mill .....	E. G. Hastings .....	278,954	June 5	417	114	23	2195
Grinding-mill .....	D. R. Hoopes .....	281,072	July 10	906	253	24	167

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr's	Vol.	Page.
Grinding-mill	C. W. Lawrence	270,817	Jan. 16	1226	354	23	255
Grinding-mill	C. W. Lawrence	272,272	Feb. 13	654	239	23	601
Grinding-mill	S. Lucats	287,539	Nov. 6	59	18	25	518
Grinding-mill	G. B. Maynadier	284,048	Sept. 11	597	168	24	1011
Grinding-mill	G. B. Maynadier	286,838	Oct. 16	1334	364	25	257
Grinding-mill	R. McCully	274,209	Mar. 20	1243	342	23	1063
Grinding-mill	R. McCully	274,210	Mar. 20	1244	342	23	1063
Grinding-mill	E. H. and C. Morgan	281,911	July 24	1987	544	24	365
Grinding-mill	J. T. Obenchain	289,695	Dec. 4	415	116	25	958
Grinding-mill	U. H. Odell	279,880	June 19	1559	436	23	2404
Grinding-mill	S. C. Schofield	272,334	Feb. 13	927	258	23	613
Grinding-mill	S. C. Schofield	283,518	Aug. 21	1269	355	24	741
Grinding-mill	L. C. Springer	290,369	Dec. 18	1237	348	25	1121
Grinding-mill	D. C. Stover	272,917	Feb. 27	1702	476	23	759
Grinding-mill	D. C. Stover	282,682	Aug. 7	248	72	24	542
Grinding-mill	F. Wilson	281,814	July 24	1869	510	24	345
Grinding-mill	J. F. Winchell	273,927	Mar. 13	885	241	23	993
Grinding-mill	A. N. Wolf	279,067	June 5	558	153	23	2219
Grinding-mill. Feed.	E. H. and C. Morgan	270,826	Jan. 16	1235	356	23	257
Grinding-mill. Roller	J. B. Allfree	280,992	July 10	805	224	24	148
Grinding-mill. Roller	S. L. Bean	275,568	Apr. 10	917	248	23	1391
Grinding-mill. Roller	C. T. Hanna	272,043	Feb. 13	570	153	23	551
Grinding-mill. Roller	R. Morrell	283,639	Aug. 21	1403	393	24	767
Grinding-mill. Roller	W. Tennant	275,542	Apr. 10	885	239	23	1385
Grinding-mill. Roller	W. Tennant	275,543	Apr. 10	888	240	23	1386
Grinding-mill rollers. Machine for dressing	F. Messer	286,466	Oct. 9	855	232	25	166
Grinding-mill. Vertical-disk	H. Cutler	283,328	Aug. 14	1032	290	24	692
Grinding-mills. Automatic feed-regulator for	J. W. Hilliard	286,383	Oct. 16	1305	355	25	252
Grinding minerals, &c. Machine for	T. O. Cutler	278,407	May 29	2358	644	23	2060
Grinding-ring. Metallic	E. S. Howland	286,613	Oct. 16	1049	233	25	207
Grinding-roll feeder.	G. B. Root	287,724	Oct. 30	2479	668	25	481
Grinding substances and mixing the same with liquids. Apparatus for	G. T. Lewis	270,904	Jan. 23	1333	385	23	280
Grinding-wheel frame	D. B. Hyde	285,656	Sept. 25	1792	510	24	1237
Grindstone-arbor. Adjustable and detachable	E. R. Mason	282,546	Aug. 7	84	24	24	514
Grindstone-hanger	P. Bradford	282,262	July 31	2438	670	24	446
Grindstone-hood	E. R. Hyde and A. Valentine	279,248	June 12	789	217	23	2263
Grindstone-truing-tool holder	N. H. Snider	273,625	Mar. 6	494	133	23	919
Grindstone tool-holder	J. I. Carr	277,882	May 22	1675	457	23	1934
Grindstone tool-holder	J. I. Carr	277,883	May 22	1676	457	23	1934
Grindstone tool-holder	G. H. Strong and J. I. Carr	277,958	May 22	1761	480	23	1948
Grindstones and emery-wheels. Device for truing	C. E. W. Brown	275,579	Apr. 10	928	252	23	1393
Grindstones. Device for roughening	G. Andrews	272,615	Feb. 20	1304	363	23	682
Grindstones. Setting thimbles for hanging.	C. W. McCormick	283,630	Aug. 21	1394	390	24	765
Grip-staff or gripper	C. A. Gildemeyer	274,586	Mar. 27	1751	485	23	1157
Gripping device. Friction	A. B. Smith	288,879	Nov. 20	1368	377	25	761
Grist or flouring mill	A. Mariotte	278,718	June 5	56	17	23	2134
Grooming-machine	W. H. Clark	270,389	Jan. 9	678	201	23	142
Groove-cutter	J. Martignoni	271,646	Feb. 6	75	21	23	453
Grooving boards for boxes. Machine for	G. Wilson	287,207	Oct. 23	1810	497	25	347
Grub-pulling machine.	J. Ball	274,550	Mar. 27	1703	473	23	1149
Guard:							
See Berth-guard.	Plant and tree guard.						
Bolt-guard.	Pulley-guard.						
Car-guard.	Railway-guard.						
Car dust-guard.	Railway cattle-guard.						
Car-wheel guard.	Railway foot-guard.						
Carving-fork guard.	Railwaysafety-guard.						
Cattle-guard.	Razor-guard.						
Elevator-guard.	Rein-guard.						
Elevator safety-guard.	Roof snow-guard.						
Fork-guard.	Saw-guard.						
Handle-guard.	Spinning-frame thread-guard.						
Hatchway-guard.	Spinning-machine thread-guard.						
Hatchway safety-guard.	Switch-guard.						
Key-hole guard.	Trace-eye guard.						
Lamp-guard.	Vulcanizer safety-guard.						
Life-guard.	Window-guard.						
Miter-wheel guard.	Window-cleaning guard.						
Mosquito-guard.							
Gudgeon-roller	A. N. Ackerman	283,551	Aug. 21	1303	365	24	748
Guide and sign boards. Making	W. A. McCool	286,045	Oct. 2	327	91	25	60
Guide. Road.	C. A. Inglis	270,223	Jan. 9	473	139	23	103
Guitars. String-bridge for	E. Anderberg	292,147	July 31	2297	631	24	422
Gum and manufacturing the same. Chewing	A. H. Anbin	280,115	June 26	1851	166	23	2462
Gum compounds. Apparatus for working vulcanizable	A. C. Eddy	277,018	May 8	633	166	23	1740
Gum compounds. Working and vulcanizing	A. C. Eddy	277,019	May 8	637	166	23	1741
Gun. Air.	W. T. Chamberlain	279,538	June 19	1166	323	23	2335
Gun-barrel	J. H. Brown	230,738	Dec. 25	1747	483	25	1216
Gun-barrel. Auxiliary	L. S. Harrison	278,546	May 29	2525	689	23	2090
Gun-barrel cleaner	J. C. Petmoeck	289,132	Nov. 27	1678	465	25	824
Gun-barrels. Machine for turning	C. A. King	287,548	Oct. 30	2236	607	25	435
Gun. Blow	A. Wengenroth	286,513	Oct. 9	915	247	25	176
Gun. Breakdown	W. M. Scott and C. Proctor	288,670	Nov. 20	1111	305	25	716
Gun. Breech-loading	A. T. Brown	274,435	Mar. 20	1529	420	23	1113
Gun. Breech-loading	J. P. Burkhard and F. Novotny	288,618	Nov. 20	1042	287	25	704



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. ed.	Vol.	Page.
Gun. Breech-loading.....	W. H. Davenport.....	290,751	Dec. 25	1765	487	25	1219
Gun. Breech-loading.....	G. W. Hadley.....	275,377	Apr. 10	669	179	23	1348
Gun. Breech-loading.....	L. L. Hopburn.....	290,426	Dec. 18	1328	368	25	1136
Gun. Breech-loading bomb.....	E. Pierce. (Reissue).....	10,392	Oct. 9	990	267	25	190
Gun. Breech-loading composite.....	J. H. McLean and M. Coloney.....	282,548	Aug. 7	87	{ 24 25 26 }	{ 24 25 26 }	515
Gun-carriage.....	J. Vavasseur.....	273,199	Feb. 27	2039	{ 573 574 }	{ 23 24 }	819
Gun-case.....	E. B. Bronson.....	290,205	Dec. 18	1030	290	25	1085
Gun feeder. Machine.....	J. G. Accles.....	290,622	Dec. 18	1583	{ 435 436 }	{ 25 26 }	1180
Gun for destroying animals.....	E. A. Crepin and F. Rochat.....	274,279	Mar. 20	1330	367	23	1079
Gun-lock.....	A. T. Brown.....	289,062	Nov. 27	1596	442	25	809
Gun-lock safety attachment.....	J. Dero.....	290,867	Dec. 25	1901	525	25	1243
Gun-lock safety attachment.....	D. B. Wesson.....	289,875	Dec. 11	630	175	25	1003
Gun. Machine.....	B. B. Hotchkiss. (Reissue).....	10,280	Feb. 6	524	141	23	531
Gun. Machine.....	J. H. McLean.....	282,551	Aug. 7	92	27, 28	24	516
Gun. Machine.....	J. H. McLean.....	282,553	Aug. 7	97	29	24	517
Gun. Machine.....	J. H. McLean and M. Coloney.....	282,549	Aug. 7	88	26, 27	24	515
Gun. Machine.....	F. M. Shields.....	282,787	Aug. 7	374	106	24	566
Gun. Magazine.....	P. Boch.....	272,636	Feb. 20	1330	373	23	688
Gun. Magazine.....	P. Boch.....	276,522	Apr. 24	2120	{ 589 590 }	{ 23 24 }	1613
Gun. Magazine.....	J. M. and M. S. Browning.....	282,839	Aug. 7	434	123	24	577
Gun. Magazine.....	J. H. Bullard.....	287,229	Oct. 23	1839	503	25	352
Gun. Magazine.....	H. Carr.....	281,341	July 17	1253	348	24	234
Gun. Magazine.....	M. Coloney.....	282,499	Aug. 7	27	8	24	505
Gun. Magazine.....	J. H. McLean.....	282,552	Aug. 7	94	28	24	516
Gun. Magazine.....	J. H. McLean.....	282,554	Aug. 7	99	30	24	517
Gun. Magazine.....	J. Nemetz.....	273,131	Feb. 27	1959	551	23	805
Gun. Magazine.....	J. P. Simmons and S. Adams.....	275,085	Apr. 3	271	74	23	1272
Gun. Needle.....	J. M. and H. Villa.....	277,385	May 8	1076	290	23	1818
Gun-rest.....	J. E. V.-Leerbech and F. D. Volker-sen.....	271,251	Jan. 30	1753	507	23	357
Gun-rod. Jointed.....	L. Keller.....	275,050	Apr. 3	218	59	23	1263
Gun-sight.....	J. C. Kelton.....	280,484	July 3	187	49	24	35
Gun. Spring.....	S. E. Clark.....	288,548	Nov. 13	955	262	25	682
Gun-stock.....	S. N. Stevens.....	279,841	June 19	1510	422	23	2396
Gun. Three-barreled.....	W. T. Davis.....	278,688	June 5	17	5	23	2127
Gun-wad.....	F. G. Farnham.....	288,168	Nov. 6	462	129	25	568
Gun-wad.....	E. Redmond.....	274,378	Mar. 20	1457	399	23	1101
Gun-wad.....	O. F. Seibold.....	271,527	Jan. 30	2117	609	23	422
Gun-wiper.....	C. S. Leet.....	288,459	Nov. 13	852	230	25	664
Gun-wiper. Extension.....	J. S. Birch.....	276,660	May 1	149	38	23	1651
Gun. Wire-wound.....	B. B. Hotchkiss.....	269,936	Jan. 2	133	40	23	23
Gun. Wire-wound.....	W. E. Woodbridge.....	271,561	Jan. 30	2157	621	23	428
Guns and projectiles. Charging.....	W. T. Chamberlain.....	279,540	June 19	1167	323	23	2336
Guns. Auxiliary rifle-barrel for.....	H. T. Martin.....	271,883	Feb. 6	356	99	23	503
Guns. Cartridge-feeder for machine.....	L. F. Bruce.....	273,249	Mar. 6	8	3	23	836
Guns. Detachable magazine for magazine.....	H. Borchardt.....	273,448	Mar. 6	268	72	23	879
Guns. Ejector for magazine.....	J. M. Marlin.....	271,091	Jan. 23	1563	450	23	317
Guns. Extractor for breakdown.....	J. Maloney.....	271,645	Feb. 6	74	20	23	413
Guns. Loading-gate for magazine.....	W. Trabue.....	276,308	Apr. 24	1843	513	23	1566
Guns. Mounting.....	A. Preusser.....	281,643	July 17	1627	445	24	297
Gunpowder. Manufacture of.....	N. Wiard.....	273,209	Feb. 27	2058	{ 578 579 }	{ 23 24 }	822
Gymnastic chair.....	W. E. Kelly.....	284,024	Aug. 28	1905	534	24	868
Hair-crimper.....	J. A. Clothier.....	273,957	Mar. 13	920	252	23	999
Hair-crimper.....	J. D. Woodbury.....	283,183	Aug. 14	847	237	24	657
Hair-crimping tool.....	W. A. Hauce.....	278,944	June 5	408	111	23	2193
Hair from and into rope. Machine for untwisting and spinning.....	J. Spaulding.....	276,492	Apr. 24	2080	578	23	1607
Hair-front.....	N. S. Stowell.....	279,990	June 26	1699	477	23	2435
Hair. Grape-vine.....	H. Hufnagel.....	279,389	June 12	984	273	23	2299
Hair head-dress or wave.....	M. E. Thompson.....	276,306	Apr. 24	1841	512	23	1565
Hair-holder.....	H. E. Thorpe.....	284,341	Sept. 4	221	63	24	942
Hair-pin.....	B. F. Teal.....	269,897	Jan. 2	88	26	23	19
Hair-pin package.....	E. P. Haif.....	276,031	Apr. 17	1500	412	23	1499
Hair rooter, knitter, and hackle.....	M. Campbell.....	281,834	July 24	1891	516	24	349
Hair-springs. Manufacture of.....	J. Logan.....	287,448	Oct. 30	2109	574	25	409
Hair-springs. Muffle for tempering.....	F. H. Cornthell.....	283,700	Aug. 21	1479	417	24	782
Hair to the action of heated vapors. Device for exposing.....	D. G. Griffin.....	278,129	May 22	1975	543	23	1985
Hair-tonic.....	G. A. Leip.....	285,045	Sept. 18	1099	.....	24	1106
Hair-tonic.....	A. Miles.....	289,922	Dec. 11	689	.....	25	1014
Hair-tonic.....	J. A. Shattuck.....	277,165	May 8	830	.....	23	1774
Hair-tonic.....	W. M. Stark and F. George.....	284,918	Sept. 11	930	.....	24	1070
Hair-waves. Making.....	J. M. Baxter.....	289,957	Dec. 11	724	204	25	1020
Halter.....	R. H. Armstrong.....	281,952	July 24	2034	556	24	373
Halter.....	J. W. B. Carpenter.....	285,012	Sept. 18	1037	296	24	1099
Halter.....	E. A. Cooper.....	284,540	Sept. 4	463	131	24	983
Halter.....	A. G. Garfield.....	286,602	Oct. 16	1033	280	25	204
Halter.....	R. Mellinger.....	275,686	Apr. 10	1069	291	23	1417
Halter.....	R. Porter.....	280,237	June 26	1993	561	23	2487
Halter.....	H. Rorebeck.....	288,595	Nov. 13	1016	279	25	694
Halter.....	E. P. Sears.....	277,354	May 8	1046	280	23	1813
Halter.....	J. Thornton.....	277,380	May 8	1071	289	23	1817
Halter.....	C. S. Upton.....	283,539	Aug. 21	1388	360	24	744
Halter-clasp.....	F. A. Thomas.....	273,191	Feb. 27	2030	571	23	818
Halter-fastening device.....	J. Gibbons.....	278,931	June 5	391	107	23	2190
Halter-loop fastener.....	J. Gibbons.....	286,808	Oct. 16	1291	350	25	249
Halter-strap fastener.....	J. Gibbons.....	279,561	June 19	1191	330	23	2340
Halter-trimming.....	E. A. Cooper.....	284,541	Sept. 4	464	132	24	983
Halter-trimming.....	O. P. Letchworth.....	272,715	Feb. 20	1423	399	23	704

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Hammer	L. Carr	270,577	Jan. 16	926	267	23	198
Hammer	P. Hayden	287,222	Oct. 23	1903	520	25	364
Hammer	P. Hayden and A. A. Boyd	272,251	Feb. 13	825	230	23	596
Hammer	W. B. Hayden	270,429	Jan. 9	733	216	23	152
Hammer	L. E. Jones	273,096	Feb. 27	1920	537	23	797
Hammer	C. Lange	281,526	July 17	1484	407	24	273
Hammer	J. S. Mitchell	287,954	Nov. 6	206	60	25	543
Hammer	J. A. Outlaw	287,571	Oct. 30	2270	615	25	441
Hammer	T. H. Pendergast	280,853	July 10	639	180	24	119
Hammer	J. P. Quinette	283,815	Aug. 28	1634	460	24	820
Hammer	C. Roehl	289,028	Nov. 27	1554	429	25	802
Hammer	C. E. Smith	276,912	May 1	484	127	23	1711
Hammer	A. Waggoner	282,245	July 31	2420	665	24	442
Hammer	R. B. Whitzel	279,510	June 12	1127	312	23	2322
Hammer	R. B. Whitzel	279,511	June 12	1127	312	23	2322
Hammer	R. B. Whitzel	282,819	Aug. 7	411	116	24	573
Hammer	R. B. Whitzel	287,398	Oct. 23	2046	556	25	390
Hammer	J. A. Wilson	277,818	May 15	1590	435	23	1913
Hammer. Adjustable	C. Roehl	285,844	Oct. 2	76	23	25	16
Hammer and collar fastener	J. F. Becker	290,661	Dec. 25	1638	450	25	1196
Hammer attachment	C. H. Allen	272,183	Feb. 13	742	205	23	580
Hammer attachment	G. J. Letchworth	275,228	Apr. 3	445	124	23	1302
Hammer-fastener	G. Banks	280,554	July 3	260	70	24	47
Hammer-fastener	G. P. Bishop	272,021	Feb. 13	545	147	23	547
Hammer-fastener	J. R. Finly	276,963	May 1	563	146	23	1722
Hammer-fastener	J. Hudson	271,247	Jan. 30	1749	506	23	356
Hammer-fastener	A. Niccum	285,428	Sept. 25	1558	439	24	1193
Hammer-fastener	H. Tav	281,582	July 17	1551	424	24	224
Hammer-fastening. Metal	E. D. Fisher	288,322	Nov. 13	662	183	25	631
Hammer-strap fastener	R. G. Hanford, Jr.	274,763	Mar. 27	1954	543	23	1195
Hammer-tip	T. Brabson	282,261	July 31	2437	670	24	445
Hammer	G. W. Cook	283,379	Aug. 21	1107	312	24	712
Hammer	C. J. Grellner	275,645	Apr. 10	1022	276	23	1408
Hammer	C. J. Grellner	282,308	July 31	2496	685	24	455
Hammer	H. O. Hooper	271,709	Feb. 6	146	40	23	465
Hammer	H. Wiedmann	281,217	July 10	1090	300	24	199
Hammer and box opening and scraping device. Combined	J. J. Wylie	281,818	July 24	1874	512	24	345
Hammer and box-scraper	F. A. Cowles	275,025	Apr. 3	192	51	23	1258
Hammer. Atmospheric	J. C. Butterfield	285,389	Sept. 25	1509	424	24	1184
Hammer. Atmospheric	J. C. Butterfield	285,390	Sept. 25	1510	424	24	1185
Hammer. Atmospheric	J. C. Butterfield	290,650	Dec. 25	1863	520	25	1240
Hammer. Blacksmith's	A. Anderson	273,793	Mar. 13	719	195	23	966
Hammer. Bush	H. D. Martin	281,092	July 10	925	258	24	171
Hammer. Bush	A. Nelson	271,731	Feb. 6	172	47	23	470
Hammer. Drop	N. C. Stiles	270,146	Jan. 2	375	109	23	76
Hammer. Drop	N. C. Stiles. (Reissue)	10,324	May 8	1145	308	23	1829
Hammer. Foot-power	A. Standish	280,969	July 10	782	217	24	143
Hammer. Power	A. Beaudry	281,001	July 10	816	227	24	151
Hammer. Power	J. C. Butterfield	285,387	Sept. 25	1506	423	24	1184
Hammer. Steam	E. B. Meatyard	290,449	Dec. 18	1354	374	25	1140
Hammer. Steam	F. B. Miles	288,840	Nov. 20	1320	362	25	752
Hammers. Die and die-block for forge	J. H. Baker	280,998	July 10	813	226	24	150
Hammers. Helve of power	C. W. Willard	285,718	Sept. 25	1907	541	24	1257
Hammock	D. H. Blasgow and S. Fichtner	277,829	May 15	1605	438	23	1915
Hammock	J. Fichtner	276,234	Apr. 24	1751	485	23	1550
Hammock	C. E. Hiester	278,431	May 29	2389	652	23	2066
Hammock	B. Morton	285,299	Sept. 18	1395	394	24	1159
Hammock	F. A. Nelson	269,876	Jan. 2	62	19	23	15
Hammock	I. E. Palmer	270,836	Jan. 16	1249	359	23	259
Hammock	I. E. Palmer	270,837	Jan. 16	1250	360	23	259
Hammock	I. E. Palmer	272,311	Feb. 13	894	250	23	608
Hammock	I. E. Palmer	272,312	Feb. 13	896	251	23	608
Hammock	A. Pratt	273,388	Mar. 6	197	53	23	867
Hammock	G. W. Rich	280,681	June 26	1814	510	23	2455
Hammock and method of making the body of the same	A. O. Reed	277,161	May 8	826	218	23	1773
Hammock-carriage	H. H. Reed	269,881	Jan. 2	67	20, 21	23	16
Hammock or bed	C. Moore	273,756	Mar. 13	667	178	23	956
Hammock or bed-bottom	I. E. Palmer	271,510	Jan. 30	2098	603	23	418
Hammock-support. Folding	J. F. Pluche	290,921	Dec. 25	1968	543	25	1254
Hammocks. Spreading-stick for	J. H. Bates	271,767	Feb. 6	218	61	23	478
Hand-bag frame	G. Crouch	282,850	Aug. 7	450	127	24	580
Hand-bag or satchel	T. A. Freeman	281,482	July 17	1436	303	24	264
Hand-drill	D. F. Barber	284,799	Sept. 11	793	221	24	1044
Hand-drill	J. H. Hoague	281,068	July 10	898	250	24	166
Hand-protector	J. Doyle	276,231	Apr. 24	1745	484	23	1549
Hand-rail for stairways	T. Simonson	287,963	Nov. 6	227	64	25	547
Hand-rake	W. F. Drew	286,120	Oct. 2	417	114	25	77
Hand-rake	L. A. Schaeffer	289,567	Dec. 4	247	69	25	930
Hand-relief. Writer's	J. N. Wilson	282,595	Aug. 7	146	43	24	526
Hand-rest for books	C. H. Metz	286,051	Oct. 2	333	92	25	61
Handle							
See Ax-handle.	Mower-handle.						
Basket-handle.	Pestle-handle.						
Brush-handle.	Saw-handle.						
Coffin-handle.	Tea-kettle handle.						
Cover-handle.	Tool-handle.						
Dipper-handle.	Tub-handle.						
File-handle.	Umbrella and parasol handle.						
Knife-handle.	Valve-handle.						
Knife or tool handle.							
Handle.	J. E. Merriman	271,095	Jan. 23	1568	451	23	317
Handle attachment	H. P. Hood	275,914	Apr. 17	1362	375	23	1475



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Handle for carrying bundles, &c.	W. G. Grimm	275,902	Apr. 17	1348	371	23	1473
Handle for files and other tools	J. F. French	285,987	Oct. 2	256	72	25	49
Handle for files and other tools	J. F. French	285,988	Oct. 2	257	73	25	49
Handle for files and other tools	J. F. French	285,991	Oct. 2	260	73	25	49
Handle for files, &c.	J. F. French	288,045	Nov. 6	322	91	25	562
Handle for files, &c.	J. F. French	288,046	Nov. 6	323	91	25	562
Handle for files, &c.	J. F. French	288,047	Nov. 6	324	91	25	562
Handle for satchels, bags, &c.	E. Simon	270,852	Jan. 16	1263	364	23	262
Handle guard. Ax and tool.	G. P. Morrill	289,123	Nov. 27	1667	462	25	822
Handle hooks. Machine for forming tub-	J. H. Dunbar	281,984	July 24	2072	568	24	360
Handles to vessels of enameled ironware. Attaching-hanger.	F. G. and W. F. Niedringhaus	286,627	Oct. 16	1068	287	25	210
See Car-door hanger. Grindstone-hanger.							
Carboy-hanger. Hat and coat hanger.							
Carriage-body hanger. Picture-frame hanger.							
Curtain-hanger. Seed-corn hanger.							
Door-hanger. Shaft-hanger.							
Eaves-trough hanger. Shafting-hanger.							
Garment-hanger. Wall-paper hanger.							
Harmonic attachment for key-boards	J. F. Clifford and E. Corbett	274,464	Mar. 27	1576	{ 432 433 }	{ 23 23 }	{ 1129 1129 }
Harness	J. Beha	285,379	Sept. 25	1496	421	24	1182
Harness	P. J. Grandy	290,038	Dec. 11	830	234	25	1030
Harness	V. Smith	271,933	Feb. 6	424	116	23	515
Harness	E. P. Thornton	281,738	July 24	1765	480	24	325
Harness	J. Weirick	276,105	Apr. 17	1591	{ 439 440 }	{ 23 23 }	{ 1515 1515 }
Harness and box-loop press	T. W. Morse	275,843	Apr. 17	1280	351	23	1460
Harness and vehicle loop	E. Crawley and C. H. Albrecht	273,820	Mar. 13	755	205	23	971
Harness attachment	F. M. Boring	288,614	Nov. 20	1038	266	25	704
Harness attachment	S. Hemphill	286,004	Oct. 2	277	78	23	512
Harness back-band hook	O. Pitts	272,767	Feb. 20	1491	419	23	716
Harness back-band hook	W. C. Sherard	285,128	Nov. 6	415	118	25	580
Harness breast-chain	W. Rudolph, Sr	282,011	July 24	2103	576	24	384
Harness breast-strap slide	J. A. Park	272,753	Feb. 20	1474	414	23	713
Harness breeching-stay	R. P. Pearson	283,417	Aug. 21	1145	324	24	719
Harness, Carriage	W. Mulloy	272,897	Feb. 27	1682	470	23	756
Harness chafe-pad	C. W. Burgdorf	286,260	Oct. 9	590	161	25	118
Harness check-hook	A. C. Dietz	288,696	Nov. 20	1144	315	25	721
Harness check-hook	G. W. Fish	270,406	Jan. 9	701	207	23	146
Harness, Chime attachment for	W. H. Nichols	284,885	Sept. 11	888	250	24	1062
Harness, Controlling-strap for	G. Kinnier, Jr	284,563	Sept. 4	488	137	24	987
Harness-coupling	A. P. Gross	274,487	Mar. 27	1625	451	23	1136
Harness-coupling, Adjustable	L. Wartenberg	278,474	May 29	2440	666	23	2075
Harness-hook	S. R. Jarvis	274,782	Mar. 27	1977	550	23	1198
Harness line-holder	A. J. Larson	288,246	Nov. 13	566	157	25	615
Harness-loop	W. W. Bishop	283,559	Aug. 21	1318	368	24	750
Harness-loop	J. S. Ginger	279,741	June 19	1306	390	23	2376
Harness-loop	J. Kearville, Jr	289,269	Nov. 27	1836	507	25	854
Harness-loop	H. A. Pott	270,477	Jan. 9	789	230	23	164
Harness-loop	C. F. G. Stender	270,609	June 19	1243	345	23	2349
Harness or hame link	J. J. Kelly	277,290	May 8	974	261	23	1800
Harness-pad	J. F. Hessel	286,435	Oct. 9	824	223	25	160
Harness-pad	E. Kettering	277,291	May 8	974	262	23	1800
Harness-pad	R. J. Welles	270,711	Jan. 16	1099	315	23	230
Harness pad and tree	M. E. Zeller	274,078	Mar. 13	1067	294	23	1025
Harness-pad block	G. E. Bauder and A. M. Pease	278,079	May 22	1903	521	23	1973
Harness-pad machine	R. J. Welles	284,696	Sept. 11	663	166	24	1022
Harness-pad plate	D. McMillan	271,500	Jan. 30	2066	600	23	416
Harness-pad press	E. Carpenter	271,417	Jan. 30	1973	570	23	396
Harness-pad press	L. H. Urner	283,305	Aug. 14	997	280	24	666
Harness-pad press	F. M. White	276,946	May 1	539	159	23	1718
Harness pad-tree	H. G. Albrecht and C. Nielson	284,160	Sept. 4	1	1	24	905
Harness-pads. Machine for crimping	R. J. Welles	270,712	Jan. 16	1100	315	23	230
Harness-pads. Press for making	J. B. Noe	280,225	June 26	1978	556	23	2485
Harness pole-ring	D. Kirk	274,615	Mar. 27	1783	495	23	1164
Harness, Single	C. W. Burgdorf	290,530	Dec. 18	1470	406	25	1160
Harness-straps. Machine for channeling	T. K. Clark	283,570	Aug. 21	1332	372	24	753
Harness-suspender. Automatic	J. Knibbs	274,501	Mar. 27	1641	456	23	1139
Harness tail-piece and rein-protector	C. H. Mead, Jr	272,295	Feb. 27	1681	470	23	756
Harrow	K. Annison	274,249	Mar. 20	1294	356	23	1072
Harrow	S. Anderson	282,692	Aug. 7	262	75	24	544
Harrow	J. H. Barley	270,536	Jan. 9	871	253	23	180
Harrow	E. R. Bernhamer	273,246	Mar. 6	1	1	23	835
Harrow	C. A. Brostrom	290,525	Dec. 18	1463	404	25	1159
Harrow	T. S. Brown and G. Williams	283,069	Aug. 14	709	199	24	634
Harrow	J. Cameron	274,267	Mar. 20	1315	363	23	1076
Harrow	S. B. Carper	275,990	Apr. 17	1450	399	23	1492
Harrow	B. F. Christ	284,818	Sept. 11	513	227	24	1048
Harrow	H. Cobb	284,278	Sept. 4	150	41	24	929
Harrow	W. F. Dodge	273,479	Mar. 6	308	83	23	886
Harrow	H. Doolittle	283,083	Aug. 14	726	203	24	636
Harrow	A. C. Evans	281,755	July 24	1757	487	24	330
Harrow	J. G. Friedemann	280,303	June 26	2076	585	23	2502
Harrow	F. T. Gandy	284,832	Sept. 11	827	230	24	1051
Harrow	J. Gerstner	280,602	July 3	318	89	24	57
Harrow	A. Goodhart and G. Hemminger	270,417	Jan. 9	712	211	23	149
Harrow	A. E. Green	284,837	Sept. 11	835	233	24	1052
Harrow	M. W. Griffiths	270,055	Jan. 2	267	77, 78	23	55
Harrow	U. M. Hopkins	281,187	July 10	1050	290	24	193
Harrow	H. S. Howard	273,535	Mar. 6	378	100	23	899
Harrow	J. Kenton	273,105	Feb. 27	1931	541	23	799
Harrow	J. V. Lacey	284,309	Sept. 4	187	53	24	936

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Harrow.....	G. Lettenmyer.....	271,202	Jan. 23	1698	490	23	338
Harrow.....	C. P. Lewis.....	274,347	Mar. 20	1421	389	23	1094
Harrow.....	J. H. and P. Lux.....	280,751	July 3	503	143	24	90
Harrow.....	J. C. McDorman.....	281,095	July 10	928	259	24	171
Harrow.....	J. L. McKay.....	271,499	Jan. 30	2085	600	23	416
Harrow.....	A. Michael.....	285,501	Sept. 25	1640	461	24	1208
Harrow.....	W. H. Myers.....	288,100	Nov. 6	385	109	25	574
Harrow.....	E. L. Nash and B. R. Pennybacker, Jr.	283,472	Nov. 13	871	236	25	667
Harrow.....	F. Nishwitz.....	288,658	Nov. 20	1095	{ 300 301 }	25	713
Harrow.....	H. T. Noble.....	283,805	Aug. 28	1618	456	24	813
Harrow.....	J. Y. Payton.....	279,793	June 19	1452	407	23	2386
Harrow.....	J. D. Privett.....	274,819	Mar. 27	2019	562	23	1206
Harrow.....	B. F. Rix.....	287,965	Nov. 6	223	63	25	546
Harrow.....	F. C. Romkey.....	286,154	Oct. 2	457	124	25	85
Harrow.....	J. H. Romkey.....	279,437	June 12	1040	288	23	2308
Harrow.....	J. Schindler.....	289,860	Dec. 11	612	170	25	1001
Harrow.....	J. A. Thronson.....	278,632	May 29	2633	720	23	2108
Harrow.....	W. P. Triggs.....	286,974	Oct. 16	1504	414	25	285
Harrow.....	T. B., W., and G. W. Ward.....	274,066	Mar. 13	1048	289	23	1021
Harrow.....	A. A. Weris.....	287,353	Oct. 23	1990	542	25	380
Harrow.....	L. S. Wheeler.....	279,060	June 5	550	151	23	2217
Harrow, Adjustable.....	J. L. Laughlin.....	274,125	Mar. 20	1137	313	23	1044
Harrow and clod-breaker. Rotary.....	B. Smith.....	287,479	Oct. 30	2149	{ 584 585 }	25	418
Harrow and clod-crusher. Combined.....	S. Miller.....	285,644	Sept. 25	1810	515	24	1240
Harrow and crusher. Combined.....	J. Miller.....	272,074	Feb. 13	610	165	23	557
Harrow and cultivator.....	W. H. Carruth.....	271,599	Feb. 6	21	5	23	444
Harrow and cultivator. Combined.....	L. W. Fillebrown.....	273,697	Mar. 6	585	156	23	934
Harrow and cultivator. Combined.....	L. A. John.....	289,659	Dec. 4	357	101	25	950
Harrow and cultivator. Combined.....	J. W. Pollock.....	276,071	Apr. 17	1544	425	23	1507
Harrow and cultivator. Wheel.....	C. H. Eggleston.....	272,668	Feb. 20	1368	384	23	694
Harrow and drill. Spring-tooth.....	M. B. Williams and H. Marvel.....	280,548	July 3	254	68	24	46
Harrow and hay-rake teeth. Device for fastening.....	M. McDowell.....	286,213	Oct. 9	530	145	25	108
Harrow and roller. Combined.....	G. G. Seeger.....	273,320	Mar. 6	99	30	23	851
Harrow and seed-sower. Combined rotary-disk.....	J. Imler.....	282,526	Aug. 7	63	19	24	511
Harrow and stalk-cutter. Combined.....	A. Albies.....	280,551	July 3	257	69	24	46
Harrow and stalk-cutter or roller. Combined rotary.....	J. Barker.....	273,009	Feb. 27	1808	506	23	778
Harrow attachment.....	W. P. Kirkland.....	284,307	Sept. 4	186	52	24	936
Harrow. Corn.....	S. Y. Miller.....	270,241	Jan. 9	492	145	23	107
Harrow-coupling.....	P. Krier.....	280,382	July 3	53	14	24	12
Harrow. Disk.....	J. S. Corbin.....	273,966	Mar. 13	929	255	23	1001
Harrow. Double.....	G. F. Flynn.....	275,374	Apr. 10	666	178	23	1348
Harrow. Flexible.....	J. S. Nautz.....	280,848	July 10	635	179	24	118
Harrow. Pulverizing, seeding, and fertilizing.....	J. Stephens.....	283,160	Aug. 14	817	228	24	651
Harrow. Revolving.....	T. McClelland.....	290,781	Dec. 25	1796	496	25	1225
Harrow. Riding.....	T. L. Cone.....	289,232	Nov. 27	1796	497	25	846
Harrow. Riding.....	M. P. Mighell and A. J. Hull.....	272,454	Feb. 20	1005	309	23	646
Harrow. Riding.....	T. Van Ostrand.....	273,196	Feb. 27	2035	573	23	819
Harrow, roller, and cultivator. Combined.....	W. H. White.....	288,900	Nov. 20	1392	384	25	766
Harrow, roller, and scraper. Combined.....	J. Harter.....	277,029	May 8	652	170	23	1743
Harrow, roller, and seeder. Combined.....	J. R. Bane.....	284,709	Sept. 11	679	{ 191 192 }	24	1025
Harrow, roller, &c. Combined.....	J. D. McKinnon.....	289,118	Nov. 27	1661	{ 460 461 }	25	821
Harrow. Rotary.....	J. R. Bane.....	272,112	Feb. 13	665	181	23	566
Harrow. Rotary.....	P. Offenbacher.....	270,245	Jan. 9	496	146	23	107
Harrow. Seed-drilling.....	A. M. Knoll.....	290,244	Dec. 18	1079	301	25	1093
Harrow, seed-planter, and cultivator. Combined.....	R. F. Ellis.....	278,113	May 22	1947	534	23	1981
Harrow. Spring-tooth.....	A. O. Bement.....	272,939	Feb. 27	1729	483	23	764
Harrow. Spring-tooth.....	P. F. Wells.....	274,684	Mar. 27	1862	518	23	1178
Harrow. Spring-toothed sulky.....	S. O. Hickok.....	270,067	Jan. 2	281	83	23	57
Harrow. Sulky.....	S. H. Cawley.....	289,616	Dec. 4	302	84	25	941
Harrow. Sulky.....	J. S. Cleveland.....	282,271	July 31	2450	674	24	448
Harrow. Sulky.....	T. G. Cook.....	288,164	Nov. 6	456	127	25	587
Harrow. Sulky.....	J. Feess.....	275,030	Apr. 3	198	53	23	1259
Harrow. Sulky.....	E. E. Gillett.....	274,311	Mar. 20	1371	376	23	1085
Harrow. Sulky.....	T. B. Nutting.....	287,852	Nov. 6	72	22	25	520
Harrow-sulky.....	D. H. Glidden.....	289,405	Dec. 4	39	12	25	894
Harrow-tooth.....	J. T. Clarkson.....	282,054	July 31	2164	594	24	400
Harrow-tooth.....	I. H. Reiner.....	282,223	July 31	2394	659	24	438
Harrow-tooth.....	P. Stanton.....	278,287	May 22	2181	600	23	2020
Harrow-tooth clamp.....	L. J. Stanton.....	271,938	Feb. 6	427	117	23	516
Harrow-tooth fastening.....	G. W. and F. E. Arnold.....	276,209	Apr. 24	1721	476	23	1545
Harrow-tooth holder.....	F. W. Herrmann.....	289,260	Nov. 27	1826	504	25	852
Harrow-tooth socket.....	P. C. and I. A. Carstensen.....	288,773	Nov. 20	1241	340	25	738
Harrow. Wheel.....	C. F. Hornbeck.....	272,254	Feb. 13	828	231	23	596
Harrow. Wheel.....	T. A. Sweet.....	279,613	June 19	1247	346	23	2350
Harvester.....	W. R. Baker and H. E. Pridmore.....	275,977	Apr. 17	1430	395	23	1488
Harvester.....	R. W. Benedict.....	282,040	July 31	2141	588	24	397
Harvester.....	J. Bordwell.....	290,733	Dec. 25	1740	{ 480 481 }	25	1215
Harvester.....	D. R. Brown.....	276,764	May 1	307	79, 80	23	1679
Harvester.....	C. Colahan.....	285,464	Sept. 25	1599	449	24	1200
Harvester.....	J. S. Davis.....	271,430	Jan. 30	1989	{ 574 575 }	23	399
Harvester.....	J. S. Davis.....	272,217	Feb. 13	780	{ 216 217 }	23	587
Harvester.....	J. S. Davis.....	272,377	Feb. 13	982	{ 275 276 }	23	623
Harvester.....	C. M. Grim.....	289,090	Nov. 27	1626	450	25	814
Harvester.....	G. G. Hunt.....	281,363	July 17	1286	356	24	240
Harvester.....	J. W. Irwin.....	273,686	Mar. 6	575	153	23	932
Harvester.....	S. D. Maddin.....	288,353	Nov. 13	707	194	25	638



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Harvester.....	J. P. Manny.....	276,847	May 1	401	106	23	1696
Harvester.....	L. Miller.....	276,449	Apr. 24	2031	563	23	1598
Harvester.....	H. E. Pridmore.....	270,120	Jan. 2	335	98, 99	23	68
Harvester.....	M. T. Ridout.....	279,106	June 5	619	169	23	2228
Harvester.....	J. F. Seiberling.....	290,484	Dec. 18	1402	387	25	1149
Harvester.....	O. Simpson. (Reissue).....	10,354	July 10	1102	388	24	201
Harvester.....	W. R. Smith.....	276,490	Apr. 24	2077	576	23	1606
Harvester.....	L. Sweet.....	277,078	May 8	720	577	23	1755
Harvester.....	C. E. Thorne.....	284,686	Sept. 11	649	187	23	1755
Harvester.....	J. F. Tibbets.....	286,505	Oct. 9	905	183	24	1020
Harvester and grain-binder. Combined	A. O. Carman.....	269,826	Jan. 2	5	244	25	174
Harvester and husker. Combined corn	W. H. Secor.....	281,569	July 17	1531	3, 4	23	3
Harvester and truck. Combined	J. F. Steward.....	276,642	May 1	192	420	24	281
Harvester attachment.....	I. E. Arner.....	272,016	Feb. 13	539	32	23	1648
Harvester attachment.....	W. H. Turner.....	284,778	Sept. 11	765	146	23	546
Harvester. Bean.....	W. Bradford.....	270,381	Jan. 9	668	214	24	1040
Harvester. Bean.....	E. S. Simmons.....	280,966	July 10	779	196	23	140
Harvester-binder.....	J. D. Heebner.....	278,956	June 5	420	216	24	143
Harvester-binder.....	L. Miller.....	271,253	Jan. 30	1755	114	23	2195
Harvester-binder.....	L. Miller.....	271,254	Jan. 30	1759	115	23	357
Harvester-binder attachment.....	M. Hedrick.....	280,619	July 3	336	508	23	358
Harvester binding attachment.....	E. Ebi.....	278,521	May 29	2497	509	24	60
Harvester binding attachment.....	E. M. Touseley.....	283,935	Aug. 28	1775	682	23	2085
Harvester bundle-carrier.....	J. W. Reid.....	271,119	Jan. 23	1593	501	24	846
Harvester bundle carrier and dropper.....	J. K. Worthington.....	282,942	Aug. 7	552	458	23	322
Harvester chain-rake.....	J. H. Diekey.....	276,008	Apr. 17	1468	216	24	599
Harvester. Clover.....	J. D. Otis.....	290,599	Dec. 18	1551	494	23	1494
Harvester. Corn.....	C. Baltzell.....	277,660	May 15	1411	408	25	1175
Harvester. Corn.....	J. S. Briggs.....	286,772	Oct. 16	1247	380	23	1880
Harvester. Corn.....	J. Fry.....	290,027	Dec. 11	815	381	25	241
Harvester. Corn.....	A. W. Taylor.....	274,843	Mar. 27	2042	229	23	1037
Harvester. Corn.....	R. H. Taylor.....	280,687	July 3	419	230	23	1210
Harvester. Corn.....	S. E. Weaver.....	286,682	Oct. 16	1386	118	24	75
Harvester. Corn and cane.....	O. H. Judd and C. T. Rawalt.....	276,422	Apr. 24	1995	380	25	265
Harvester. Cotton.....	C. D. Leach.....	284,642	Sept. 11	587	381	23	1592
Harvester. Cotton.....	C. T. Mason, Jr.....	286,032	Oct. 2	313	552	24	1010
Harvester. Cotton.....	J. and J. E. Myers.....	286,055	Oct. 2	338	166	25	58
Harvester. Cotton.....	G. N. Todd.....	275,094	Apr. 3	282	88	24	62
Harvester. Cotton.....	G. N. Todd.....	285,856	Oct. 2	92	77	23	1274
Harvester-cover.....	W. H. Hill.....	285,410	Sept. 25	1534	27, 28	25	19
Harvester-cutter.....	I. F. Bassford.....	281,956	July 24	2039	432	24	1189
Harvester-cutter.....	S. E. Conner and J. P. Finch.....	275,595	Apr. 10	946	433	23	374
Harvester-cutter.....	H. L. Hopkins.....	273,082	Feb. 27	1889	257	23	1396
Harvester-cutter.....	H. L. Hopkins.....	273,083	Feb. 27	1891	531	23	792
Harvester-cutter-bar.....	J. K. Case.....	271,787	Feb. 6	245	531	23	792
Harvester-cutter-bar.....	W. H. Farra.....	278,922	June 5	383	69	23	423
Harvester-cutter-bar.....	M. W. Kiefer.....	288,342	Nov. 13	692	105	23	2188
Harvester-cutter-bar.....	J. E. Lewis.....	276,838	May 1	392	191	25	636
Harvester-cutter-bar.....	S. B. Robbins.....	271,127	Jan. 23	1604	104	23	1695
Harvester-cutter-bar.....	D. Shirley.....	280,250	June 26	2008	461	23	323
Harvester cutting apparatus.....	E. S. Snyder.....	283,292	Aug. 14	982	564	23	2490
Harvester grain-binder.....	W. M. Piatt.....	276,458	Apr. 24	2039	274	24	683
Harvester grain-binder.....	S. B. Robbins.....	271,126	Jan. 23	1602	566	23	1600
Harvester. Grain-binding.....	M. E. Blood.....	275,751	Apr. 10	1150	567	23	323
Harvester. Grain-binding.....	J. S. Davis.....	275,330	Apr. 3	569	460	23	1430
Harvester. Grain-binding.....	W. W. Marsh and M. E. Blood.....	275,681	Apr. 10	1062	461	23	1322
Harvester. Grain-binding.....	L. Miller.....	276,448	Apr. 24	2027	155	23	1416
Harvester. Grain-binding.....	L. Miller.....	290,459	Dec. 18	1368	156	25	1143
Harvester grain-divider.....	E. Barnhard and A. F. Thomas.....	282,947	Aug. 14	563	157	24	607
Harvester grain-elevator.....	O. B. Colcord.....	277,993	May 22	1808	158	23	607
Harvester-knife grinder.....	G. W. King.....	270,548	Jan. 9	887	288	23	1956
Harvester knife-grinder.....	G. W. King.....	285,492	Sept. 25	1629	494	23	183
Harvester-pitman.....	K. Annensen.....	276,149	Apr. 24	1648	257	24	1206
Harvester platform adjustment.....	D. R. Preston.....	278,596	May 29	2581	457	23	1333
Harvester-rake.....	S. D. Bates.....	278,850	June 5	242	705	23	2099
Harvester-rake.....	C. Colahan.....	284,723	Sept. 11	698	242	23	2164
Harvester-rake.....	O. Cooley.....	272,212	Feb. 13	777	196	24	1028
Harvester-rake.....	C. Lidren.....	278,979	June 5	443	215	23	566
Harvester-rake.....	C. Madson.....	283,409	Aug. 21	1136	120	23	2199
Harvester-rake.....	S. B. Robbins.....	271,124	Jan. 23	1600	121	24	718
Harvester rake-arm.....	O. Kromer.....	278,023	May 22	1846	321	23	323

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &	Vol.	Page.
Harvester-rake trip-gear .....	W. A. Osborn .....	280,074	June 26	1805	{ 507 508 }	23	2453
Harvester-rake trip mechanism .....	W. F. Burditt .....	279,702	June 19	1354	{ 377 378 }	23	2368
Harvester-reel .....	K. Anunsen .....	276,148	Apr. 24	1648	455	23	1533
Harvester-reel .....	J. S. Davis .....	277,996	May 23	1812	495	23	1957
Harvester-reel .....	G. G. Hunt .....	286,304	Oct. 9	665	177	25	131
Harvester-reel .....	N. Jewett .....	284,304	Sept. 4	183	51	24	935
Harvester-reel .....	F. F. Kanne. (Reissue) .....	10,366	Jan. 2	434	{ 126 127 }	23	90
Harvester-reel .....	F. F. Kanne .....	272,057	Feb. 13	589	159	23	554
Harvester-reel .....	W. F. Olin .....	286,629	Oct. 16	1070	288	25	210
Harvester-reel .....	H. E. Pridmore .....	270,910	Jan. 23	1341	387	23	281
Harvester-reel .....	W. J. Pulver .....	270,336	Jan. 9	606	{ 172 179 }	23	128
Harvester-reel .....	S. B. Robbins .....	271,125	Jan. 23	1601	460	23	323
Harvester-reels. Apparatus for adjusting .....	G. H. Howe .....	288,811	Nov. 20	1285	352	25	746
Harvester-reels. Apparatus for adjusting .....	J. M. Rosebrooks .....	270,341	Jan. 9	612	180	23	129
Harvester. Self-binding .....	I. E. Arner .....	281,227	July 17	1108	305	24	209
Harvester sickle-bar .....	C. Schmidt .....	271,923	Feb. 6	416	113	23	513
Harvester-sickle driving mechanism .....	G. H. Carver .....	282,494	Aug. 7	18	5	24	504
Harvester traction-wheel .....	R. H. Dixon .....	271,612	Feb. 6	35	9	23	446
Harvester traction-wheel .....	W. N. Whiteley and W. Bayley .....	279,061	June 5	551	151	23	2217
Harvester-wheel .....	L. Miller and A. E. Ellinwood .....	276,450	Apr. 24	2032	564	23	1598
Harvester-wheel .....	J. R. Severance .....	289,150	Nov. 27	1698	471	25	827
Harvesters and mowing-machines. Adjustable reel for .....	J. D. Nix .....	290,792	Dec. 25	1805	{ 499 500 }	25	1227
Harvesters. Automatic gaveling-rake for .....	S. G. Randall .....	290,801	Dec. 25	1824	{ 503 504 }	25	1229
Harvesters. Bundle-separating attachment for self-binding .....	C. A. and N. S. Riddock .....	270,486	Jan. 9	797	233	23	165
Harvesters. Cover for self-binding .....	W. H. Turner .....	270,862	Jan. 16	1273	367	23	264
Harvesters. Endless carrier for .....	W. R. Steiner .....	290,715	Dec. 25	1714	{ 472 473 }	25	1210
Harvesters. Grain-adjusting device for .....	M. E. Blood .....	278,492	May 29	2462	672	23	2079
Harvesters. Grain-carrier for .....	J. S. Davis .....	285,580	Sept. 25	1731	{ 459 490 }	24	1225
Harvesters. Sheaf-gatherer for self-binding .....	E. S. Williams .....	279,300	June 12	853	236	23	2278
Harvesters. Transporting frame and wheel for .....	A. Gump .....	276,581	May 1	51	14	23	1636
Harvesting and binding machine. Grain .....	G. Esterly .....	282,065	July 31	2177	{ 598 599 }	24	403
Harvesting-machine .....	R. Brown .....	285,730	Sept. 25	1925	{ 545 546 }	24	1260
Harvesting-machine .....	R. Eickemeyer .....	271,694	Feb. 6	129	36	23	462
Harvesting-machine .....	E. W. Jenkins .....	283,243	Aug. 14	930	259	24	673
Harvesting machine. Cotton .....	W. L. Black .....	276,661	May 1	150	38, 39	23	1651
Harvesting machine. Grain .....	G. Esterly .....	288,784	Nov. 20	1251	343	25	740
Harvesting machine. Grain .....	J. F. Gordon .....	283,097	Aug. 14	742	{ 208 209 }	24	639
Harvesting machine. Grain .....	C. Whitney .....	281,811	July 24	1864	{ 509 510 }	24	343
Hasp-hook .....	G. H. Sargent .....	290,119	Dec. 11	925	263	25	1058
Hasp-lock .....	J. C. Doggs .....	282,607	Aug. 7	160	48	24	529
Hasp-lock .....	J. C. Franklin .....	283,335	Aug. 14	1039	292	24	694
Hasp-lock .....	E. R. Michaelis .....	289,849	Dec. 11	601	167	25	999
Hat .....	J. P. Beatty .....	279,690	June 19	1342	373	23	2366
Hat .....	E. Copleston .....	283,863	Aug. 28	1684	475	24	829
Hat .....	R. H. Trested .....	280,262	June 26	2022	569	23	2492
Hat and bonnet stand .....	W. V. Whipple .....	288,287	Nov. 13	617	169	25	623
Hat and bonnet supporter .....	M. Smith .....	290,365	Dec. 18	1823	347	25	1120
Hat and coat hanger and button-hook. Combined .....	W. R. Cole .....	270,889	Jan. 23	1313	379	23	276
Hat and making the same .....	R. E. Mason, W. Smalley, and G. Schofield .....	277,913	May 22	1709	466	23	1940
Hat and other head-wear .....	R. G. Salomon .....	287,176	Oct. 23	1769	485	25	341
Hat-band .....	C. F. Beatty .....	274,704	Mar. 27	1886	525	23	1182
Hat-binding .....	D. and D. C. Wheeler .....	280,982	July 10	796	221	24	146
Hat-blocking device .....	H. O. Maynard .....	274,012	Mar. 13	984	270	23	1011
Hat-blocking machine .....	M. H. Ryder .....	283,820	Aug. 28	1637	461	24	820
Hat-blocking table. Revolving .....	M. A. Cuming .....	271,807	Feb. 6	266	74	23	487
Hat-bodies and other fabrics of carded and disintegrated fibers. Method of and apparatus for making .....	J. T. Waring .....	277,636	May 15	1383	373	23	1875
Hat-bodies, and sticking and scalding napped hats. Machine for sizing .....	G. F. Larkin .....	275,924	Apr. 17	1372	378	23	1477
Hat-bodies, &c. Machine for felting and sizing .....	C. W. Glover .....	279,376	June 12	964	268	23	2296
Hat-bodies. Machine for hardening and sizing .....	W. H. Behrens .....	287,752	Oct. 30	2520	679	25	488
Hat-bodies. Roller for felting .....	C. W. Glover .....	289,881	Aug. 7	486	{ 136 137 }	24	586
Hat-bodies. Roller for felting .....	C. W. Glover .....	284,411	Sept. 4	308	86	24	955
Hat-bodies upon expansible hat-blocks. Device for holding .....	E. Tweedy .....	283,363	Aug. 14	1081	304	24	701
Hat-body-felting machine .....	C. G. W. Purdy .....	281,134	July 10	980	274	24	180
Hat-brim-curling machine .....	F. Cocker .....	286,907	Oct. 16	1421	390	25	271
Hat-brim-curling machine .....	F. Cocker .....	286,908	Oct. 16	1423	391	25	271
Hat-brim-curling machine .....	J. Wilson .....	289,202	Nov. 27	1765	489	25	840
Hat-brims. Wire frame for .....	W. B. Curtiss .....	288,313	Nov. 13	647	177	25	628
Hat, cap, &c. .....	A. C. Couch .....	282,444	July 31	2676	734	24	487
Hat, cap, and other head-wear .....	R. F. S. Heath .....	273,074	Feb. 27	1881	528	23	791
Hat-cooling apparatus for blocking-machines .....	H. C. Haulenbeck .....	276,243	Apr. 24	1761	491	23	1552
Hat-curling machine .....	G. Roth .....	278,458	May 29	2424	661	23	2072
Hat-curling machine .....	M. H. Ryder .....	287,865	Nov. 6	89	27	25	523
Hat-curling machine .....	E. Tweedy .....	281,321	July 17	1231	{ 340 341 }	24	230
Hat-curling machine .....	E. Tweedy .....	283,726	Aug. 21	1515	{ 427 428 }	24	788
Hat-drying apparatus .....	W. H. Dunlap and J. Ketchum, Jr. .....	288,987	Nov. 27	1501	415	25	793



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Hat-felting machine.....	R. Drake .....	270,292	Jan. 9	552	162	23	118
Hat-felting machine.....	R. Eickemeyer.....	289,243	Nov. 27	1808	{ 499 500	25	848
Hat-felting machine.....	J. C. Grant .....	270,422	Jan. 9	718	212	23	150
Hat-flanging machine.....	W. A. Bate .....	284,711	Sept. 11	682	193	24	1026
Hat frames and bodies. Manufacture of.....	D. and D. C. Wheeler .....	250,980	July 10	794	221	24	146
Hat-frames. Covering.....	D. and D. C. Wheeler .....	280,981	July 10	796	231	24	146
Hat-holder.....	J. B. Broome .....	290,735	Dec. 25	1743	482	25	1315
Hat-holder.....	F. E. Bundy .....	275,581	Apr. 10	930	252	23	1393
Hat-hook.....	J. H. Alcott .....	273,698	Mar. 13	591	159	23	943
Hat-ironing machine.....	A. De Laski and E. Shaw .....	273,670	Mar. 6	550	{ 146 147	23	928
Hat-ironing machine.....	R. Eickemeyer .....	290,408	Dec. 18	1287	361	25	1130
Hat-lining.....	A. Hoem .....	277,729	May 15	1486	402	23	1894
Hat-machines. Movable bottom for.....	C. Lake .....	279,772	June 19	1427	399	23	2382
Hat-manufacturer's lap-machine.....	G. W. Alexander .....	281,226	July 17	1106	305	24	209
Hat or bonnet.....	M. H. Ryder .....	280,331	June 26	2113	592	23	2508
Hat or cap.....	A. C. Couch .....	282,441	July 31	2674	733	24	487
Hat or cap.....	A. C. Couch .....	282,442	July 31	2675	733	24	487
Hat or cap.....	A. C. Couch .....	282,443	July 31	2675	733	24	487
Hat or cap.....	A. C. Couch .....	282,444	July 31	2675	733	24	487
Hat or cap lining.....	C. Simis .....	279,830	June 19	1499	419	23	2394
Hat or other head-covering.....	A. R. B. Moses .....	272,147	Feb. 13	700	192	23	573
Hat or other head-covering.....	R. H. Trested .....	270,155	Jan. 2	385	112	23	78
Hat-pressing machine.....	J. P. Beatty .....	286,576	Oct. 16	998	270	25	198
Hat scalding and felting machine.....	J. S. Taylor .....	279,843	June 19	1514	424	23	2396
Hat-shade.....	W. Munz .....	283,353	Aug. 14	1066	300	24	699
Hat-shaping apparatus.....	L. H. Hoyt .....	277,035	May 8	658	172	23	1745
Hat show-box.....	J. Rindsberg .....	290,475	Dec. 18	1391	384	25	1147
Hat sizing and shrinking machine.....	W. F. Martin .....	274,623	Mar. 27	1789	497	23	1164
Hat-sizing apparatus.....	N. Harper .....	278,333	May 29	2265	620	23	2044
Hat-sizing machine.....	A. T. Clark .....	278,509	May 29	2483	678	23	2083
Hat-sizing machine.....	N. Harper .....	278,332	May 29	2261	{ 619 620	23	2043
Hat-sizing machine.....	A. Pelisse .....	276,708	May 1	224	57	23	1663
Hat-sizing machine.....	A. Pelisse .....	279,664	June 19	1311	364	23	2361
Hat sizing or felting machine.....	J. S. Taylor .....	280,095	June 26	1828	514	23	2458
Hat starting and sizing machine.....	W. Simmonds .....	278,614	May 29	2608	711	23	2103
Hat-stiffening compound.....	A. Solmans .....	287,972	Nov. 6	231	.....	25	548
Hat-stiffening machine.....	J. C. Hill and J. Doody .....	289,911	Dec. 11	677	188	25	1011
Hat. Sunshade.....	S. B. Bartine .....	276,753	May 1	294	75	23	1676
Hat-tip.....	W. J. Winghart and W. H. Rochford .....	274,873	Mar. 27	2090	580	23	1216
Hat-tips. Machine for stretching.....	J. H. Gesner .....	277,703	May 15	1660	394	23	1889
Hat. Umbrella.....	A. Gros and C. Salbreux .....	270,660	Jan. 16	1023	296	23	218
Hats and bonnets. Wiring brims of.....	M. H. Ryder .....	288,596	Nov. 13	1017	279	25	694
Hats and sizing or felting hat and other fabrics. Scalding napped.....	J. S. Taylor .....	277,081	May 8	724	189	23	1756
Hats. Device for hanging up.....	W. H. Stichter .....	269,970	Jan. 2	175	50	23	36
Hats, furs, &c. Machine for clipping.....	T. and W. H. Coldwell .....	271,423	Jan. 30	1979	{ 571 572	23	397
Hats in the process of manufacture. Machine for washing.....	E. B. Taylor .....	278,467	May 29	2434	664	23	2074
Hats. Machine for beating up napped.....	W. F. Martin .....	275,925	Apr. 17	1373	378	23	1477
Hats. Manufacture of.....	W. H. Dunlap and J. Ketchum, Jr. ....	288,086	Nov. 27	1499	415	25	793
Hats. Manufacture of cloth.....	M. S. Levy .....	272,385	Feb. 13	1003	281	23	625
Hats. Manufacture of felt.....	C. Vero and J. Everitt .....	284,924	Sept. 11	935	.....	24	1071
Hats. Manufacturing.....	D. and D. C. Wheeler .....	286,244	Oct. 9	569	156	25	114
Hats on finishing-blocks. Machine for mounting.....	R. Eickemeyer .....	278,001	May 22	1818	497	23	1958
Hats. Ribbon or label holder for.....	W. Carrick .....	278,577	June 5	278	81	23	2171
Hatter's tank.....	R. Drake .....	279,547	June 19	1175	326	23	2337
Hatch, &c. Automatic.....	C. Chapman .....	289,068	Nov. 27	1603	444	25	810
Hatch-cover.....	J. McIntyre .....	282,100	July 31	2224	611	24	411
Hatch-door of elevator-shafts. Self opening and closing.....	S. W. Bickley .....	288,612	Nov. 20	1036	285	25	703
Hatch. Elevator.....	W. Stevens .....	279,612	June 19	1246	345	23	2350
Hatch-gate. Elevator.....	W. Stevens .....	279,611	June 19	1245	345	23	2350
Hatchet.....	J. R. Bailey .....	270,883	Jan. 23	1308	378	23	275
Hatchet.....	W. P. Cutter .....	274,085	Mar. 13	1076	297	23	1026
Hatchets. Die for forming the claws of.....	J. Harding .....	285,127	Sept. 18	1197	335	24	1123
Hatchway. Elevator.....	W. Stevens .....	287,590	Oct. 30	2304	623	25	448
Hatchway-gate.....	W. Stevens .....	279,610	June 19	1244	345	23	2349
Hatchway guard. Automatic elevator.....	J. Byers and G. Taylor .....	276,767	May 1	311	81	23	1680
Hatchway guard. Elevator.....	J. Addie .....	272,932	Feb. 27	1721	481	23	762
Hatchway guard. Elevator.....	E. Kiss .....	282,905	Aug. 7	513	144	24	591
Hatchway guard. Elevator.....	N. K. Sprague .....	288,884	Nov. 20	1373	378	25	762
Hatchway-protector for elevators.....	R. T. Bean .....	287,219	Oct. 23	1826	500	25	350
Hatchway safety-guard. Elevator.....	J. P. Richardson .....	285,681	Sept. 25	1851	529	24	1248
Hatchway. Self-closing.....	T. E. Elliott .....	288,041	Nov. 6	316	89	25	562
Hatchway. Self-closing.....	C. C. Hartung .....	290,048	Dec. 11	841	238	25	1041
Hatchway. Self-closing.....	D. Humphreys .....	274,777	Mar. 27	1971	549	23	1197
Hatchway. Self-closing.....	D. Humphreys .....	286,136	Oct. 2	436	119	25	81
Hatchway. Self-closing.....	R. D. Thackston .....	271,157	Jan. 23	1640	472	23	330
Hatchway. Self-closing.....	R. D. Thackston .....	274,844	Mar. 27	2043	569	23	1210
Hatchway. Self-closing.....	G. W. Van Allen .....	278,204	May 22	2071	571	23	2002
Hatchways. Automatic door for elevator.....	M. F. Kidd .....	281,632	July 17	1616	442	24	294
Hauling-can.....	J. F. Swab .....	282,585	Aug. 7	134	40	24	524
Hauling upon slipways. Apparatus for.....	J. Thompson .....	278,631	May 29	2631	{ 719 720	23	2108
Hay and cotton press.....	J. Cocke, Jr. ....	283,571	Aug. 21	1334	372	24	753
Hay and cotton press.....	S. Donaldson .....	279,546	June 19	1175	325	23	2337
Hay and cotton press.....	J. A. Hampton .....	273,520	Mar. 6	359	95	23	895
Hay and cotton press.....	W. J. F. Liddell .....	272,719	Feb. 20	1428	{ 400 401	23	705
Hay and cotton press.....	W. J. F. and W. S. Liddell.....	286,619	Oct. 16	1057	{ 284 285	25	208

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Hay and cotton press	E. C. Worthen	287,750	Oct. 30	2518	679	25	487
Hay and grain. Apparatus for unloading	R. Griswold	287,667	Oct. 30	2405	648	25	467
Hay and grain in barns. Unloading	W. and O. C. Mitchell	274,010	Mar. 13	982	269	23	1010
Hay and grain rack	R. Griswold	279,938	June 26	1642	460	23	2425
Hay and grain unloader	L. Ackerman	273,422	Mar. 6	234	63	23	874
Hay and grain unloader	A. L. Jordan	271,562	Feb. 6	336	92	23	500
Hay and straw furnace	W. H. Whittier	272,110	Feb. 13	662	180	23	566
Hay-carrier	F. H. Bolte	276,556	May 1	13	4	23	1629
Hay-carrier	W. Loudon	290,591	Dec. 18	1542	424	25	1173
Hay-carrier	O. Loveland	284,869	Sept. 11	870	244	24	1058
Hay-carrier	R. Miller	288,839	Nov. 20	1318	{ 361 362 }	25	752
Hay-carrier	L. Y. Myers	276,864	May 1	424	113	23	1700
Hay-carrier	J. Nettleton	275,254	Apr. 3	471	{ 131 132 }	23	1307
Hay-carrier	W. G. Ricker	284,903	Sept. 11	906	256	24	1066
Hay-derrick. Horse-power	L. Hoblit	277,728	May 15	1485	402	23	1894
Hay-distributor for barns	F. Baylis	283,191	Aug. 14	858	240	24	659
Hay-elevator	C. M. Mallory	282,654	Aug. 7	216	63	24	537
Hay-elevator	J. W. Stone	276,498	Apr. 24	2088	580	23	1608
Hay-elevator	S. A. Wellman	280,424	July 3	105	29	24	21
Hay elevator and carrier	G. W. Brower	273,455	Mar. 6	277	75	23	880
Hay elevator and carrier	E. A. Byers	271,218	Jan. 30	1719	498	23	351
Hay elevator and carrier	H. L. Ferris	276,016	Apr. 17	1478	408	23	1496
Hay elevator and carrier	E. L. Hall	274,317	Mar. 20	1377	378	23	1086
Hay elevator and carrier	E. F. Morse	288,587	Nov. 13	1003	277	25	691
Hay elevator and carrier	J. T. Rundle	280,865	July 10	654	{ 184 185 }	24	122
Hay elevator and carrier	M. Stentz	281,736	July 24	1762	479	24	324
Hay elevator and carrier	F. B. Strickler	279,889	June 19	1569	439	23	2406
Hay, &c. Elevator for unloading and stacking	R. Griswold	279,939	June 26	1643	460	23	2425
Hay-elevator ropes. Sling for	J. E. Porter	275,850	Apr. 17	1287	354	23	1461
Hay-elevator track	F. W. Miller	275,840	Apr. 17	1275	350	23	1459
Hay-elevator track	J. Ney	287,772	Oct. 30	2551	686	25	494
Hay-fork	G. A. Merriam	284,041	Aug. 28	1923	538	24	871
Hay fork and carrier	J. Farrell	273,350	Mar. 6	143	40, 41	23	858
Hay-fork. Horse	F. H. Bolte	283,694	Aug. 21	1474	415	24	780
Hay-fork. Horse	J. S. Durning	278,897	June 5	300	87	23	2174
Hay-gatherer	H. Grebe	272,237	Feb. 13	809	225	23	592
Hay-knife	S. J. Baker	276,951	May 1	545	142	23	1719
Hay-knife	S. J. Baker	288,198	Nov. 13	508	141	25	605
Hay-knife	J. C. Moss	273,584	May 29	2564	700	23	2097
Hay-knife	G. H. Perkins	281,552	July 17	1512	416	24	278
Hay-loader	C. H. Fox	271,055	Jan. 23	1516	437	23	309
Hay-loader	D. C. Jewett	271,470	Jan. 30	2050	590	23	410
Hay-loader	J. F. Packer	282,762	Aug. 7	349	99	24	561
Hay-loader	J. M. Snodgrass	277,800	May 15	1574	439	23	1910
Hay loader and rake	G. W. Knowlton	269,865	Jan. 2	52	16	23	13
Hay-press	J. Wadleigh	276,649	May 1	130	34	23	1649
Hay-press for fuel purposes	A. Buchholz and A. W. Eddy	290,741	Dec. 25	1750	483	25	1217
Hay-press. Portable	G. W. Freeman	281,990	July 24	2079	570	24	381
Hay-rack	W. R. Conley	279,343	June 12	917	256	23	2288
Hay-rack	N. P. Marsh	275,239	Apr. 3	457	127	23	1304
Hay-rack	J. R. Steitz	272,791	Feb. 20	1522	429	23	722
Hay-rack	T. L. Vought	280,693	July 3	426	121	24	76
Hay-rack	E. F. Whitaker	272,109	Feb. 13	662	180	23	566
Hay-rake	L. T. Hatfield	276,689	May 1	300	51	23	1658
Hay-rake	A. W. Taylor	281,943	July 24	2023	554	24	372
Hay rake and loader	J. T. Hart	279,647	June 19	1289	358	23	2357
Hay rake and loader	E. B. Towl	277,174	May 8	841	222	23	1776
Hay rake and loader. Combined	J. T. Brannian	287,903	Nov. 6	142	42	25	533
Hay rake and loader. Combined	C. S. Dame	270,398	Jan. 9	691	{ 204 205 }	23	144
Hay rake and loader. Combined	W. W. New	272,747	Feb. 20	1468	413	23	712
Hay-rake. Horse	J. R. Bane	284,996	Sept. 18	1034	{ 289 290 }	24	1095
Hay-rake. Horse	J. E. Beauchemin	284,166	Sept. 4	7	2, 3	24	906
Hay-rake. Horse	R. O. Bingham	287,613	Oct. 30	2342	632	25	454
Hay-rake. Horse	J. Bower	284,942	Sept. 11	960	269	24	1075
Hay-rake. Horse	R. S. Carr	283,324	Aug. 14	1020	285	24	690
Hay-rake. Horse	J. Dain, Jr.	288,314	Nov. 13	647	178	25	629
Hay-rake. Horse	M. Daley	290,864	Dec. 25	1896	523	25	1242
Hay-rake. Horse	G. F. Farrar	276,013	Apr. 17	1475	407	23	1496
Hay-rake. Horse	H. Gale	290,411	Dec. 18	1292	362	25	1131
Hay-rake. Horse	E. Glendillen	289,082	Nov. 27	1619	449	25	814
Hay-rake. Horse	M. Hallenbeck	278,538	May 29	2516	687	23	2058
Hay-rake. Horse	H. H. Hathaway	270,218	Jan. 9	468	137	23	102
Hay-rake. Horse	W. A. Knowlton	290,777	Dec. 25	1792	495	25	1224
Hay-rake. Horse	J. C. Roy	275,789	Apr. 10	1201	329	23	1439
Hay-rake. Horse	L. D. B. Shaw	280,963	July 10	776	215	24	142
Hay-rake. Horse	E. Wayland	286,650	Oct. 16	1105	298	25	216
Hay-rake. Horse	E. and H. H. Wayland	279,057	June 5	547	150	23	2217
Hay-rake. Horse	R. Winfree	290,725	Dec. 25	1727	477	25	1213
Hay-rake. Revolving horse	H. Rogers	282,375	July 31	2584	709	24	471
Hay-rake. Sulky	J. H. Thomas	272,351	Feb. 13	944	262	23	615
Hay raking and loading machine	M. Beck	283,746	Aug. 28	1547	{ 437 438 }	24	805
Hay-ricking device	R. O. Davis	276,673	May 1	176	45	23	1654
Hay rope. Machine for twisting	J. W. Purslow	275,267	Apr. 3	489	136	23	1300
Hay-stacker	J. P. Fell and E. C. Gregg	270,043	Jan. 2	255	73, 74	23	52
Hay-stacker	W. Loudon	282,003	July 24	2093	574	24	383
Hay-stacker	A. W. Taylor	274,842	Mar. 27	2041	568	23	1210
Hay-stacker	J. C. Testman	277,378	May 8	1070	288	23	1817
Hay stacker and loader	E. C. Gregg and J. P. Fell	283,882	Aug. 28	1707	481	24	833



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Hay-tedder .....	D. W. Bovee .....	289,382	Dec. 4	13	4	25	889
Hay-tedder .....	J. A. Ehle .....	286,406	Oct. 9	790	213	25	153
Hay-tedder .....	P. A. Spicer .....	280,873	July 10	664	187	24	124
Hay-tedder and rake. Combined .....	W. R. Johns .....	290,775	Dec. 25	1789	494	25	1224
Hay-tedder tooth .....	J. Mudgett .....	274,640	Mar. 27	1810	502	23	1169
Hay-unloading apparatus .....	E. A. Ely .....	280,159	June 26	1897	534	23	2471
Head-block .....	D. Parkhurst .....	274,366	Mar. 20	1446	396	23	1098
Head-block .....	S. R. Smith and E. Myers .....	271,747	Feb. 6	194	51	23	47
Head-covering .....	J. L. Kendall .....	275,670	Apr. 10	1051	285	23	1414
Head-light .....	E. S. Jenney .....	270,804	Jan. 16	1209	349	23	252
Head-light for locomotives, &c. Electric .....	F. Ball, Jr. ....	277,536	May 15	1266	339	23	1856
Head-light. Locomotive .....	J. Allen and W. R. Musser .....	273,428	Mar. 6	240	65	23	875
Head-light. Locomotive .....	A. H. Handlan, Jr. ....	281,869	July 24	1934	529	24	356
Head-light. Locomotive .....	A. Harris .....	272,245	Feb. 13	820	228	23	594
Head-light. Locomotive .....	A. Harris .....	272,246	Feb. 13	820	229	23	594
Head-light. Locomotive .....	A. Harris .....	276,814	May 1	363	96	23	594
Head-light. Locomotive .....	A. Harris .....	270,791	Jan. 16	1195	345	23	248
Head-light. Locomotive .....	A. Harris and G. M. Clark .....	270,792	Jan. 16	1195	345	23	249
Head-light. Locomotive .....	A. Harris and G. M. Clark .....	270,793	Jan. 16	1196	345	23	249
Head-light. Locomotive .....	A. Harris and G. M. Clark .....	270,794	Jan. 16	1197	346	23	249
Head-light. Locomotive .....	A. Harris and G. M. Clark .....	270,795	Jan. 16	1198	346	23	249
Head-light. Locomotive .....	A. Harris and G. M. Clark .....	272,247	Feb. 13	821	229	23	595
Head-light. Locomotive .....	J. M. Kelly .....	283,254	Aug. 14	941	262	24	675
Head-light. Signal .....	W. Armstrong .....	279,072	June 5	562	154	23	2220
Head-light signal. Locomotive .....	C. Anderson .....	287,079	Oct. 23	1646	452	25	318
Head-light signal. Locomotive .....	J. M. Kelly .....	288,242	Nov. 13	561	156	25	614
Head-light signal. Locomotive .....	J. Kirby, Jr. ....	276,428	Apr. 24	2002	555	23	1593
Head-light with signal attachment. Locomotive .....	I. A. and C. I. Williams .....	281,327	July 17	1236	342	24	231
Head-protector .....	H. T. Farmer .....	290,017	Dec. 11	805	226	25	1035
Head-rest .....	J. J. Bowker .....	270,377	Jan. 9	664	195	23	139
Head-rest .....	M. J. Koenig .....	290,644	Dec. 18	1610	443	25	1184
Head-rest .....	G. Popplewell .....	280,078	June 26	1811	510	23	2454
Head-rest fastening. Adjustable .....	J. H. Armour and J. Schott .....	289,596	Dec. 4	282	79	25	937
Head-rest for car or other seats. Portable and adjustable .....	L. and W. H. Waddell .....	284,925	Sept. 11	937	263	24	1071
Head-rest. Portable .....	E. F. Prescott .....	278,361	May 29	2303	631	23	2051
Head-wear .....	B. C. Hechavarria and M. A. Montejó .....	272,136	Feb. 13	692	189	23	571
Head-wear protector. Lady's .....	J. A. Kneeland .....	273,694	Mar. 6	523	155	23	934
Header .....	A. Miller .....	269,951	Jan. 2	154	45	23	32
Header .....	J. H. Winn .....	285,720	Sept. 25	1909	542	24	1257
Header-spring .....	S. Hamilton .....	284,296	Sept. 4	174	49	24	933
Header, thrasher, and separator. Combined .....	W. H. Parrish .....	282,217	July 31	2385	657	24	436
Heat-alarm. Electric .....	M. Martin .....	272,893	Feb. 27	1678	469	23	755
Heat-alarms. Correcting attachment for automatic .....	H. Dowens .....	273,349	Mar. 6	142	40	23	858
Heat and gas regulator .....	H. N. Evans .....	273,716	Mar. 13	609	163	23	946
Heat-obstructing mixture .....	W. H. Rogers .....	282,779	Aug. 7	366	103	24	564
Heat of furnaces. Utilizing the waste .....	W. H. Brooks .....	278,496	May 29	2467	673	23	2080
Heat of stove-pipes and chimneys. Apparatus for utilizing the waste .....	H. M. Wheeler .....	284,106	Aug. 28	2002	557	24	885
Heater .....	J. Johnson .....	274,785	Mar. 27	1981	551	23	1199
Heater .....	R. Johnson and J. F. Buerkel .....	279,486	June 12	1096	303	23	2317
Heater .....	R. Johnson and J. F. Buerkel .....	288,708	Nov. 20	1159	318	25	723
Heater .....	L. Stockdale .....	278,466	May 29	2433	663	23	2074
Heater and oven. Combined .....	J. H. Lindsay .....	278,567	May 29	2550	695	23	2094
Heating air or condensing steam. Apparatus for .....	E. Kendall .....	272,886	Feb. 27	1670	467	23	754
Heating and cooking apparatus .....	C. F. McCarty .....	272,290	Feb. 13	572	244	23	604
Heating and lighting. Hydrocarbon apparatus for .....	F. H. Holmes .....	279,760	June 19	1415	396	23	2379
Heating and ventilating buildings. System of .....	N. Wheeler .....	285,539	Sept. 25	1684	474	24	1217
Heating and ventilating rooms. Apparatus for .....	A. K. Campbell .....	275,585	Apr. 10	934	254	23	1394
Heating apparatus .....	H. Howe .....	285,485	Sept. 25	1620	454	24	1204
Heating apparatus .....	R. Tungfer .....	283,440	Aug. 21	1178	331	24	724
Heating apparatus. Electrical .....	A. Lieberman and W. Robb .....	276,840	May 1	394	104	23	1695
Heating apparatus for railway-roundhouse. Steam .....	E. F. Osborne .....	288,848	Nov. 20	1330	365	25	754
Heating apparatus. Hot-water .....	W. Burlingame .....	290,908	July 10	702	198	24	131
Heating apparatus. Steam .....	J. H. Blessing .....	290,662	Dec. 25	1639	451	25	1196
Heating apparatus. Steam and hot-water .....	F. Tudor .....	278,636	May 29	2635	721	23	2109
Heating-boiler. Steam .....	W. Hopkins and C. Fockler .....	272,692	Feb. 20	1395	392	23	699
Heating buildings. Boiler for .....	E. A. Gay .....	273,718	Mar. 13	611	164	23	946
Heating by exhaust-steam. Apparatus for .....	F. Tudor .....	283,537	Aug. 21	1285	360	24	744
Heating, cooling, and ventilating apparatus .....	I. N. Mills .....	283,637	Aug. 21	1402	392	24	766
Heating device .....	J. D. Potter .....	275,409	Apr. 10	717	191	23	1358
Heating fire back and frame. Two-room .....	J. H. Burnam .....	287,230	Oct. 23	1841	503	25	352
Heating-furnace .....	G. W. Fair .....	284,545	Sept. 4	467	133	24	984
Heating-furnace .....	H. W. Michael .....	269,873	Jan. 2	59	18	23	14
Heating-furnace .....	J. M. Preston and J. L. Bacon .....	288,856	Nov. 20	1341	368	25	756
Heating-furnace .....	G. P. Randall .....	273,151	Feb. 27	1924	558	23	810
Heating-furnace .....	J. J. Richardson .....	270,698	Jan. 16	1084	311	23	227
Heating-furnace .....	D. W. Robb .....	270,127	Jan. 2	352	102	23	72
Heating-furnace .....	F. Tylee .....	274,676	Mar. 27	1853	516	23	1176
Heating furnace. Air .....	G. W. Marembeck .....	290,902	Dec. 25	1946	537	25	1250

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'E.	Vol.	Page.
Heating, tempering, and annealing furnace .....	A. J. Nellis .....	288,101	Nov. 6	386	109	25	574
Heating the air in heat-flues of buildings. Apparatus for .....	A. P. Howard .....	286,134	Oct. 2	434	118	25	80
Heating vehicles. Apparatus for .....	A. Morel .....	273,758	Mar. 13	670	{ 179 160 }	23	957
Hedge-trimmer .....	M. M. Curtis .....	289,074	Nov. 27	1611	446	25	812
Hedge-trimming machine .....	E. W. Dawson .....	290,865	Dec. 25	1898	524	25	1243
Hedge-trimming machine .....	M. Lowrey .....	272,843	Feb. 20	1603	{ 448 449 }	23	736
Heel beading and wheeling tool .....	C. J. Addy .....	270,622	Jan. 16	981	283	23	208
Heel-burnisher and edge-setter .....	J. P. Dion .....	290,544	Dec. 18	1484	410	25	1163
Heel-burnishing machine .....	J. L. Cross .....	278,102	May 22	1935	531	23	1979
Heel-burnishing machine .....	O. Cyr .....	283,381	Aug. 21	1108	313	24	712
Heel-burnishing machine .....	J. E. Tarbox .....	270,150	Jan. 2	322	111	23	78
Heel-burnishing tool .....	E. Beurgeois .....	277,207	May 8	875	232	23	1781
Heel-filing machine .....	W. Gordon .....	285,997	Oct. 2	268	75	25	51
Heel-iron .....	H. E. Wilkins and J. L. Dole .....	271,755	Feb. 6	205	57	23	475
Heel lift and tap .....	G. A. White .....	283,048	Aug. 14	686	192	24	629
Heel lifts and taps. Manufacturing .....	G. A. White .....	287,488	Oct. 30	2162	587	25	420
Heel-lifts. Machine for nailing .....	Q. A. Townes .....	276,648	May 1	129	34	23	1649
Heel-nailing machine .....	M. V. Ethridge .....	285,596	Sept. 25	1755	{ 497 498 }	24	1230
Heel-nailing machine .....	F. F. Raymond, 2d .....	271,117	Jan. 23	1590	458	23	321
Heel-nailing machine .....	F. F. Raymond, 2d .....	271,118	Jan. 23	1591	458	23	322
Heel-nailing machine .....	F. F. Raymond, 2d .....	280,399	July 3	72	20	24	15
Heel-nailing machine .....	F. F. Raymond, 2d .....	287,472	Oct. 30	2137	{ 580 581 582 }	25	416
Heel-nailing machine .....	F. F. Raymond, 2d .....	289,857	Dec. 11	609	170	25	1000
Heel-nailing machine .....	F. F. Raymond, 2d .....	290,109	Dec. 11	908	{ 257 258 }	25	1054
Heel-nailing machine .....	F. F. Raymond, 2d, and J. E. Wheeler .....	280,861	July 10	648	183	24	120
Heel-paring machine .....	F. Cutlan .....	274,109	Mar. 20	1113	307	23	1040
Heel-trimming machine .....	J. H. Busell .....	270,632	Jan. 16	996	288	23	211
Heel-trimming machine .....	J. H. Busell .....	280,717	July 3	453	130	24	81
Heel-trimming machine .....	H. A. Henderson .....	281,691	July 24	1706	{ 462 463 }	24	314
Heel-trimming machine .....	J. Tingley .....	290,817	Dec. 25	1845	511	25	1233
Heel-trimming machine .....	M. A. Tyler .....	282,591	Aug. 7	141	42	24	525
Heels. Burnisher and beader-head for polishing .....	S. B. Scruton .....	282,673	Aug. 7	236	60	24	541
Heeling-machine .....	D. Whitlock .....	287,489	Oct. 30	2163	{ 587 588 }	25	420
Hemp drawing and spinning machines. Feed-regulator for .....	J. R. Hoover .....	275,046	Apr. 3	215	58	23	1263
Hemp, flax, &c. Machine for dressing .....	T. Tebow .....	290,494	Dec. 18	1415	391	25	1151
Hen-house .....	S. Rawson .....	299,307	Nov. 27	1883	524	25	893
Hide for shaping. Preparing raw .....	O. E. Wait .....	284,780	Sept. 11	767	214	24	1040
Hide-splitter .....	A. England .....	290,555	Dec. 18	1500	414	25	1166
Hides, &c. Apparatus for scouring and fleshing .....	A. Whiting .....	275,305	Apr. 3	578	147	23	1318
Hides. Composition for depilating .....	J. L. Moret .....	281,287	July 17	1181	.....	24	222
Hides. Machine for stretching and drying .....	L. Dederick .....	287,009	Oct. 23	1553	428	25	299
Hides. Machine for unhairing, scouring, and fleshing .....	A. E. Whitney .....	280,698	July 3	471	122	24	77
Hides or skins. Tawing .....	J. Shaw .....	286,491	Oct. 9	885	.....	25	171
Hides. Tawing .....	C. P. Smallbridge, Sr .....	281,411	July 17	1340	.....	24	249
High and low water indicator for steam-boilers. Automatic .....	B. Collins .....	271,794	Feb. 6	253	70	23	484
Hilling and fertilizing machine .....	R. W. Allen .....	274,542	Mar. 27	1695	{ 470 471 }	23	1148
Hinge .....	S. D. Halley .....	270,880	Jan. 16	1295	373	23	267
Hinge .....	H. C. Lewis .....	279,775	June 19	1433	401	23	2383
Hinge .....	D. McCurdy .....	282,004	July 24	2084	574	24	383
Hinge .....	A. N. and G. A. Parnall .....	290,464	Dec. 18	1377	380	25	1145
Hinge .....	C. Pfauantz .....	277,925	May 22	1782	470	23	1942
Hinge .....	A. L. Porter .....	283,277	Aug. 14	966	269	24	679
Hinge .....	T. L. Rivers .....	276,540	Apr. 24	2142	596	23	1617
Hinge .....	A. L. Scranton .....	282,574	Aug. 7	121	36	24	521
Hinge .....	A. Shepard .....	282,576	Aug. 7	123	36, 37	24	521
Hinge. Adjustable .....	M. Campbell .....	279,857	June 19	1534	429	23	2399
Hinge. Blind .....	C. G. Shepard and P. Adams, Jr. ....	282,470	July 31	2706	744	24	492
Hinge. Door .....	H. Haltaufferheide .....	283,601	Aug. 21	1364	381	24	759
Hinge for boilers, stoves, &c. ....	N. W. Pratt .....	273,601	Mar. 6	466	126	23	914
Hinge for mirrors, &c. Frictional .....	J. C. Blair .....	290,839	Dec. 25	1868	516	25	1237
Hinge for sliding and rolling gates .....	J. S. Wood .....	276,949	May 1	543	142	23	1719
Hinge for toilet-glasses and mirrors .....	C. S. Fleming .....	290,021	Dec. 11	809	227	25	1036
Hinge for vessels of enameled ironware .....	F. G. and W. F. Niedringhaus .....	286,628	Oct. 16	1069	288	25	210
Hinge. Friction .....	F. S. Clarkson .....	290,398	Dec. 18	1276	359	25	1128
Hinge. Gate .....	L. M. Draper .....	276,165	Apr. 24	1669	461	23	1536
Hinge. Gate .....	G. H. Pattison .....	283,416	Aug. 21	1144	{ 323 324 }	24	719
Hinge. Gate .....	A. S. Thomas .....	289,870	Dec. 11	623	173	25	1002
Hinge. Lock .....	J. K. Clark .....	277,680	May 15	1434	387	23	1884
Hinge. Lock .....	A. Gärtner .....	280,462	July 3	163	44	24	30
Hinge. Lock .....	J. A. Kline .....	288,345	Nov. 13	696	191	25	636
Hinge. Lock .....	E. E. Masters .....	283,128	Aug. 14	780	219	24	646
Hinge. Lock .....	A. Seivard .....	283,523	Aug. 21	1274	356	24	741
Hinge. Metal-box .....	A. H. Faneher .....	284,828	Sept. 11	823	229	24	1050
Hinge. Mirror .....	G. L. Donovan .....	285,239	Sept. 18	1329	374	24	1147
Hinge. Sewing-machine .....	W. B. Cleves .....	272,121	Feb. 13	673	183	23	568
Hinge. Shutter .....	L. W. Merriam .....	288,834	Nov. 20	1314	360	25	751
Hinge. Spring .....	J. H. Alexander .....	269,986	Jan. 2	191	56	23	40
Hinge. Spring .....	T. Butler .....	277,881	May 22	1675	457	23	1934
Hinge. Spring .....	C. B. Clark .....	276,958	May 1	557	145	23	1721
Hinge. Spring .....	J. K. Clark .....	276,000	Apr. 17	1459	402	23	1493
Hinge. Spring .....	L. M. Devore .....	282,858	Aug. 7	439	130	24	581



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Hinge. Spring.....	L. M. Devore.....	288,984	Nov. 27	1497	415	25	793
Hinge. Spring.....	H. P. Kochsmeier.....	282,993	Aug. 14	609	173	24	616
Hinge. Spring.....	J. Spruce.....	277,370	May 8	1062	286	23	1815
Hinge. Spring.....	A. B. Tanner.....	271,946	Feb. 6	436	120	23	517
Hinge. Spring.....	R. H. Wiles.....	274,161	Mar. 20	1181	325	23	1052
Hinge. Spring.....	W. H. Williams.....	281,594	July 17	1566	428	24	286
Hinge. Stop.....	T. M. Hass.....	284,008	Aug. 28	1888	529	24	865
Hinge. Strap.....	W. L. Bacon.....	289,599	Dec. 4	285	80	25	937
Hinge. Table.....	J. C. Vetter.....	281,322	July 17	1232	341	24	230
Hinge. Trunk.....	G. W. Hey.....	282,635	Aug. 7	195	56	24	534
Hitching device.....	C. E. Dyer.....	282,968	Aug. 14	583	165	24	611
Hitching device.....	L. E. Klugh and J. Hudson.....	278,710	June 5	44	14	23	2132
Hitching device. Horse.....	J. H. Osgood.....	272,466	Feb. 20	1108	313	23	649
Hitching-post.....	W. P. Beach.....	271,769	Feb. 6	220	62	23	478
Hitching-strap.....	H. S. Dimock.....	280,363	July 3	30	8	24	7
Hitching-strap holder.....	C. D. Page.....	273,300	Mar. 6	74	21	23	847
Hitching-strap holder.....	C. D. Page.....	275,695	Apr. 10	1077	294	23	1419
Hobby-horse.....	J. and R. Bean.....	284,940	Sept. 11	957	268	24	1074
Hod-elevator.....	S. Dale.....	286,119	Oct. 2	416	114	25	77
Hod-elevator.....	A. T. Hull.....	286,009	Oct. 2	282	79	25	53
Hod-elevator.....	A. T. Hull.....	290,235	Dec. 18	1068	299	25	1091
Hod-elevator.....	C. L. Nicholson.....	290,347	Dec. 18	1212	339	25	1116
Hod-elevator.....	A. B. Piatti.....	271,113	Jan. 23	1586	456	23	320
Hod-elevator.....	F. Pierce.....	283,655	Aug. 21	1420	399	24	770
Hod-elevator. Endless.....	L. Atwood.....	275,455	Apr. 10	776	207	23	1367
Hod-elevator. Endless.....	O. N. Eaton.....	287,013	Oct. 23	1558	429	25	300
Hod-elevator. Safety.....	L. Atwood.....	271,678	Feb. 6	109	30	23	459
Hod-elevator. Safety.....	L. Atwood.....	273,006	Feb. 27	1805	505	23	777
Hoe.....	H. H. and C. Finn.....	285,604	Sept. 25	1767	500	24	1232
Hoe.....	D. Humphrey.....	275,915	Apr. 17	1363	375	23	1475
Hoe.....	H. and L. Iwan.....	287,027	Oct. 23	1581	435	25	305
Hoe. Combined.....	R. D. Murrell.....	284,883	Sept. 11	886	249	24	1062
Hoe. Corn.....	L. Connor.....	274,108	Mar. 20	1111	306	23	1039
Hoe. Horse scuffle.....	O. Burgher.....	275,462	Apr. 10	783	209	23	1368
Hoe. Scuffle.....	H. Still.....	289,723	Dec. 4	442	124	25	964
Hoe. Spring.....	J. S. Heath.....	281,874	July 24	1940	530	24	357
Hoe. Wheel.....	D. C. Lee.....	282,202	July 31	2370	652	24	433
Hoes. Die for making.....	F. F. P. Unckrich.....	278,203	May 22	2070	570	23	2002
Hoes. Machine for making.....	R. E. Breed.....	280,287	June 26	2052	576	23	2498
Hoes. Machine for making the eyes of.....	J. S. Craft.....	275,363	Apr. 10	651	174	23	1346
Hoes. Manufacture of.....	T. Bowater and L. D. York.....	281,441	July 17	1372	378	24	254
Hog-cholera compound.....	J. A. Thomas.....	281,161	July 10	1011	.....	24	185
Hog-cholera remedy.....	E. W. Be Vier.....	282,949	Aug. 14	565	.....	24	608
Hog-cholera remedy.....	D. T. Cooper.....	283,080	Aug. 14	722	.....	24	636
Hog-cholera remedy.....	G. W. Wynns.....	289,487	Dec. 4	146	.....	25	912
Hog-nose cutter.....	W. B. Lyon.....	279,779	June 19	1437	402	23	2383
Hog-nose ring.....	G. Collins.....	273,960	Mar. 13	922	253	23	999
Hog-nose ringer.....	F. McConnell.....	275,241	Apr. 3	458	127	23	1304
Hog-ringer.....	J. W. Laub.....	282,909	Aug. 7	517	145	24	592
Hoist. Ash.....	J. D. Spreckels.....	289,159	Nov. 27	1709	475	25	830
Hoist. Barrel.....	W. Mack.....	278,570	May 29	2553	696	23	2095
Hoist or elevator.....	T. McDonough.....	278,445	May 29	2408	656	23	2069
Hoisting and conveying earth from sewer-trenches. Apparatus for.....	P. H. McCauley.....	280,645	July 3	369	103	24	65
Hoisting and conveying machine.....	A. E. Brown.....	281,011	July 10	827	230	24	153
Hoisting and conveying machine.....	A. E. Brown.....	281,446	July 17	1387	231	24	257
Hoisting and conveying machine car.....	D. I. Calhoun.....	283,964	Aug. 28	1808	512	24	853
Hoisting and laying stone. Apparatus for.....	G. Hunter.....	270,675	Jan. 16	1052	301	23	221
Hoisting and transmitting freight, coal, &c. Mech- anism for.....	F. Murgatroyd.....	277,327	May 8	1016	272	23	1807
Hoisting apparatus.....	T. W. Capen.....	279,704	June 19	1357	378	23	2369
Hoisting apparatus.....	E. Gasser.....	273,835	Mar. 13	770	209	23	974
Hoisting apparatus.....	H. B. Larzelere.....	281,528	July 17	1485	408	24	274
Hoisting apparatus.....	C. Mettam.....	288,586	Nov. 13	1002	276	25	691
Hoisting apparatus.....	J. H. Miller.....	285,915	Oct. 2	175	50	25	34
Hoisting apparatus.....	G. E. Newell and L. G. Ladd.....	282,556	Aug. 7	102	30, 31	24	518
Hoisting apparatus.....	R. Stone.....	271,537	Jan. 30	2127	612	23	423
Hoisting apparatus.....	W. W. Wythe.....	279,305	June 12	857	238	23	2279
Hoisting apparatus for wagon-derricks, &c.....	B. Jackson and G. W. Bonds.....	285,903	Oct. 2	160	45	25	31
Hoisting apparatus for locomotive and portable en- gines.....	J. L. Boyer.....	280,994	July 10	696	196	24	129
Hoisting apparatus. Hog.....	G. B. Flanigan.....	272,422	Feb. 20	1059	297	23	639
Hoisting-bucket.....	S. Grant.....	275,821	Apr. 17	1252	344	23	1455
Hoisting-bucket.....	G. E. Newell and L. G. Ladd.....	290,649	Dec. 18	1615	444	25	1185
Hoisting-buckets to belts. Device for attaching.....	R. N. Sanderson.....	271,743	Feb. 6	190	53	23	473
Hoisting-car.....	L. D. Davis.....	290,404	Dec. 18	1281	360	25	1129
Hoisting-carrier.....	G. D. Rowell.....	271,276	Jan. 30	1786	518	23	362
Hoisting device.....	C. W. Baldwin.....	277,403	May 8	1098	295	23	1821
Hoisting-gin.....	S. T. Richardson.....	280,329	June 26	2111	592	23	2508
Hoisting-machine.....	J. Boyd.....	271,681	Feb. 6	113	81	23	459
Hoisting-machine.....	T. W. Capen.....	273,462	Mar. 6	286	77	23	882
Hoisting-machine.....	E. H. and L. L. Graves and G. W. Brotor.....	282,979	Aug. 14	592	167	24	613
Hoisting-machine.....	E. Harrington.....	272,431	Feb. 20	1068	301	23	642

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Hoisting-machine .....	E. Harrington .....	272,432	Feb. 20	1069	301	23	642
Hoisting-machine .....	H. S. Haskins .....	272,439	Feb. 20	1076	303	23	643
Hoisting-machine .....	J. Mayhew and E. D. Payne .....	277,147	May 8	808	213	23	1771
Hoisting-machine .....	B. F. Porter, J. P. Bloom, and R. Aspin .....	275,849	Apr. 17	1286	353	23	1461
Hoisting-machine .....	R. Reid .....	278,821	June 5	192	56	23	2155
Hoisting-machine brake. Automatic .....	W. W. Wythe .....	279,304	June 12	856	237	23	2279
Hoisting-machine. Portable .....	L. T. Pyott .....	271,115	Jan. 23	1589	457	23	321
Hoisting machinery carrier or sheave-truck .....	C. W. Hunt .....	282,640	Aug. 7	200	58	24	534
Hoistway-covers. Closing and controlling .....	D. Fraser .....	278,528	May 29	2505	684	23	2087
Holdback .....	T. A. Crabtree .....	278,867	June 5	289	83	23	2172
Holdback. Carriage .....	C. Phelps .....	273,596	Mar. 6	460	124	23	913
Holdback. Vehicle .....	J. H. Stamp .....	272,492	Feb. 20	1147	322	23	655
Holder:							
See Abrasive-disk hold-er.	Loom picker-stick holder.						
Bag-holder.	Map-holder.						
Bag and twine holder.	Match and tooth-pick holder.						
Barrel-head holder.	Mirror-holder.						
Bill-holder.	Mop-holder.						
Bird-cage food-holder.	Music-holder.						
Blacking-box holder.	Music-leaf holder.						
Bolt-holder.	Mustache-holder.						
Book-holder.	Napkin-holder.						
Bouquet-holder.	Necktie-holder.						
Broom-holder.	Necktie and scarf holder.						
Brush-holder.	Oil-can holder.						
Butter-holder.	Order-holder.						
Can-holder.	Package-holder.						
Candle-holder.	Pamphlet-holder.						
Car-label holder.	Paper-holder.						
Car-seat ticket-holder.	Paper-bag holder.						
Carboy-holder.	Paper-bag and twine holder.						
Card-holder.	Parcel-holder.						
Card and sample holder.	Pen-holder.						
Chart-holder.	Pen and pencil holder.						
Chisel-holder.	Pencil-holder.						
Christmas-tree holder.	Pencil and crayon holder.						
Christmas-tree candle-holder.	Pencil or crayon holder.						
Cigar-holder.	Photographer's camera-plate holder.						
Cigar and cigarette holder.	Photographic-plate holder.						
Copy-holder.	Photographic dry-plate holder.						
Cow-tail holder.	Picture-frame holder.						
Crayon-holder.	Pillow-sham holder.						
Crayon or lead holder.	Pipe-nipple holder.						
Cuff-holder.	Pocket-book holder.						
Cuspidor-holder.	Punch-holder.						
Cutter-head tool-holder.	Quilt-holder.						
Dental-disk holder.	Rein-holder.						
Electrotype and stereotype plate holder.	Ribbon-holder.						
File-holder.	Sack-holder.						
Flower-pot holder.	Sad-iron holder.						
Flower-stand holder.	Sap-bucket holder.						
Gas-holder.	Sash-holder.						
Glove-holder.	Scarf-holder.						
Grindstone tool-holder.	Scissors-holder.						
Grindstone-truing-tool holder.	Sewing-machine-attach-ment holder.						
Hair-holder.	Sewing-machine shuttle-holder.						
Harness line-holder.	Sewing-machine spool-holder.						
Harrow-tooth holder.	Shade-holder.						
Hat-holder.	Sham-holder.						
Hitching-strap holder.	Soap-holder.						
Horse-tail holder.	Spittoon-holder.						
Jar-holder.	Spooling-machine bob-bin-holder.						
Knife and pencil holder.	Stamp-holder.						
Knitting-machine bobbin-holder.	Stencil-holder.						
Lamp-holder.	Stereotype-plate holder.						
Lamp-shade holder.	Stove-pipe holder.						
Lathe-tool holder.	Thread-holder.						
Lead and crayon holder.	Ticket-holder.						
Lead or crayon holder.	Tool-holder.						
Life-preserver hold-er.	Towel-holder.						
	Trace-holder.						
	Twine-holder.						
	Type-holder.						
	Type and space holder.						
	Umbrella-holder.						
	Watch-holder.						
	Whip-holder.						
	Whip and rein holder.						
	Whisk-broom holder.						
	Wig-block holder.						
	Yoke-holder.						
Hollow ware. Bailed .....	D. M. McLean .....	273,119	Feb. 27	1943	545	23	802
Hominy-mill .....	W. Stonebraker .....	285,085	Sept. 18	1144	320	24	1114
Hone. Knife .....	T. Williams .....	281,744	July 24	1771	482	24	326



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Honey-comb-foundation machine.....	E. B. Weed.....	283,442	Aug. 21	1180	332	24	725
Honey-comb-packing bottle or jar.....	S. M. Smith.....	290,131	Dec. 11	938	266	25	1060
Honey-extractor.....	E. T. Lewis.....	278,713	June 5	49	15	23	2133
Hoof-cleaner.....	E. O. Davis.....	274,570	Mar. 27	1728	480	23	1153
Hoof-trimmer.....	W. M. Cleeland.....	271,038	Jan. 23	1493	430	23	305
Hoofs of animals. Apparatus for trimming.....	J. C. Mullins.....	290,089	Dec. 11	888	252	25	1050
Hook:							
See Adjustable hook. Harness-back-band hook.							
Boot and shoe sus- pension-hook. Harness check-hook.							
Breast-strap hook. Hasp-hook.							
Button-hook. Hat-hook.							
Button and glove hook. Hop-vine hook.							
Cant-hook. Ice-hook.							
Chain swivel-hook. Lacing-hook.							
Chandelier suspen- sion-hook. Ladder-hook.							
Clothes-hook. Neck-wear hook.							
Clothes-line hook. Policeman's hook.							
Clutch-hook. Rein-hook.							
Coat and cloak hook. Safety-hook.							
Cornice-hook. Screw-hook.							
Detachable hook. Snap-hook.							
Fall-block hook. Suspender-hook.							
Fish-trap hook. Suspension-hook.							
Grappling-hook. Swamp and grab hook.							
Harness-hook. Trace-hook.							
	Tug-hook.						
	Whimbletree-hook.						
Hook.....	P. Miles.....	280,388	July 3	62	16	24	13
Hook.....	P. Miles.....	280,389	July 3	62	17	24	14
Hook for hats, &c.....	F. Young.....	282,023	July 24	2119	580	24	386
Hooks and eyes. Machine for bending screw.....	E. A. Alpress.....	270,362	Jan. 9	637	188	23	135
Hoop:							
See Cheese-hoop. Toy hoop.							
Hoop-bending machine.....	G. E. Smith.....	289,936	Dec. 11	700	197	25	1016
Hoop coiling and nailing machine.....	J. J. Burk.....	278,773	June 5	119	33, 34	23	2144
Hoop-cutting machine.....	H. W. Eskildson.....	273,266	Mar. 6	277	8	23	839
Hoop-cutting machine.....	J. A. Grant.....	285,612	Sept. 25	175	503	24	1234
Hoop-cutting machine.....	F. L. Wilson.....	283,942	Aug. 28	1783	504	24	848
Hoop-dressing machine.....	N. P. Stevens.....	281,737	July 24	1763	479	24	325
Hoop-fastening for buckets, &c.....	H. B. Phillips.....	272,469	Feb. 20	1111	314	23	649
Hoop-fastening for buckets, &c.....	H. B. Phillips. (Reissue).....	10,337	June 5	637	173	23	2231
Hoop-flaring machine.....	J. Z. Gifford.....	287,659	Oct. 30	2395	645	25	465
Hoop keeper. Metallic.....	J. J. Heim.....	273,076	Feb. 27	1883	529	23	791
Hoop-planer.....	O. R. Olsen.....	279,496	June 12	1108	{ 305 } { 306 }	{ 23 } { 23 }	{ 2319 } { 2319 }
Hoop-planing machine. Barrel.....	H. F. Campbell.....	272,029	Feb. 13	553	150	23	548
Hoop-preparing mechanism.....	H. F. Campbell.....	288,205	Nov. 13	513	143	25	606
Hoop-shaving machine.....	J. Prince.....	274,029	Mar. 13	1002	274	23	1013
Hoop-skirt.....	L. Gallaher.....	277,263	May 8	935	251	23	1793
Hoop-skirt.....	H. I. Gould.....	290,676	Dec. 25	1655	456	25	1199
Hoop-skirt.....	H. I. Gould.....	290,677	Dec. 25	1656	457	25	1199
Hoop-skirt.....	M. Rosenstock.....	288,863	Nov. 20	1347	370	25	757
Hoops from poles. Machine for sawing.....	W. Bowker.....	286,173	Oct. 9	482	{ 133 } { 134 }	{ 25 } { 25 }	{ 100 } { 100 }
Hoops from poles. Machine for sawing.....	R. Williams.....	271,672	Feb. 6	104	28	23	458
Hoops from poles. Machinery for sawing barrel.....	R. Williams and W. Bowker.....	272,996	Feb. 27	1790	501	23	774
Hop-drier.....	J. L. Filkins.....	285,246	Sept. 18	1337	376	24	1148
Hop-house drying-floor.....	O. M. Knox.....	281,273	July 17	1167	323	24	920
Hop-scales from their stems. Machine for separating.....	J. Müller.....	285,150	Sept. 18	1229	345	24	1128
Hop-vine hook.....	J. Lipe.....	280,639	July 8	362	100	24	64
Hops. Apparatus for treating spent.....	E. Davies.....	288,553	Nov. 13	961	{ 264 } { 265 }	{ 25 } { 25 }	{ 683 } { 683 }
Hops. Preserving.....	F. A. Bruns.....	279,127	June 12	657	.....	23	2246
Hopper. Feed.....	W. M. Rand.....	272,321	Feb. 13	908	254	23	610
Horse and hand power.....	J. A. Adams.....	285,198	Sept. 18	1280	360	24	1138
Horse-blanket.....	E. W. Allen.....	277,184	May 8	850	225	23	1777
Horse-blanket.....	C. M. Andrews.....	277,867	May 22	1660	453	23	1931
Horse-blanket.....	G. Crane.....	274,177	Mar. 20	1199	330	23	1056
Horse-blanket fastener.....	A. F. Armstrong and M. K. Waite.....	290,198	Dec. 18	1020	287	25	1083
Horse-boot.....	E. Barnard.....	285,552	Sept. 25	1700	479	24	1220
Horse-boot.....	J. Miller.....	288,836	Nov. 20	1316	361	25	751
Horse-boot.....	J. O'Brien.....	290,096	Dec. 11	893	254	25	1051
Horse-brushing machine.....	E. Pennington.....	290,263	Dec. 18	1107	310	25	1098
Horse-canopy.....	F. H. Dibble.....	279,139	June 12	672	185	23	2248
Horse checking and controlling apparatus.....	H. Gottheimer.....	289,406	Dec. 4	40	12	25	894
Horse checking and unchecking device.....	D. O. Cox.....	287,419	Oct. 30	2074	564	25	403
Horse-detacher.....	S. B. and W. Bray.....	284,804	Sept. 11	797	222	24	1045
Horse-detacher.....	G. H. Cresce.....	282,960	Aug. 14	576	163	24	610
Horse-detacher.....	L. H. Fongeres and G. W. Blair.....	278,928	June 5	388	106	23	2189
Horse-detacher.....	E. R. Herring.....	287,284	Oct. 23	1905	521	25	365
Horse-detacher.....	O. T. Jones.....	281,860	July 24	1924	526	24	354
Horse-detacher.....	A. P. Larsson.....	290,072	Dec. 11	868	246	25	1047
Horse-detacher.....	W. S. Martin.....	288,464	Nov. 13	858	232	25	664
Horse-detacher.....	W. Y. McPherson.....	282,347	July 31	2552	699	24	465
Horse-detacher.....	J. Risséy and W. J. Horton.....	288,365	Nov. 13	731	{ 198 } { 199 }	{ 25 } { 25 }	{ 642 } { 642 }
Horse-detacher.....	C. J. Spindle.....	281,938	July 24	2018	552	24	371
Horse-detacher.....	S. A. Willson.....	272,394	Feb. 13	1015	283	23	627
Horse foot-pad.....	W. Reynolds.....	272,156	Feb. 13	711	195	23	575
Horse knee-boot.....	J. Fennell.....	283,990	Aug. 28	1840	519	24	858
Horse-power.....	P. Beche.....	278,853	June 5	247	71	23	2165
Horse-power.....	J. H. Elward.....	277,835	May 15	1611	440	23	1917
Horse-power.....	J. H. Elward.....	287,259	Oct. 23	1874	513	25	358

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Horse-power .....	W. B. Ingersoll .....	279,764	June 19	1420	397	23	2380
Horse-power .....	J. Preston .....	270,983	Jan. 23	1436	414	23	296
Horse-power .....	R. F. Rasmussen .....	280,080	June 26	1813	510	23	2455
Horse-power .....	E. A. Rix .....	271,123	Jan. 23	1599	{ 459 460 }	23	322
Horse-power .....	J. Smith .....	289,154	Nov. 27	1704	473	25	828
Horse-power .....	A. Stuart .....	277,375	May 8	1067	287	23	1816
Horse-power .....	D. Wolf .....	269,980	Jan. 2	184	54	23	38
Horse-power .....	W. H. Worth .....	276,320	Apr. 24	1876	{ 520 521 }	23	1570
Horse power and capstan .....	C. C. Brush .....	277,216	May 8	884	235	23	1783
Horse-power chain-link .....	G. E. Burt .....	283,751	Aug. 28	1556	439	24	807
Horse-power speed-regulator .....	J. A. Rouse .....	272,330	Feb. 13	921	256	23	612
Horse-power speed-regulator .....	J. A. Rouse .....	287,327	Oct. 23	1959	535	25	375
Horse-power sweep for grinding-mills .....	E. M. Wilcox .....	270,531	Jan. 9	866	252	23	179
Horse-power tread .....	D. S. I. D., and W. D. Heebner .....	285,129	Sept. 18	1199	336	24	1123
Horse quarter-boot .....	J. Fennell .....	288,220	Nov. 13	528	147	25	609
Horse quarter-boot .....	G. J. Hise and J. H. Fenton .....	275,655	Apr. 10	1033	279	23	1411
Horse quarter-boot .....	J. G. Lightford and J. H. Fenton .....	286,319	Oct. 9	690	184	25	135
Horse quarter-boot .....	S. Taylor .....	275,872	Apr. 17	1315	363	23	1467
Horse-tail holder .....	A. C. Smith .....	277,431	May 8	1134	305	23	1827
Horse-tail holder .....	J. C. Vail .....	289,873	Dec. 11	629	175	25	1003
Horse toe-weight .....	J. H. Fenton .....	286,190	Oct. 9	504	139	25	104
Horse-whipping device .....	G. L. Clark .....	276,153	Apr. 24	1659	458	23	1535
Horses. Adjustable toe-weight for trotting .....	C. H. Etter .....	286,189	Oct. 9	503	139	25	104
Horses. Device for stopping .....	C. E. Von Schwarz .....	273,616	Mar. 6	481	129	23	916
Horses' eyes. Screen for protecting .....	J. Sumner .....	287,885	Nov. 6	118	35	25	528
Horses' feet. Boot for soaking .....	W. G. Wild .....	280,107	June 26	1243	519	23	2461
Horses' feet. Moisture and pressure pad for .....	L. A. Couillard .....	288,211	Nov. 13	520	145	25	607
Horses from cribbing. Device for preventing .....	J. H. Ellis .....	275,370	Apr. 10	659	176	23	1347
Horses' heads. Rubber bumper for .....	G. J. Hise .....	275,654	Apr. 10	1032	279	23	1411
Horses. Overshoe for .....	B. Greenaway .....	287,280	Oct. 23	1900	520	25	364
Horses. Overshoe for .....	J. W. Smith .....	288,880	Nov. 20	1369	377	25	702
Horseshoe .....	J. D. Billings .....	283,849	Aug. 28	1669	471	24	826
Horseshoe .....	J. D. Billings .....	283,850	Aug. 28	1669	471	24	826
Horseshoe .....	G. W. Bowen .....	285,215	Sept. 18	1300	366	24	1141
Horseshoe .....	G. Braundl .....	271,307	Jan. 30	1826	530	23	370
Horseshoe .....	J. B. Burr .....	271,217	Jan. 30	1718	497	23	351
Horseshoe .....	D. Carey .....	276,157	Apr. 24	1658	457	23	1535
Horseshoe .....	E. A. Carroll .....	275,141	Apr. 3	343	94	23	1285
Horseshoe .....	O. M. Chase .....	279,223	June 12	759	210	23	2263
Horseshoe .....	J. N. Clarke .....	285,573	Sept. 25	1724	467	24	1224
Horseshoe .....	D. Crane .....	289,504	Dec. 4	167	46	25	915
Horseshoe .....	T. Doyle .....	271,228	Jan. 30	1730	501	23	353
Horseshoe .....	I. Fenno .....	289,402	Dec. 4	36	11	25	893
Horseshoe .....	F. A. Gauer .....	270,764	Jan. 16	1190	343	23	247
Horseshoe .....	H. Gourdin .....	273,677	Mar. 6	564	149	23	930
Horseshoe .....	F. M. Hartman .....	285,261	Sept. 18	1354	382	24	1152
Horseshoe .....	A. C. Hawes .....	280,816	July 10	598	167	24	112
Horseshoe .....	T. Head .....	287,024	Oct. 23	1577	435	25	304
Horseshoe .....	G. Heidel .....	280,819	July 10	601	168	24	112
Horseshoe .....	H. Holland .....	278,015	May 22	1838	501	23	1961
Horseshoe .....	G. B. Howie .....	287,833	Nov. 6	53	16	25	517
Horseshoe .....	W. Kireben .....	272,963	Feb. 27	1753	490	23	767
Horseshoe .....	J. A. Maguire .....	274,800	Mar. 27	1996	555	23	1202
Horseshoe .....	J. J. Mervesp .....	283,132	Aug. 14	783	220	24	646
Horseshoe .....	J. Nester .....	280,653	July 3	382	107	24	68
Horseshoe .....	J. Nester .....	290,091	Dec. 11	889	253	25	1051
Horseshoe .....	R. O'Hara and C. H. Remington .....	282,108	July 31	2237	615	24	413
Horseshoe .....	H. Olsson .....	272,750	Feb. 20	1471	413	23	712
Horseshoe .....	F. C. Rollins .....	286,640	Oct. 16	1083	292	25	212
Horseshoe .....	E. and V. D. Simar .....	281,932	July 24	2011	551	24	370
Horseshoe .....	F. W. Steiner .....	283,434	Aug. 21	1172	339	24	723
Horseshoe .....	E. S. Thurber .....	270,154	Jan. 2	385	112	23	78
Horseshoe .....	E. S. Thurber .....	274,853	Mar. 27	2054	573	23	1212
Horseshoe .....	E. S. Thurber .....	276,647	May 1	128	34	23	1649
Horseshoe .....	R. Weston .....	270,713	Jan. 16	1101	315	23	230
Horseshoe .....	J. W. White and J. C. Farmer .....	280,889	July 10	621	191	24	127
Horseshoe .....	R. G. Wilcox .....	271,008	Jan. 23	1465	421	23	301
Horseshoe .....	C. F. A. Zinke .....	289,330	Nov. 27	1917	533	25	870
Horseshoe. Adjustable .....	P. Hicks .....	279,758	June 19	1414	395	23	2379
Horseshoe and calk therefor .....	E. S. Thurber .....	274,851	Mar. 27	2052	572	23	1211
Horseshoe attachment for marshy ground .....	F. W. Moldenhauer .....	280,216	June 26	1963	553	23	2483
Horseshoe-blank roll .....	J. N. Clarke .....	275,022	Apr. 3	189	50	23	1257
Horseshoe-calk .....	G. W. Martin .....	279,408	June 12	1007	279	23	2303
Horseshoe-calk. Adjustable .....	G. W. Nickerson .....	280,071	June 26	1802	507	23	2453
Horseshoe-calk. Detachable .....	J. Joadwine .....	276,694	May 1	205	53	23	1659
Horseshoe-calk. Removable .....	F. Fawcett .....	272,672	Feb. 20	1373	385	23	695
Horseshoe-calks. Sharpening .....	C. F. Elmes .....	283,385	Aug. 21	1112	314	24	712
Horseshoe. Detachable .....	J. Thomas and B. Betzer .....	289,177	Nov. 27	1725	481	25	833
Horseshoe-nail-blank-finishing machines. Auto- matic feeder for .....	H. A. Wills and J. D. Kingsland .....	275,558	Apr. 10	903	{ 245 246 }	23	1389
Horseshoe-nail blanks. Finishing .....	W. W. Miner .....	287,150	Oct. 23	1732	474	25	334
Horseshoe-nail blanks. Machine for finishing .....	J. B. Wills .....	287,206	Oct. 23	1808	496	25	347
Horseshoe-nail machine .....	W. Werts .....	280,268	June 26	2029	{ 570 571 }	23	2493
Horseshoe-nail machine .....	J. D. Wilkison .....	284,934	Sept. 11	946	266	24	1073
Horseshoe-nails. Machine for assorting .....	J. B. Husted .....	277,488	May 15	1207	324	23	1846
Horseshoe-nails. Machine for forging .....	R. Ross .....	277,063	May 8	695	{ 181 182 }	23	1751
Horseshoe-nails. Machine for making .....	J. A. Coleman .....	286,390	Oct. 9	768	{ 207 208 }	25	150
Horseshoe-nails. Machine for making .....	J. A. Coleman .....	286,391	Oct. 9	770	{ 208 209 }	25	150



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Horseshoe-nails. Machine for rolling.....	E. Croft.....	285,800	Oct. 2	22	7, 8	25	6
Horseshoe. Self-sharpening.....	T. W. Leonard.....	269,947	Jan. 2	150	44	23	31
Horseshoe. Soft-ground.....	L. Brigham.....	285,562	Sept. 25	1710	483	24	1222
Horseshoe. Soft-ground.....	L. Brigham.....	285,563	Sept. 25	1711	483	24	1222
Horseshoeing implement.....	B. F. Pinson, Jr.....	275,698	Apr. 10	1079	295	23	1419
Horseshoeing-stand.....	W. D. Coffey.....	286,389	Oct. 9	766	207	25	149
Hose.....	C. Callahan.....	278,312	May 29	2234	612	23	2038
Hose and pipe coupling.....	W. I. Mann.....	270,323	Jan. 9	590	174	23	125
Hose and rope reel.....	T. R. Ellerbeck and A. C. Young.....	286,408	Oct. 9	792	213	25	154
Hose-carriage.....	S. T. Holly.....	274,771	Mar. 27	1965	{ 546 547 }	23	1196
Hose-carriage.....	J. Pusey.....	271,738	Feb. 6	181	49	23	472
Hose-cart.....	J. T. Noble.....	280,323	June 26	2100	590	23	2506
Hose clamp-handle and wrench. Combined.....	L. Kinzel.....	283,714	Aug. 21	1501	423	24	755
Hose-coupling.....	W. G. Abel.....	290,195	Dec. 18	1017	287	25	1083
Hose-coupling.....	D. S. Blue.....	290,663	Dec. 25	1659	451	25	1196
Hose-coupling.....	J. B. Genin.....	283,771	Aug. 28	1578	446	24	811
Hose-coupling.....	G. M. Gerhauser.....	280,169	June 26	1905	536	23	2472
Hose-coupling.....	F. Hickman.....	270,005	Jan. 2	279	82	23	57
Hose-coupling.....	J. H. Luther.....	274,951	Apr. 3	87	24	23	1240
Hose-couplings. Device for truing misshapen.....	J. A. Wheelock.....	284,107	Aug. 28	2002	558	24	885
Hose. Electric conductor for fire.....	C. M. Bowman.....	290,844	Dec. 25	1875	{ 517 518 }	25	1238
Hose-exhibitor.....	O. W. Conner.....	275,887	Apr. 17	1333	367	23	1470
Hose-fastener.....	E. B. Preston.....	282,466	July 31	2703	743	24	491
Hose-fastener.....	E. B. Preston.....	282,467	July 31	2704	743	24	491
Hose-jumper.....	W. B. Thomas.....	287,341	Oct. 23	1975	540	25	378
Hose. Manufacture of rubber-lined.....	J. E. Gillespie.....	275,638	Apr. 10	1015	.....	23	1407
Hose-nozzle.....	F. Hickman.....	270,064	Jan. 2	279	82	23	57
Hose or tubing.....	E. L. Perry.....	289,854	Dec. 11	605	169	25	1000
Hose-pipe nozzle.....	T. Haley.....	278,008	May 22	1827	499	23	1959
Hose pipes and sprinklers. Standard for garden.....	F. O. Worthley.....	271,562	Jan. 30	2159	621	23	428
Hose-protector.....	C. T. Bodfield and J. Arnett.....	289,381	Dec. 4	12	4	25	889
Hose-reel.....	A. Billings.....	289,960	Dec. 11	727	205	25	1021
Hose-reel.....	J. E. Gillespie.....	275,637	Apr. 10	1014	274	23	1407
Hose-reel.....	I. W. McGaffey.....	286,046	Oct. 2	328	91	25	60
Hose-reel.....	C. H. Shaffer.....	290,806	Dec. 25	1831	{ 506 507 }	25	1231
Hose-reel and ladder-truck. Combined.....	C. H. James.....	275,493	Apr. 10	825	223	23	1375
Hose-reel. Automatic.....	L. W. Stockwell. (Reissue).....	10,412	Nov. 27	1971	548	25	879
Hose-strap and means of attachment.....	E. R. Barbour.....	289,600	Dec. 4	286	80	25	938
Hose-supporter.....	W. R. Clough.....	288,161	Nov. 6	453	126	25	587
Hospital-crane.....	A. B. Morrison.....	290,088	Dec. 11	887	252	25	1050
Hot-air and gas engine.....	L. H. Nash.....	278,257	May 22	2145	589	23	2014
Hot-air engine.....	T. McDonough.....	278,446	May 29	2408	{ 656 657 }	23	2069
Hot-air engine.....	S. Wilcox.....	289,481	Dec. 4	131	37, 38	25	910
Hot-air engine.....	S. Wilcox.....	289,482	Dec. 4	135	38, 39	25	910
Hot-air engine. Double-acting.....	G. O., and W. Eimecke.....	290,036	Jan. 2	246	72	23	51
Hot-air furnace.....	C. B. Boynton.....	289,967	Dec. 11	739	209	25	1024
Hot-air furnace.....	C. B. Cutler.....	280,455	July 3	147	40	24	28
Hot-air furnace.....	H. J. Pelstring.....	281,551	July 17	1511	{ 415 416 }	24	278
Hot-air-furnace setting.....	E. S. Hutchinson.....	273,993	Mar. 13	958	264	23	1006
Hot-air magazine.....	J. H. Spurrier.....	286,648	Oct. 16	1094	294	25	214
Hot-air register.....	P. W. Nolan.....	270,832	Jan. 16	1243	358	23	258
Hot-bed and other frames for plants.....	J. A. Tracht.....	282,242	July 31	2416	664	24	442
Hotel-indicator.....	R. S. Hering.....	275,210	Apr. 3	424	116	23	1299
House.....							
See Drying-house. Ice-freezing house.							
House. Gin-house.....	F. W. Lawrence.....	288,072	Nov. 6	349	97	25	567
House. Apartment.....	E. T. Hatch.....	288,352	Nov. 13	681	187	25	633
House heater. School.....	J. Voegtli.....	270,706	Jan. 16	1093	313	23	229
House. Portable.....	E. Lee.....	290,991	Dec. 25	2072	370	25	1270
Houses. Construction of.....	L. Haas.....	274,315	Mar. 20	1376	378	23	1086
Hub.....	W. G. Morris.....	286,471	Oct. 9	861	234	25	167
Hub.....	W. Newlin.....	283,271	Aug. 14	961	268	24	679
Hub and axle. Vehicle.....	G. H. Simmons.....	273,618	Mar. 6	484	130	23	917
Hub-attaching device.....	T. A. Crabtree.....	289,627	Dec. 4	314	88	25	943
Hub-attaching device.....	J. Curtin.....	278,513	May 29	2489	680	23	2084
Hub-attaching device.....	H. M. Hall.....	278,942	June 5	401	110	23	2192
Hub-attaching device.....	J. W. Nunn.....	287,311	Oct. 23	1941	530	25	371
Hub-attaching device.....	G. W. Patterson.....	277,425	May 8	1125	302	23	1826
Hub-attaching device.....	H. F. Phillips.....	282,767	Aug. 7	355	100	24	562
Hub-band.....	G. W. Endebrock.....	289,339	Nov. 27	1927	535	25	872
Hub-band.....	C. E. Jones and C. H. Billings.....	270,547	Jan. 9	886	257	23	183
Hub-band.....	A. S. Parker.....	274,136	Mar. 20	1148	316	23	1046
Hub-boring machine.....	E. Caswell.....	282,495	Aug. 7	19	5	24	504
Hub-boring machine.....	J. T. Deterer.....	274,470	Mar. 27	1582	434	23	1130
Hub-boring machine.....	H. A. Moyer. (Reissue).....	10,360	July 31	2719	{ 748 749 }	24	494
Hub. Carriage.....	C. K. Wilcox.....	290,724	Dec. 25	1726	476	25	1213
Hub for couplings or pulleys.....	R. Whitehill.....	279,623	June 19	1260	349	23	2352
Hub for traction-wheels.....	A. Jillson.....	278,021	May 22	1844	503	23	1962
Hub. Metallic.....	J. Donglass.....	287,045	Oct. 30	2374	640	25	460
Hub. Vehicle.....	W. Caswell.....	275,993	Apr. 17	1453	400	23	1492
Hub. Vehicle.....	P. Moran.....	280,217	June 26	1964	553	23	2483
Hub. Vehicle.....	E. P. Newman.....	276,706	May 1	220	56	23	1662
Hub. Vehicle.....	V. A. Sallot.....	288,121	Nov. 6	409	115	25	579
Hub. Vehicle-wheel.....	M. L. Senderling.....	277,355	May 8	1046	281	23	1813
Hub. Vehicle-wheel.....	A. W. Stevens.....	270,257	Jan. 9	510	150	23	110
Hub. Vehicle-wheel.....	M. Tidd.....	279,892	June 19	1573	441	23	2407
Hub. Wheel.....	M. C. Johnson.....	273,548	Mar. 6	397	106	23	902

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Huller: See Pea-huller. Rice-huller.	Seed-huller. Wheat-huller.						
Hydrant	J. P. Farley	289,903	Dec. 11	667	186	25	1010
Hydrant	W. H. Fromm	270,782	Jan. 16	1186	342	23	247
Hydrant	W. Kaiser	278,435	May 29	2395	653	23	2067
Hydrant	W. Vadersen and F. L. Träder	286,508	Oct. 9	907	245	25	175
Hydrant	P. White	270,334	Jan. 9	628	185	23	132
Hydrant. Fire.	W. H. Leonard	287,534	Oct. 30	2244	609	25	437
Hydrant. Non-freezing.	H. Fletter	287,815	Nov. 6	31	10	25	513
Hydrant-valve	W. Kaiser	284,021	Aug. 28	1902	533	24	867
Hydraulic and other elevators	G. N. Reiff	278,739	June 5	81	23	23	2137
Hydraulic elevator	N. C. Bassett	290,660	Dec. 25	1635	450	25	1195
Hydraulic elevator	J. A. Lesourd and J. Lotan	286,451	Oct. 9	841	228	25	164
Hydraulic elevator	W. H. Milliken	281,781	July 24	1824	498	24	336
Hydraulic jack	D. Drawbaugh	288,697	Nov. 20	1145	315	25	721
Hydraulic jack	T. O. Hutchinson	280,315	June 26	2090	588	23	2504
Hydraulic jack	O. H. Mechem	273,872	Mar. 13	821	222	23	982
Hydraulic jack	J. C. Tanner	271,154	Jan. 23	1635	470	23	329
Hydraulic motor	H. Baumotte	286,374	Oct. 9	749	201	25	146
Hydraulic motor	E. B. Benham and H. B. Richardson	276,520	Apr. 24	2117	588	23	1613
Hydraulic motor	P. T. Griffith	290,039	Dec. 11	830	235	25	1040
Hydraulic motor	N. Yagn	273,930	Mar. 13	890	243	23	994
Hydraulic motor for vessels	S. O'Brien	286,477	Oct. 9	867	235	25	168
Hydraulic or other elevator	G. N. Reiff	275,857	Apr. 17	1295	356	23	1462
Hydraulic trap	G. H. Crosby	280,355	July 3	20	5	24	6
Hydrocarbon. Apparatus for generating vapor } from liquid	W. H. Brooks	272,373	Feb. 13	973	272	23	621
Hydrocarbon-burner	W. H. Brooks	273,942	Mar. 13	905	247	23	996
Hydrocarbon-burner	S. H. Douglas	272,863	Feb. 27	1634	457	23	749
Hydrocarbon-burner and apparatus for burning hy- } drocarbons.	W. Jasper	275,390	Apr. 10	693	184	23	1353
Hydrocarbon-engine	F. O. Wellington	278,065	May 22	1889	518	23	1971
Hydrocarbon fluids. Process of and furnace for burn- } ing	C. Holland	275,490	Apr. 10	822	223	23	1375
Hydrocarbon-furnace	J. B. Archer	279,904	June 26	1595	447	23	2417
Hydrocarbon-furnace	C. Holland	275,382	Apr. 10	681	180	23	1351
Hydrocarbon-furnace	C. Holland	275,488	Apr. 10	819	222	23	1374
Hydrocarbon-furnace	C. Holland	275,489	Apr. 10	820	222	23	1374
Hydrocarbon-furnace	O. D. Orvis	288,477	Nov. 13	875	237	25	668
Hydrocarbon-generator	H. F. Hayden	275,207	Apr. 3	421	115	23	1298
Hydrocarbon liquid to gas or air. Metrical regulator } for distributing	W. M. Jackson	280,747	July 3	499	141	24	88
Hydrocarbon-vapor generator and burner	I. R. Blumenberg and H. W. Whiting	275,124	Apr. 3	323	90	23	1282
Hydrogen peroxide. Manufacture of	C. Marchand	273,569	Mar. 6	430	115	23	908
Hydrometer cup and thief	J. David	284,393	Sept. 4	288	80	24	952
Hydropneumatic engine	L. G. Cook	271,040	Jan. 23	1495	431	23	305
Hydropneumatic engine	L. G. Cook	272,656	Feb. 20	1355	320	23	692
Hygrometer	G. A. Ayers	277,533	May 15	1262	339	23	1855
Hygroscope	W. Klinkerfues	275,220	Apr. 3	434	119	23	1300
Ice. Aiding the formation of atmospheric or natural.	O. Guthrie	277,024	May 8	646	184	23	1742
Ice and producing cold. Machine for making	T. H. Day	285,879	Oct. 2	127	36	25	25
Ice and salt mixing apparatus	A. J. Stoll	285,521	Sept. 25	1664	468	24	1212
Ice apparatus	J. Bowes	278,085	May 22	1916	525	23	1975
Ice. Apparatus for handling	R. B. Thomas	277,811	May 15	1583	432	23	1912
Ice. Apparatus for melting anchor	A. H. Martine	279,901	June 19	1586	444	23	2409
Ice. Blocking	G. W. Goddell	276,604	Oct. 16	1036	280	25	204
Ice-box	F. Jacoby	271,072	Jan. 23	1541	444	23	313
Ice-chambers. Guard for excluding air from	G. Gear	271,623	Feb. 6	48	13	23	449
Ice-chest	C. P. Jackson	274,337	Mar. 20	1411	387	23	1092
Ice-chest and reservoir. Combination	C. D. Morin	271,100	Jan. 23	1573	453	23	318
Ice-cream dasher	T. Mills	278,997	June 5	467	128	23	2203
Ice-cream freezer	D. S. Coskrey	275,152	Apr. 3	354	97	23	1288
Ice-cream freezer	D. W. Curtis	289,336	Nov. 27	1924	535	25	871
Ice-cream freezer	F. Espel	274,298	Mar. 20	1356	372	23	1082
Ice-cream freezer	F. Espel	277,250	May 8	924	247	23	1791
Ice-cream freezer	R. W. Furnas	280,734	July 3	479	135	24	85
Ice-cream freezer	H. O. King	273,107	Feb. 27	1932	541	23	799
Ice-cream freezer	C. W. Packer	272,752	Feb. 20	1473	414	23	713
Ice-cream freezer	W. Rogers and T. A. Maher	278,276	May 22	2165	596	23	2017
Ice-cream freezer	T. Sands	275,418	Apr. 10	726	193	23	1359
Ice-cream, &c. Non-heat-conducting envelope for	M. T. Fussell	274,698	Feb. 6	135	37	23	463
Ice-cream, &c. Non-heat-conducting package for	J. H. Empson	281,851	July 24	1914	522	24	352
Ice-creper	I. I. Bush	276,156	Apr. 24	1657	457	23	1534
Ice-creper	H. Cottrell	286,687	Oct. 16	1145	308	25	223
Ice-creper	A. W. Eichelberger	272,669	Feb. 20	1369	384	23	694
Ice-creper	A. Geiger	282,305	July 31	2493	685	24	455
Ice-creper	N. C. Jones	278,337	May 29	2275	622	23	2045
Ice-creper	G. L. Lyon	286,647	Nov. 20	1080	296	25	711
Ice-creper	C. R. Peyton	284,571	Sept. 4	503	141	24	989
Ice-creper	I. G. Treat	286,240	Oct. 9	559	153	25	113
Ice-creper	L. Young	290,165	Dec. 11	973	275	25	1067
Ice-cutter and harvester	C. B. Church	281,751	July 24	1778	484	24	328
Ice-cutting machine	A. C. Chaplin	271,220	Jan. 30	1721	498	23	352
Ice-cutting machine. Manual-power	A. L. and P. Stauffer	287,683	Nov. 6	116	34	25	528
Ice-cutting machine. Steam	J. Jamieson	273,998	Mar. 13	966	266	23	1007
Ice-elevator	H. A. Clapp and C. F. Baker	286,116	Oct. 2	414	113	25	76
Ice-elevator	H. A. Clapp and C. F. Baker	290,536	Dec. 18	1475	408	25	1161
Ice-freezing house. Portable	A. Von Krause	276,508	Apr. 24	2101	524	23	1610
Ice-harvester	C. B. Church	281,752	July 24	1779	484	24	328
Ice harvesting and loading machine	M. Breckheimer	285,791	Oct. 2	13	4	25	5



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volumc.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Ice-hook .....	J. Winebrener .....	277,437	May 8	1141	307	23	1828
Ice. House for producing and preserving .....	C. Pohlmann .....	275,699	Apr. 10	1080	295	23	1419
Ice-machine .....	W. B. Bushnell .....	285,460	Sept. 25	1594	448	24	1199
Ice-machine .....	A. W. Eldredge .....	277,249	May 8	923	247	23	1791
Ice-machine .....	S. W. Johnson .....	288,063	Nov. 6	340	95	25	565
Ice-machine .....	W. M. Mixer .....	290,911	Dec. 25	1955	{ 539 540 }	25	1252
Ice-machine .....	T. L. Rankin .....	270,121	Jan. 2	340	100	23	69
Ice-machine .....	T. L. Rankin .....	270,193	Jan. 2	429	{ 124 125 }	23	88
Ice-machine .....	B. Thoens .....	284,515	Sept. 4	435	{ 123 124 }	24	978
Ice-machine .....	W. M. Wood and W. L. Bailie .....	283,054	Aug. 14	693	{ 194 195 611 612 }	24	630
Ice-machine and refrigerating apparatus. Ammonia .....	H. and R. McManus .....	282,101	July 31	2225	{ 611 612 }	24	411
Ice-machine can .....	H. F. Fordham .....	278,527	May 29	2504	684	23	2086
Ice-machine condenser .....	J. C. Kline .....	288,450	Nov. 13	841	227	25	662
Ice. Machine for cutting holes through .....	R. Fitzgerald .....	256,599	Oct. 16	1030	279	25	203
Ice, &c. Machine for lowering .....	C. Rundlett .....	275,863	Apr. 17	1303	358	23	1464
Ice-machines. Gas-valve for .....	B. Thoens .....	289,727	Dec. 4	449	125	25	965
Ice-machines. Reservoir attachment for ammonia .....	P. Small .....	290,490	Dec. 18	1410	390	25	1150
Ice-making machine .....	J. A. Kline .....	274,500	Mar. 27	1639	456	23	1139
Ice-pick .....	J. A. Wiedersheim .....	289,738	Dec. 4	461	130	25	967
Ice pick and breaker .....	P. Nies .....	285,060	Sept. 18	1115	311	24	1109
Ice pick or cutter .....	A. C. Rex .....	281,644	July 17	1630	445	24	297
Ice-plow .....	C. R. Kyser .....	279,653	June 19	1297	360	23	2359
Ice-plow .....	B. Tryon .....	273,192	Feb. 27	2030	571	23	818
Ice plows and markers. Guide for .....	F. J. Fischer .....	287,428	Oct. 30	2085	566	25	404
Ice. Process of and apparatus for blocking .....	G. W. Goodell .....	275,192	Apr. 3	398	{ 109 110 }	23	1295
Ice-scraper .....	L. Hallowell .....	279,645	June 19	1285	357	23	2357
Ice-shaving machine .....	M. Gonzales .....	281,686	July 24	1694	461	24	313
Ice-tongs .....	J. W. Bowman .....	289,749	Dec. 4	475	134	25	969
Ice-tongs .....	G. J. Dickson .....	287,423	Oct. 30	2081	565	25	404
Ice-tool. Combination .....	G. M. Patten .....	277,334	May 8	1024	274	23	1809
Illuminating apparatus .....	J. and R. Pintsch .....	282,115	July 31	2256	619	24	415
Illuminating apparatus .....	E. Warne .....	288,281	Nov. 13	610	167	25	622
Illuminating-burner .....	C. Clamond .....	282,053	July 31	2163	{ 593 594 }	24	400
Illuminating-fluids. Time mechanism for lighting and extinguishing .....	G. P. Ganster .....	289,826	Dec. 11	566	158	25	992
Illuminating sidewalks or roof to a continuous vault or gallery, &c. .....	T. Hyatt .....	289,537	Dec. 4	208	58	25	922
Illuminators. Mast for .....	P. De Saisset .....	283,581	Aug. 21	1344	375	24	755
Incandescents. Apparatus for carbonizing .....	C. G. Perkins .....	287,315	Oct. 23	1947	532	25	372
Incandescents. Apparatus for carbonizing .....	C. G. Perkins .....	287,316	Oct. 23	1948	532	25	372
Incandescents. Apparatus for treating .....	C. G. Perkins .....	287,317	Oct. 23	1949	532	25	372
Incandescents. Furnace for baking .....	W. H. Boulton .....	284,171	Sept. 4	15	4	24	907
Incandescents. Retort for carbonizing .....	C. J. Van Depoele .....	284,779	Sept. 11	766	214	24	1040
Incandescents. Manufacture of .....	T. A. Edison .....	274,296	Mar. 20	1354	.....	23	1032
Inclined plane and sled therefor .....	R. Steel .....	277,625	May 15	1373	370	23	1873
Incombustible. Rendering manuscripts, &c. .....	G. Meyer .....	280,500	July 3	203	.....	24	37
Incombustible. Rendering organic substances .....	H. S. Suilliot and H. David .....	271,995	Feb. 6	507	.....	23	528
Incrustation. Device for preventing .....	E. J. Hoffman .....	270,569	Jan. 9	912	263	23	187
Incrustation-preventive .....	G. Downie .....	277,122	May 8	773	.....	23	1764
Incrustation-preventive .....	J. B. Hannay .....	285,615	Sept. 25	1779	506	24	1235
Incubator .....	A. H. Morgan .....	272,744	Feb. 20	1465	412	23	711
Incubator .....	J. Peterson .....	271,355	Jan. 30	1899	549	23	382
Incubator .....	E. S. Renwick .....	281,398	July 17	1321	{ 365 366 }	24	246
Incubator .....	C. F. Winkler .....	286,756	Oct. 16	1228	332	25	238
Incubators. Electric regulator and alarm for .....	F. Rosebrook .....	271,991	Feb. 6	499	135	23	527
Index .....	L. B. Tebbetts .....	288,277	Nov. 13	608	166	25	621
Index .....	L. B. Tebbetts .....	288,278	Nov. 13	608	{ 166 167 }	25	621
Index .....	J. H. Wagstaff .....	285,531	Sept. 25	1676	471	24	1215
Index for machine-tools. Differential .....	J. M. Seymour .....	276,292	Apr. 24	1821	507	23	1562
Index-tab .....	F. Flamminger and C. O. Sobinski .....	277,836	May 15	1615	440	23	1917
Index-tab for books, &c. .....	G. Ankelen .....	274,248	Mar. 20	1293	356	23	1072
Indexing books .....	H. A. De Silveira .....	283,383	Aug. 21	1110	313	24	712
Indicator:							
See Bilge-water indica- tor. ....	Railway time-indicator. School-indicator.						
Boot and shoe indi- cator. ....	Secondary-battery indi- cator.						
Express-indicator. ....	Speed-indicator.						
Feed-water-alarm indicator. ....	Station-indicator.						
Fire-indicator. ....	Steam-boiler indicator.						
Fire-alarm-indicator. ....	Steam-engine indicator.						
High and low water indicator. ....	Stock-indicator.						
Interest-indicator. ....	Telephone-call indicator.						
Pneumatic indicator. ....	Temperature-indicator.						
Post-office-box indi- cator. ....	Train-indicator.						
Railway-bridge in- dicator. ....	Type-writer or caligraph indicator.						
Indicator-lock .....	Visual indicator.						
Indicator-lock .....	Watch-winding indicator.						
Indicator-lock .....	M. Welsh .....	289,196	Nov. 27	1755	488	25	838
Indicator-lock .....	P. Yoe .....	274,875	Mar. 27	2091	{ 580 581 }	23	1217
Indigo. Manufacture of metamethyl .....	C. Rudolph .....	276,890	May 1	456	.....	23	1706
Indigo. Material for the manufacture of metamethyl. ....	C. Rudolph .....	276,889	May 1	455	.....	23	1706
Indophenols. Treatment of .....	H. Koechlin and O. N. Witt .....	275,774	Apr. 10	1184	.....	23	1436

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &.	Vol.	Page.
Induction-coil.	G. H. E. Trouvelot.	273,643	Mar. 6	514	139	23	922
Infant's seat.	A. E. McDonald.	289,115	Nov. 27	1656	459 460	25	820
Ingot-buggy.	S. C. Collin.	281,022	July 10	842	234	24	156
Ingot-manipulator.	T. Critchlow.	278,511	May 29	2485	679	23	2083
Ingot mold. Steel.	F. N. Beazle.	290,626	Dec. 18	1589	437	25	1181
Ingot-molds. Plastic refractory material for repairing.	T. Smith.	284,502	Sept. 4	421		24	975
Ingot-press.	E. B. Meatyard.	290,448	Dec. 18	1351	374	25	1140
Ingot-scalping machine.	C. C. Horn.	284,302	Sept. 4	180	51	24	934
Ingots and apparatus therefor. Production of sound.	F. A. Krupp.	271,717	Feb. 6	154	43	23	467
Inhaler.	C. Hilbert.	276,968	May 1	567	148	23	1723
Inhaler.	G. Meyer.	280,321	June 26	2097	589	23	2506
Inhaler.	S. A. Morse.	281,114	July 10	951	266	24	175
Inhaler.	L. W. Nevius.	279,265	June 12	810	224	23	2272
Inhaler.	W. F. Semple.	290,486	Dec. 18	1405	388	25	1150
Inhaler and irrigator. Nasal.	J. Keck.	285,753	Sept. 25	1956	554	24	1265
Inhaler. Medicinal.	J. W. Snyder.	290,608	Dec. 18	1569	431	25	1177
Inhaling air-chamber for dental and surgical operations, &c.	E. P. Howland.	280,040	June 26	1769	497	23	2447
Injector.	H. F. Colvin.	284,614	Sept. 11	558	158	24	1005
Injector.	J. Dimelow.	280,589	July 3	305	84	24	54
Injector.	A. S. Eberman.	288,039	Nov. 6	313	88, 89	25	561
Injector.	E. G. Felthousen and D. L. Volker.	283,229	Aug. 14	902	252	24	668
Injector.	J. Loftus.	290,693	Dec. 25	1678	462	25	1202
Injector.	J. H. McPhail.	285,498	Sept. 25	1636	460	24	1207
Injector.	W. T. Messinger.	281,385	July 17	1303	361	24	243
Injector.	H. B. Murdock.	281,389	July 17	1309	362	24	244
Injector.	W. H. Newell.	283,013	Aug. 14	642	182	24	621
Injector.	D. Renshaw.	274,968	Apr. 3	111	31	23	1244
Injector.	L. Schutte.	276,898	May 1	467	123	23	1707
Injector.	E. G. Sheward and J. Gresham.	285,171	Sept. 18	1254	352	24	1133
Injector.	O. H. Wheeler.	273,652	Mar. 6	527	142	23	924
Injector.	E. Wohlers.	276,319	Apr. 24	1874	520	23	1570
Injector. Air.	H. W. Norwood.	279,269	June 12	814	225	23	2272
Injector and ejector. Combined.	G. H. Little.	272,448	Feb. 20	1085	306 307	23	645
Injector. Feed-water.	W. McElroy.	275,063	Apr. 3	237	65, 66	23	1266
Injector. Medical-powder.	M. Mattson.	280,202	June 26	1945	546	23	2479
Injector. Oil or water.	O. H. Jewell.	271,077	Jan. 23	1548	446	23	315
Injector. Ointment.	A. W. Brinkerhoff.	277,213	May 8	881	233	23	1783
Injector. Steam.	J. Desmond.	270,937	Jan. 23	1373	396	23	826
Ink-can.	W. A. Anble.	286,893	Oct. 16	1403	385	25	268
Ink case. Printer's.	C. Heller.	273,969	Mar. 13	954	263	23	1005
Ink-fountain.	C. A. Lieb.	277,582	May 15	1322	355	23	1864
Ink-fountain. Printer's.	J. R. Rankin.	273,605	Mar. 6	470	127	23	914
Ink. Stamping.	W. Reissig.	277,342	May 8	1032		23	1810
Ink. Writing.	E. D. Kendall.	273,240	Feb. 27	2096		23	828
Inking apparatus.	J. K. Bittenbender.	270,886	Jan. 23	1310	378	23	276
Inking-roller. Sectional.	W. F. Jones.	276,825	May 1	377	100	23	1692
Inkstand.	I. Brooke.	271,410	Jan. 30	1966	503	23	395
Inkstand.	I. Brooke.	279,532	June 19	1160	321	23	2334
Inkstand.	I. Brooke.	280,568	July 3	277	76	24	50
Inkstand.	A. Cutler.	283,467	Aug. 21	1209	340	24	730
Inkstand.	H. B. Jones.	283,348	Aug. 14	1058	297	24	698
Inkstand.	S. Ustiek.	280,418	July 3	95	26	24	19
Inkstand. Pocket.	O. Jansson.	286,703	Oct. 16	1165	314	25	227
Inkstand stopper and tube combined.	J. Felt.	280,922	July 10	719	202	24	133
Inlaid articles. Manufacturing.	G. Hirst.	285,619	Sept. 25	1783	507	24	1235
Inlaid frames. Making.	A. E. Baugbart and C. H. Treat.	274,898	Apr. 3	9	2	23	1228
Inlaid metal-work for jewelry, &c.	J. Rothschild.	281,928	July 24	2006	550	24	368
Inlaid work and producing the same.	W. C. Edge.	272,032	Feb. 13	556	151	23	549
Inlaid work and producing the same.	W. C. Edge.	272,033	Feb. 13	557	151	23	549
Inlaid and embossing celluloid.	W. F. Weber.	275,343	Apr. 3	606	163	23	1328
Insect-catching device.	L. P. De Luze.	289,997	Dec. 11	779	219	25	1030
Insect-destroyer.	W. Grafton.	290,877	Dec. 25	1915	528	25	1245
Insect-destroyer.	F. D. Loomis and J. B. Dupont.	276,613	May 1	84	23	23	1642
Insect-destroyer.	J. C. Melcher.	288,833	Nov. 20	1313	360	25	751
Insect-destroyer.	A. Newkirk.	287,704	Oct. 30	2455	661	25	477
Insect-destroyer.	H. Perlich.	273,144	Feb. 27	1978	556	23	808
Insect-destroyer.	H. Perlich.	289,553	Dec. 4	227	63	25	926
Insect-destroying apparatus.	J. M. Matthews.	284,034	Aug. 28	1916	536	24	870
Insect-excluding device.	J. L. Wells.	274,425	Mar. 20	1517	417	23	1111
Insect-exterminating pad.	T. Manahan.	276,844	May 1	398	105	23	1696
Insect-powder ejector.	J. Jaeger.	270,074	Jan. 2	288	85	23	59
Insect-trap.	J. F. Bunnell.	280,291	June 26	2058	578	23	2499
Insects. Destroying.	J. Cole.	277,008	May 8	621		23	1738
Insecticide.	O. J. Parker and J. Cardy.	283,507	Aug. 21	1259		24	739
Insecticide.	H. A. Smeltz.	274,523	Mar. 27	1672		23	1144
Insecticide compound.	J. H. Gibson and J. G. Fish.	286,195	Oct. 9	510		25	105
Insecticide mixture.	J. C. Richardson.	273,895	Mar. 13	846		23	987
Instrument. Combination.	J. Hoffman.	273,232	Feb. 27	2087	586	23	827
Instrument of precision.	L. N. Jackman.	283,346	Aug. 14	1055	296	24	698
Insulate, preserve, and protect wire for electrical purposes. Composition to.	D. B. Turner.	283,044	Aug. 14	682		24	628
Insulated conductor of electricity. Electroplated.	N. H. Edgerton.	277,248	May 8	922	246	23	1790
Insulated electric conductor.	A. A. Covles.	272,659	Feb. 20	1359	381	23	693
Insulated electric conductor.	A. A. Covles.	272,660	Feb. 20	1360	381	23	693
Insulated electric conductor.	A. A. Covles.	281,841	July 24	1898	518	24	350
Insulated electric conductor.	G. S. Eaton.	280,153	June 26	1891	532	23	2470
Insulated electric conductor.	T. J. Mayall.	286,036	Oct. 2	317	89	25	59
Insulated electric conductor.	G. W. McGill.	287,766	Oct. 30	2544	684	25	493
Insulated electric conductor.	H. O. Phillips.	287,776	Oct. 30	2556	688	25	495
Insulated electric conductors. Manufacture of.	J. F. Gilpin.	281,864	July 24	1929	527	24	355
Insulated electrical conductor.	T. H. Dunham.	280,366	July 3	32	9	24	8
Insulated electrical conductor.	W. R. Patterson.	273,593	Mar. 6	458	123	23	913



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. Et.	Vol.	Page.
Insulated electrical conductor .....	W. Smith .....	277,366	May 8	1058	285	23	1815
Insulated wire for electrical purposes .....	F. H. Thompson .....	274,845	Mar. 27	2044	570	23	1210
Insulating, carrying, and laying electric wires .....	F. W. Brown .....	288,002	Nov. 6	273	77	25	554
Insulating compound for electric conductors .....	J. B. Hyde .....	290,057	Dec. 11	850	.....	25	1043
Insulating compound for electric conductors .....	S. F. Shelbourne .....	275,422	Apr. 10	730	.....	23	1360
Insulating compound for electric conductors and compounding the same .....	J. B. Hyde .....	290,058	Dec. 11	850	.....	25	1043
Insulating compound for electric wires .....	R. S. Waring. (Reissue) .....	10,351	July 3	553	.....	24	97
Insulating compound for electrical conductors and apparatus for compounding and applying the same .....	J. B. Hyde .....	281,999	July 24	2087	572	24	382
Insulating compound for electrical conductors and apparatus for compounding the same .....	J. B. Hyde. (Reissue) .....	10,403	Nov. 6	503	139	25	595
Insulating compound for electrical wires .....	J. F. Martin .....	274,622	Mar. 27	1788	.....	23	1164
Insulating-covering for telegraph-wires. Metallic .....	E. Clark .....	287,236	Oct. 23	1847	505	25	354
Insulating electric conductors .....	H. O. Phillips .....	286,220	Oct. 9	537	147	25	109
Insulating electric conductors. Machine for .....	H. O. Phillips .....	285,672	Sept. 25	1842	526	24	1246
Insulating electrical conductors .....	H. O. Phillips .....	285,673	Sept. 25	1843	526	24	1246
Insulating electrical conductors .....	J. G. Sanderson .....	276,891	May 1	457	122	23	1707
Insulating electrical conductors and a new compound suitable to be used for this and other purposes .....	W. Smith .....	276,916	May 1	488	.....	23	1711
Insulating electrical conductors. Machine for .....	J. Kruesi .....	288,454	Nov. 13	845	{ 228 229 }	{ 25 25 }	662
Insulating material .....	C. J. Van Depoele .....	287,346	Oct. 23	1982	541	25	379
Insulating material and preparation of the same .....	R. S. Waring .....	284,098	Aug. 28	1992	.....	24	883
Insulating material. Electrical .....	J. Greives .....	278,536	May 29	2515	.....	23	2088
Insulating material for electrical uses .....	R. S. Waring and J. B. Hyde. (Reissue.) .....	10,350	July 3	552	.....	24	97
Insulating materials or articles. Preparation or production of .....	J. A. Fleming .....	284,289	Sept. 4	162	.....	24	931
Insulating material to electric wires. Apparatus for applying .....	J. B. Hyde. (Reissue) .....	10,404	Nov. 6	504	139	25	595
Insulating substances. Apparatus for filling cables with .....	W. R. Patterson .....	284,226	Sept. 4	90	25	24	920
Insulating substances. Filling telegraph-cables with .....	W. R. Patterson .....	273,592	Mar. 6	456	{ 122 123 }	{ 23 23 }	912
Insulating subterranean electric cables. Mold for .....	S. F. Shelbourne .....	275,423	Apr. 10	732	194	23	1360
Insulating telegraph-wires .....	T. A. Smyth .....	278,753	June 5	97	28	23	2140
Insulating underground electric wires .....	W. M. Brisbane .....	278,087	May 22	1917	526	23	1976
Insulating wire for electric purposes .....	J. J. C. Smith .....	277,519	May 15	1239	334	23	1852
Insulating wires for electric uses. Process of and apparatus for .....	R. S. Waring and J. B. Hyde. (Reissue.) .....	10,349	July 3	550	153	24	97
Insulating-wrapper for grouped electrical conductors .....	J. H. Kohmescher .....	286,829	Oct. 16	1320	360	25	254
Insulation of electrical conductors .....	W. S. How .....	285,267	Sept. 18	1359	383	24	1153
Insulation of wires for telegraph-lines .....	T. J. Mayall .....	286,035	Oct. 2	316	88	25	59
Insulator .....	B. A. Fiske and S. D. Mott .....	286,801	Oct. 16	1284	347	25	248
Insulator .....	N. Rousseau .....	289,449	Dec. 4	91	26	25	903
Insulator. Acoustic and electric .....	W. J. Bowen .....	286,681	Oct. 16	1136	306	25	222
Insulator and lightning-arrester. Combined .....	J. E. Noble .....	280,324	June 26	2101	590	23	2506
Insulator brackets. Machine for making telegraph .....	J. B. Smith .....	278,618	May 29	2611	712	23	2105
Insulator. Electric-wire .....	J. F. Martin .....	286,946	Oct. 16	1471	404	25	279
Insulator. Electric-wire .....	J. F. Martin .....	287,146	Oct. 23	1728	473	25	333
Insulator. Electric-wire .....	W. H. Reiff .....	274,821	Mar. 27	2020	562	23	1206
Insulator. Electrical .....	D. M. Steward .....	271,994	Feb. 6	506	136	23	528
Insulator. Electrical .....	D. M. Steward. (Reissue) .....	10,344	June 19	1589	445	23	2410
Insulator. Electrical-wire .....	J. F. Martin .....	286,937	Oct. 16	1455	400	25	277
Insulator for electric conductors .....	T. Mace .....	272,069	Feb. 13	603	163	23	556
Insulator for electrical conductors .....	P. C. Ohl .....	280,947	July 10	759	210	24	139
Insulator for electrical conductors .....	F. L. Pope .....	290,922	Dec. 25	1969	543	25	1254
Insulator for telegraph-wires .....	J. S. Lewis .....	276,839	May 1	393	104	23	1695
Insulator for the suspension of electrical wire conductors .....	P. Higgs and W. Courtenay .....	269,933	Jan. 2	130	39	23	27
Insulator for underground electric conductors .....	J. F. Martin .....	286,944	Oct. 16	1468	403	25	279
Insulator for underground electric conductors .....	J. F. Martin .....	286,947	Oct. 16	1472	404	25	279
Insulator pins. Machine for making telegraph .....	J. B. Smith .....	278,619	May 29	2613	{ 712 713 }	{ 23 23 }	2105
Insulator. Telegraph .....	T. L. Chapman .....	281,452	July 17	1398	384	24	258
Insulator. Telegraph .....	C. C. Hinsdale .....	287,830	Nov. 6	50	15	25	516
Insulator. Telegraph .....	S. Oakman .....	288,360	Nov. 13	716	196	25	640
Insulators. Apparatus for making glass .....	M. Johnson .....	289,989	Aug. 14	605	171	24	615
Insulators. Compound for electric-wire .....	J. F. Martin .....	282,914	Aug. 7	521	146	24	593
Insulators for electric wires. Coupling for tubular .....	J. F. Martin .....	286,941	Oct. 16	1462	{ 401 402 }	{ 25 25 }	278
Insulators for electric wires in underground conduits. Supporting .....	J. F. Martin .....	286,943	Oct. 16	1467	403	25	279
Interest-indicator .....	H. E. Jenne .....	287,290	Oct. 23	1914	524	25	366
Interlocking apparatus .....	A. G. Cummings .....	270,024	Jan. 2	333	68	23	48
Interlocking switch and signal. Electric .....	O. Gasset and I. Fisher .....	276,138	Apr. 17	1632	450	23	1322
Intestines. Machine for cleaning .....	F. E. Davis .....	287,253	Oct. 23	1867	511	25	357
Intestines. Machine for cleaning .....	C. Nida .....	289,302	Nov. 27	1877	{ 521 522 }	{ 25 25 }	862
Intrenching implement .....	N. W. Wallace .....	285,188	Sept. 18	1272	357	24	1136
Intrenching-tool .....	G. F. Elliott .....	285,594	Sept. 25	1751	496	24	1229
Invalid-chair .....	M. J. Keonig .....	276,429	Apr. 24	2003	555	23	1593
Invalid-lifter .....	H. D. Stelle and L. M. Cutting .....	274,527	Mar. 27	1677	465	23	1145
Iron .....							
See Angle-iron. Saddle-iron. Soldering-iron. Vehicle chafe-iron. Vehicle rub-iron. Waffle-iron. Wagon rub-iron. Wagon-seat iron. Whiffletree-iron.							
Iron and condensing the products. Purifying .....	J. Henderson .....	283,241	Aug. 14	919	.....	24	671

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Iron and steel. Basic process for the dephosphorization of	J. Reese	272,085	Feb. 13	623	.....	23	560
Iron and steel. Basic process for the manufacture of homogeneous ingot	J. Reese	284,574	Sept. 4	506	.....	24	989
Iron and steel. Basic process of manufacturing	J. Henderson	283,783	Aug. 28	1597	.....	24	814
Iron and steel. Basic process of manufacturing	J. Henderson	284,532	Sept. 4	475	.....	24	985
Iron and steel. Basic process of manufacturing	J. Henderson	284,553	Sept. 4	476	.....	24	985
Iron and steel. Basic process of manufacturing	J. Henderson	284,554	Sept. 4	477	.....	24	985
Iron and steel coated with magnetic oxide. Depositing metals upon the surfaces of	G. Bower	270,004	Jan. 2	212	.....	23	44
Iron and steel directly from the ore. Apparatus for manufacturing	H. C. Bull	282,266	July 31	2443	{ 672 673 }	24	447
Iron and steel fagot	W. G. Howell	276,139	Apr. 17	1634	450	23	1522
Iron and steel. Manufacture of	J. Henderson	274,889	Mar. 27	2107	.....	23	1220
Iron and steel. Manufacture of	J. Henderson	280,310	June 26	2083	.....	23	2504
Iron and steel. Manufacture of	J. Henderson	283,483	Aug. 21	1229	.....	24	734
Iron and steel. Manufacture of	J. Henderson	283,484	Aug. 21	1231	346	24	734
Iron and steel. Plating	H. Reusch. (Reissue)	10,367	Aug. 14	1088	.....	24	702
Iron and steel. Process of and apparatus for producing non-corrodible surfaces on	J. P. Gill	284,000	Aug. 28	1864	525	24	861
Iron and steel. Process of and apparatus for the treatment of	J. P. Gill	283,999	Aug. 28	1860	524	24	860
Iron and steel. Producing ingot	J. Reese	286,067	Oct. 2	354	.....	25	65
Iron and steel surface	J. P. Gill	284,001	Aug. 28	1866	.....	24	861
Iron. Apparatus for purifying	T. H. Burridge	274,717	Mar. 27	1898	529	23	1185
Iron. Apparatus for treating molten	R. H. Gordon	287,273	Oct. 23	1889	517	25	361
Iron-bending machine	W. A. Wren	275,741	Apr. 10	1132	310	23	1428
Iron breaker. Pig	W. R. Havens and J. W. Nesmith	272,249	Feb. 13	823	229	23	595
Iron by means of fluorides and condensing the gaseous products therefrom. Purifying	J. Henderson	279,947	June 26	1650	{ 462 463 }	23	2426
Iron. Compound for tempering and hardening	M. L. Healy	290,423	Dec. 18	1325	.....	25	1135
Iron from blast-furnaces. Analyzing pig	S. A. Ford	281,044	July 10	869	.....	24	161
Iron from blast-furnaces. Analyzing pig	S. A. Ford. (Reissue)	10,395	Oct. 23	2050	.....	25	391
Iron from charcoal, &c. Apparatus for separating	D. MacEachran	289,545	Dec. 4	215	60, 61	25	924
Iron. Hardening	H. J. Burr	286,716	July 3	452	.....	24	81
Iron high in carbon and low in silicon. Manufacture of cast	J. Reese	281,729	July 24	1754	.....	24	323
Iron in an open-hearth furnace. Dephosphorizing	J. Reese	284,233	Sept. 4	98	.....	24	921
Iron in blast-furnaces. Manufacture of	C. Cochran	284,383	Sept. 4	275	.....	24	950
Iron in the Bessemer basic process. Obtaining purified	J. Reese	279,596	June 19	1250	.....	23	2347
Iron into cast-steel. Process of and apparatus for converting cast	J. Reese	277,929	May 22	1728	472	23	1942
Iron into fibrous wrought-iron. Converting cast	J. Reese	286,330	Oct. 9	702	.....	25	137
Iron. Malleablizing	T. A. Edison	273,715	Mar. 13	608	.....	23	946
Iron. Manufacture of sheet	I. E. Craig	280,799	July 10	580	.....	24	109
Iron. Manufacture of wrought	L. D. Chapin	283,074	Aug. 14	714	.....	24	634
Iron or steel without fusion. Purifying solid iron, producing therefrom malleable	J. Henderson	284,551	Sept. 4	473	.....	24	985
Iron. Process of and plant for producing cast	J. Reese	287,054	Oct. 23	1613	{ 444 445 }	23	312
Iron. Purifying molten	W. Griffith	289,085	Nov. 27	1623	.....	25	814
Iron. Purifying molten	W. Griffith	289,086	Nov. 27	1624	.....	25	814
Iron. Purifying molten	W. Griffith	289,087	Nov. 27	1624	.....	25	814
Iron. Purifying molten	W. Griffith	289,088	Nov. 27	1625	.....	25	814
Iron. Purifying molten	W. Griffith	289,089	Nov. 27	1625	.....	25	814
Iron, steel, &c. Manufacturing	J. Henderson	278,013	May 22	1836	.....	23	1961
Iron. Treating	G. Neilson	281,784	July 24	1829	.....	24	337
Iron. Treating	B. Woodhuff	286,104	Oct. 2	400	.....	25	73
Iron-ware. Manufacture of enameled	E. Kegreisz	270,094	June 5	595	162	23	2225
Iron-ware vessel. Enameled	W. F. Niedringhaus	290,596	Dec. 18	1549	427	25	1174
Iron-ware vessel. Enameled	W. F. Niedringhaus	290,597	Dec. 18	1550	427	25	1174
Iron-ware vessel. Enameled	W. F. Niedringhaus	290,598	Dec. 18	1550	427	25	1175
Iron wheel	J. L. Schrubben and W. F. Leonard	284,074	Aug. 28	1965	547	24	878
Iron with carbonic-acid gas. Purifying	J. F. Bennett	285,786	Oct. 2	8	.....	25	4
Iron with lead. Covering	J. A. Graham	286,466	July 3	168	.....	24	31
Iron. Wrought	W. F. Jordan	270,901	Jan. 23	1331	.....	23	279
Ironing and cutting table. Combined	H. A. Dearborn	282,708	Aug. 7	294	83	24	551
Ironing apparatus	I. D. Warner	279,293	June 12	841	233	23	2277
Ironing-board	J. McIntick	275,836	Apr. 17	1271	349	23	1458
Ironing-board	B. F. Monk	277,324	May 8	1013	272	23	1806
Ironing-board	G. B. Perkins	283,810	Aug. 28	1627	458	24	819
Ironing-board	J. D. Talbott	271,667	Feb. 6	97	26	23	457
Ironing-board	P. F. Weber	287,596	Oct. 30	2314	626	25	449
Ironing-board. Bosom	J. O. Welty	284,697	Sept. 11	664	187	24	1023
Ironing-board clamp	H. W. Ross and J. F. Bliss	275,275	Apr. 3	501	138	23	1311
Ironing-board support	T. C. Miller	271,895	Feb. 6	370	102	23	506
Ironing-machine	G. W. Cottingham	282,848	Aug. 7	448	126	24	579
Ironing-machine	J. Powers	275,851	Apr. 17	1288	354	23	1461
Ironing-machine	M. I. Remy	275,081	Apr. 3	267	73	23	1272
Ironing-machine	H. Schmidt	289,148	Nov. 27	1696	{ 470 471 }	25	827
Ironing-machine	Z. C. Smith	279,514	June 12	1132	314	23	2322
Ironing-machine. Corset	J. Stever	286,238	Oct. 9	556	{ 152 153 }	25	112
Ironing-stand	N. Scholl	272,906	Feb. 27	1691	474	23	757
Ironing-table	C. Campbell	275,753	Apr. 10	1157	317	23	1431
Ironing-table	A. J. and A. H. Freid	272,950	Feb. 27	1742	486	23	765
Ironing-table	C. W. L. Hayward	289,097	Nov. 27	1638	454	25	816
Ironing-table	H. D. Parke	273,140	Feb. 27	1973	555	23	807
Ironing-table	J. F. Richmond	289,561	Dec. 4	237	67	25	928
Ironing-table. Folding	L. R. Sample	282,469	July 31	2705	744	24	491
Irrigating agricultural and other lands	M. A. Martindale	272,728	Feb. 20	1442	405	23	768
Irrigating apparatus	J. Robinet	289,448	Dec. 4	90	26	25	902
Ivory. Manufacture of artificial	J. B. Edson	283,225	Aug. 14	896	.....	24	667
Ivory. Method of and apparatus for bleaching	J. Miller	281,780	July 24	1823	498	24	336



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				S ec.	Dr'g.	Vol.	Page.
Jack:							
See Boot-jack.	Last-jack.						
Boot and shoe hold- ing jack.	Lever-jack.						
Boot or shoe lasting jack.	Lifting-jack.						
Carriage-jack.	Power-jack.						
Carriage or wagon jack.	Screw-jack.						
Floor-jack.	Sewing-machine jack.						
Flooring jack.	Shoe-holding jack.						
Hydraulic jack.	Thill-coupling jack.						
Jack for raising railway-tracks	Wagon-jack.						
Jacket	Window-jack.						
Jacketed vessel	J. W. Harrison	269,932	Jan. 2	129	38	23	27
Jails, &c. Construction of	I. Schner	274,521	Mar. 27	1670	464	23	1143
Japanning metal sheets or plates	L. Fritz	288,990	Nov. 27	1504	416	25	794
Jar:	S. M. McLean	272,296	Feb. 13	877	245	23	605
See Fruit-jar.	A. N. Hopkins	278,707	June 5	40	12	23	2131
Jar	J. L. Wheeler	280,888	July 10	679	191	24	127
Jar and bottle stopper	J. H. Wood	272,823	Feb. 20	1561	439	23	729
Jar-covers. Spring-fastener for	I. N. Peirce	276,276	Apr. 24	1801	502	23	1559
Jar-fastener	T. G. Otterson.	285,062	Sept. 18	1117	313	24	1109
Jar-holder	N. Morse	276,064	Apr. 17	1537	423	23	1506
Jaw wrench. Sliding	G. J. Cline	281,456	July 17	1401	385	24	259
Jetty for connecting the channels of rivers, &c.	T. E. Buck	275,132	Apr. 3	335	92	23	1283
Jeweler's burnishing-machine	W. W. Covell	283,865	Aug. 28	1686	476	24	829
Jeweler's card and tag cabinet	J. Wiesbauer	271,007	Jan. 23	1464	421	23	300
Jeweler's findings. Manufacture of	G. H. Fuller	286,601	Oct. 16	1033	279	25	204
Jeweler's presses. Feed device for	J. E. Walcott	273,918	Mar. 13	875	237	23	991
Jeweler's show-window	C. Buschor and S. Zweighaft	280,345	July 3	9	3	24	4
Jeweler's stool	C. N. Fairbanks	271,051	Jan. 23	1512	436	23	309
Jewelry	H. M. Daggett, Jr.	279,351	June 12	927	258	23	2290
Jewelry. Manufacture of imitation-stone for	H. C. Luther	274,350	Mar. 20	1424	390	23	1095
Jewelry-mounting	L. Richards	271,988	Feb. 6	497	134	23	526
Jewelry-pin joint	H. G. Mackinney	273,564	Mar. 6	423	113	23	907
Jogging apparatus for concrete and the like	H. Reid	273,606	Mar. 6	471	127	23	914
Joint:							
See Belt-joint.	Pipe-joint.						
Carriage-top joint.	Pivot-joint.						
Cornice-pole joint.	Rail-joint.						
Curtain-pole angle- joint.	Railway-rail joint.						
Expansion-joint.	Railway-track joint.						
Faucet-joint.	Sheet-metal joint.						
Jewelry-pin joint.	Sheet-metal-pipe joint.						
Key-joint.	Universal joint.						
Knuckle-joint.	Watch-case joint.						
Lightning-rod joint.	Water-tight joint.						
Locked joint.	Wipe-joint.						
Joint-fastener	R. W. Ferguson	281,854	July 24	1916	523	24	353
Joint or coupling for rods, &c.	J. E. Langdon	285,493	Sept. 25	1631	458	24	1206
Jointer for dressing angles for joints	J. L. Gobeille	280,813	July 10	593	166	24	111
Journal	D. F. Stoyman	283,527	Aug. 21	1277	357	24	742
Journal and stuffing box	W. A. Stone	272,170	Feb. 13	725	200	23	577
Journal-bearing	F. R. Cargill	280,347	July 3	11	3	24	4
Journal-bearing	G. P. Fenner	276,015	Apr. 17	1477	408	23	1496
Journal-bearing	D. A. Hopkins	286,927	Oct. 16	1443	396	25	275
Journal-bearing	D. A. Hopkins. (Reissue).	10,426	Dec. 18	1625	447	25	1187
Journal-bearing	C. E. Tibbles	275,292	Apr. 3	323	143	23	1315
Journal-bearing	E. R. Ware	287,203	Oct. 23	1804	495	25	346
Journal-bearing	S. Wills	286,982	Oct. 16	1517	417	25	287
Journal bearing and box	R. W. Traylor	286,563	Oct. 9	978	263	25	188
Journal-box	B. W. Baldwin	283,950	Aug. 28	1795	508	24	850
Journal-box	S. Benson	276,756	May 1	297	76	23	1676
Journal-box	G. R. Cullingworth	287,006	Oct. 23	1549	427	25	299
Journal-box	G. Sargood and F. L. Hemmer	276,195	Apr. 24	1704	470	23	1542
Journal-box	J. Thomas	279,461	June 12	1063	294	23	2312
Journal-box	W. W. Worswick and N. W. Cut- ter.	289,053	Nov. 27	1586	439	25	807
Journal-box. Anti-friction	A. Russell	283,421	Aug. 21	1155	326	24	720
Journal-box attachment	E. Curtiss	270,757	Jan. 16	1157	331	23	241
Journal-box cooler	R. C. Morris	284,568	Sept. 4	499	140	24	988
Journal-box for grinding and polishing lathes	J. M. Riley	271,519	Jan. 30	2110	607	23	420
Journal-box lubricator	N. M. Bergqvist	278,309	May 29	2230	612	23	2037
Journal. Compensating	G. S. Rominger	276,287	Apr. 24	1814	505	23	1561
Journal for shafts. Sleeve	J. K. Proctor	288,489	Nov. 13	891	242	25	670
Journal-lubricator	F. Brown	280,569	July 3	278	76	24	50
Journal-lubricator	M. L. Sanderling	290,937	Dec. 25	1992	550	25	1258
Journals. Automatically cooling hot	F. O. Matthieson	270,236	Jan. 9	466	144	23	105
Journals. Compound for cooling and lubricating	G. J. Henninger	288,054	Nov. 6	332		25	564
Journals cool. Device for keeping	T. S. Wilkin	290,159	Dec. 11	967	273	25	1066
Journals. Take-up box for shaft	F. I. Pearce	277,157	May 8	820	216	23	1772
Jug. Non-heat-conducting	M. P. Bousser	277,447	May 15	1159	311	23	1838
Jug-top. Spring	H. Wright	274,244	Mar. 20	1289	355	23	1071
Jump-seat iron	H. A. Willits	284,153	Aug. 28	2066	573	24	895
Jute, butts, and animal-hair. Treating	I. Ohnstein	277,054	May 8	684		23	1749
Keg. Metallic	R. C. Rosensteel	291,004	Dec. 25	2091	576	25	1273
Keg. Nail	A. A. Southwick	274,045	Mar. 13	1017	279	23	1016
Kegs and barrels. Tool for working off	J. A. Scaman	271,660	Feb. 6	90	24	23	456
Kegs. Machine for dressing the interior of	L. and J. A. Weindel	286,661	Oct. 16	1106	298	25	216
Kettle for rendering fats, boiling soap, &c. Jack- eted steam-	H. W. Dopp	287,424	Oct. 30	2081	565	25	404
Kettle. Lamp	W. Pountney	281,791	July 24	1840	503	24	339

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Kettle-stand .....	J. Geiger .....	279,238	June 12	775	214	23	2266
Key:							
See Musical-instrument key.	Telegraph-key.						
See Watch-key.							
Key .....	T. Lincoln .....	289,284	Nov. 27	1858	516	25	858
Key-fastener .....	R. Allen .....	287,991	Nov. 6	260	74	25	552
Key-fastener .....	J. J. Arend .....	290,623	Dec. 18	1584	436	25	1180
Key-fastener .....	W. Dewey .....	281,247	July 17	1136	312	24	214
Key-fastener .....	W. H. Flinn .....	279,930	June 26	1630	457	23	2423
Key-fastener .....	W. H. Flinn .....	290,876	Dec. 25	1913	528	25	1245
Key-hole guard .....	J. Brown .....	269,824	Jan. 2	4	1	23	3
Key-hole guard .....	L. Rhoades and J. P. Sipp .....	285,074	Sept. 18	1130	316	24	1112
Key-hole guard .....	L. Rhoades and J. P. Sipp .....	289,446	Dec. 4	68	25	25	902
Key-hole guard .....	J. Warner .....	275,553	Apr. 10	899	244	23	1388
Key-hole guard .....	J. P. Wilkinson .....	282,018	July 24	2115	579	24	386
Key-joint .....	W. A. Palmer .....	283,651	Aug. 21	1417	397	24	769
Key-rack .....	W. H. Camp .....	287,623	Oct. 30	2352	634	25	456
Key-ring .....	G. W. Jopson .....	276,826	May 1	378	101	23	1692
Key-ring and button-hook. Combined.	H. W. Pratt .....	281,297	July 17	1197	331	24	225
Key-seat-cutting machine .....	G. W. Bonds .....	289,060	Nov. 27	1593	441	25	609
Key-seat-cutting machine .....	W. P. Davis .....	274,287	Mar. 20	1340	369	23	1080
Key-seat-cutting machine .....	S. B. Pierce .....	286,221	Oct. 9	538	147	25	109
Key-seat-milling machine .....	O. Buchbinder and L. Vogt .....	281,833	July 24	1889	516	24	348
Key-seat-milling machine .....	A. H. Campbell .....	274,906	Apr. 3	17	5	23	1230
Key-seats in hubs of gears, &c. Machine for forming.	L. J. Knowles .....	275,393	Apr. 10	699	186	23	1354
Key-seats. Machine for cutting .....	L. Cosgrove .....	280,582	July 3	296	82	24	53
Keys. Machine for making split .....	R. T. King .....	277,577	May 15	1317	353	23	1864
Kiln:							
See Brick-kiln.	Gas and coke kiln.						
Brick and tile kiln.	Linekiln.						
Charcoal-kiln.	Malt-kiln.						
Kiln for burning brick, tiles, &c. ....	H. McCue .....	288,466	Nov. 13	861	233	25	665
Kiln for burning tiles, earthenware, &c. ....	D. Laemmle .....	285,776	Sept. 25	1991	563	24	1269
Kiln for drying kindling-wood .....	M. J. Shaw .....	283,673	Aug. 21	1447	405 406	24	775
Kiln for firing pottery, &c. ....	N. M. Fitch .....	281,625	July 17	1610	440	24	293
Kiln-head guide .....	C. F. Lacour .....	270,444	Jan. 9	751	220	23	155
Kilns. Device for burning gaseous fuel in.	B. Loomis .....	280,838	July 10	624	175	24	116
King-bolts. Die for making clip .....	N. Eccles .....	270,404	Jan. 9	699	206	23	146
Kitchen utensil .....	W. H. H. Smith .....	285,439	Sept. 25	1570	442	24	1195
Kitchen-ventilator .....	A. Zerban .....	273,216	Feb. 27	2067	581	23	823
Kite. Folding .....	S. E. Kelly .....	274,340	Mar. 20	1415	388	23	1093
Kites. Reel for flying .....	J. C. Gunn .....	274,490	Mar. 27	1629	451	23	1136
Knife:							
See Channeling and	Mincing-knife.						
grooving knife.	Pocket-knife.						
Chopping-knife.	Rag-joining knife.						
Drawing-knife.	Roofing-knife.						
Endless band-knife.	Veneer-cutting knife.						
Hay-knife.							
Leather splitting							
and beveling knife.							
Knife .....	J. W. Gardner .....	280,599	July 3	313	87	24	56
Knife .....	H. C. Hart .....	281,361	July 17	1280	355	24	238
Knife and fork. Folding .....	T. M. Grilley .....	288,174	Nov. 6	470	131	25	589
Knife and pencil holder. Automatic.	J. Hoffman .....	290,683	Dec. 25	1664	459	25	1200
Knife-blade holder .....	C. W. Boman. (Reissue) .....	10,335	June 5	634	172	23	2231
Knife-blade holder .....	C. W. Boman .....	273,222	Feb. 27	2073	583	23	825
Knife-blades. Marking .....	M. Schweizer .....	288,369	Nov. 13	736	200	25	643
Knife-box .....	D. Block .....	283,066	Aug. 14	706	198	24	633
Knife-brick box and grinder. Combined.	J. F. Wood .....	290,619	Dec. 18	1550	434	25	1179
Knife-cleaning machine .....	H. F. Hambruch .....	271,841	Feb. 6	310	85	23	495
Knife-cleaning machine .....	W. H. D. Jones .....	281,885	July 24	1955	534	24	360
Knife-cleaning machine .....	E. M. Knight .....	285,278	Sept. 18	1372	387	24	1155
Knife-edging machine .....	J. A. Stephens .....	272,345	Feb. 13	937	260	23	614
Knife-grinder .....	T. A. Myers .....	288,099	Nov. 6	385	109	25	574
Knife-grinder and sharpener. Horizontal.	M. O. Millar .....	279,785	June 19	1442	404	23	2384
Knife-handle .....	G. S. Hastings .....	277,132	May 8	793	208	23	1767
Knife or tool handle .....	P. Lincoln .....	286,209	Oct. 9	525	144	25	107
Knife-scourer .....	C. Kinney .....	273,368	Mar. 6	172	47	23	863
Knives and forks to handles. Securing.	T. C. Richards .....	277,932	May 22	1733	472	23	1943
Knives and saws. Mechanism for straightening and keeping straight band	S. E. and J. E. Furlong .....	284,957	Sept. 11	977	275	24	1078
Knit fabric .....	R. Ward .....	283,047	Aug. 14	685	192	24	629
Knit fabric and constructing the same .....	S. M. Levy .....	280,750	July 3	502	142 143	24	89
Knit fabrics. Machine for uniting. ....	W. Pearson .....	273,143	Feb. 27	1977	555 556	23	808
Knit goods. Manufacture of. ....	S. Arnold .....	278,486	May 29	2454	669	23	2077
Knit stocking .....	C. B. Alling .....	285,201	Sept. 18	1284	361	24	1139
Knitted fabrics to woven fabrics, &c. Mechanism for attaching	W. Girling .....	288,326	Nov. 13	670	185	25	632
Knitted goods. Machine for napping and brushing.	G. Jackson .....	277,489	May 15	1209	325	23	1847
Knitting-gloves .....	R. Liebeskind .....	286,452	Oct. 9	843	228	25	164
Knitting-machine .....	J. Adams .....	270,275	Jan. 9	527	155	23	113
Knitting-machine .....	W. Aiken .....	279,902	June 26	1593	447	23	2417
Knitting-machine .....	J. L. Branson. (Reissue) .....	10,271	Jan. 10	1296	374	23	267
Knitting-machine .....	J. R. Bridges .....	270,928	Jan. 23	1362	392 393	23	284
Knitting-machine .....	W. Carter .....	272,529	Feb. 20	1190	332 333	23	663
Knitting-machine .....	J. Chapman .....	290,972	Dec. 25	2048	563 564	25	1266



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. ts	Vol.	Page.
Knitting-machine .....	W. W. Clay .....	277,004	May 8	616	{ 161 162	{ 23	1738
Knitting-machine .....	W. Esty .....	276,146	Apr. 17	1643	453	23	1524
Knitting-machine .....	J. Heginbothom .....	286,003	Oct. 2	274	77	25	52
Knitting-machine .....	W. D. Hnse .....	271,071	Jan. 23	1539	{ 443 444	{ 23	313
Knitting-machine .....	J. P. Kidder .....	274,947	Apr. 3	82	{ 22, 23 342	{ 23	1239
Knitting-machine .....	G. A. Leighton .....	272,560	Feb. 20	1225	{ 343 344	{ 23	669
Knitting-machine .....	G. A. Leighton .....	272,561	Feb. 20	1237	345	23	671
Knitting-machine .....	G. Lindley, Jr .....	277,299	May 8	982	264	23	1801
Knitting-machine .....	S. Lowe and J. W. Lamb .....	270,682	Jan. 16	1060	{ 303 304 305	{ 23	223
Knitting-machine .....	N. Marshall .....	288,648	Nov. 20	1081	{ 297 298 299	{ 25	711
Knitting-machine .....	W. H. Mayo .....	274,208	Mar. 20	1238	{ 340 341	{ 23	1062
Knitting-machine .....	J. H. Osborne .....	285,155	Sept. 18	1233	{ 346 347	{ 24	1129
Knitting-machine .....	W. Roberts .....	284,673	Sept. 11	630	{ 178 179	{ 24	1017
Knitting-machine .....	L. E. Salisbury .....	284,905	Sept. 11	909	{ 256 257	{ 24	1067
Knitting-machine .....	A. Ward .....	280,886	July 10	676	{ 190 191	{ 24	126
Knitting-machine .....	S. Woodward .....	288,962	Nov. 20	1467	405	25	780
Knitting-machine bobbin-holder .....	W. Denton .....	270,208	Jan. 9	451	132	23	99
Knitting-machine burr .....	S. G. Hall .....	275,198	Apr. 3	406	112	23	1296
Knitting-machine burr .....	S. G. Hall .....	275,199	Apr. 3	407	112	23	1296
Knitting-machine burr and means for supporting the same .....	G. W. Cummings .....	284,283	Sept. 4	155	43	24	930
Knitting machine. Circular .....	G. A. Leighton .....	272,559	Feb. 20	1223	342	23	669
Knitting machine. Circular .....	J. H. Osborne .....	277,603	May 15	1345	362	23	1868
Knitting machine. Circular rib .....	H. P. Ballou .....	284,591	Sept. 11	529	150	24	999
Knitting-machine feed-guide attachment .....	P. I. Harvey .....	279,380	June 12	972	269	23	2297
Knitting-machine needle .....	G. H. Adams .....	282,029	July 31	2129	585	24	395
Knitting-machine needle .....	L. E. Salisbury .....	287,175	Oct. 23	1768	485	25	340
Knitting-machine stop-motion mechanism .....	W. Diebel .....	278,894	June 5	297	86	23	2174
Knitting-machine thread-guide mechanism .....	J. Bradley .....	270,276	Jan. 9	520	155	23	114
Knitting stockings .....	R. Schofield .....	288,186	Nov. 6	484	134	25	592
Knob .....	G. Cooper .....	283,380	Aug. 21	1108	312	24	712
Knob alarm. Door .....	A. T. Boone .....	270,199	Jan. 9	439	129	23	97
Knob attachment .....	J. K. Clark .....	284,381	Sept. 4	269	75	24	950
Knob attachment .....	T. H. P. Dennis .....	284,396	Sept. 4	291	81	24	953
Knob attachment .....	J. Kirby, Jr .....	281,701	July 24	1716	466	24	317
Knob attachment .....	F. Lattimer .....	271,479	Jan. 30	2062	593	23	412
Knob attachment .....	F. Lattimer .....	290,247	Dec. 18	1082	302	25	1094
Knob attachment .....	W. N. Mills .....	283,134	Aug. 14	785	220	24	646
Knob attachment .....	J. B. Morris .....	283,718	Aug. 21	1506	424	24	786
Knob attachment .....	E. L. Phipps .....	273,763	Mar. 13	684	183	23	959
Knob attachment .....	E. L. Phipps .....	289,305	Nov. 27	1881	524	25	863
Knob attachment .....	R. S. Watson .....	276,942	May 1	536	138	23	1717
Knob attachment. Door .....	C. B. Brown .....	273,943	Mar. 13	906	247	23	996
Knob attachment. Door .....	W. F. Hall .....	278,704	June 5	38	11	23	2131
Knob attachment. Door .....	E. L. Phipps .....	284,893	Sept. 11	894	253	24	1064
Knob attachment. Door .....	O. Stoddard .....	280,877	July 10	667	188	24	125
Knob. Casket .....	J. C. Brooks .....	270,177	Jan. 2	410	120	23	83
Knob. Door .....	C. Elveena .....	280,728	July 3	469	134	24	84
Knob. Door .....	R. D. Huntley .....	273,685	Mar. 6	574	152	23	932
Knob. Door .....	G. Newberg .....	270,828	Jan. 16	1237	357	23	257
Knob. Door .....	C. Rebstock .....	273,893	Mar. 13	843	229	23	986
Knob for stove or other doors .....	J. H. Bennett .....	274,433	Mar. 20	1527	420	23	1113
Knob-lock .....	L. Terry .....	288,512	Nov. 13	917	250	25	675
Knob-spindle fastening .....	C. L. Taylor .....	275,287	Apr. 3	514	141	23	1314
Knockdown table .....	F. H. De Tray and R. W. Vermilya .....	270,579	Jan. 16	927	268	23	199
Knockdown table .....	F. T. Knauss .....	273,109	Feb. 27	1934	542	23	799
Knockdown table .....	G. D. Post .....	272,471	Feb. 20	1113	314	23	649
Knockdown table .....	A. P. Shearman .....	288,126	Nov. 6	414	117	25	580
Knot-tying apparatus .....	R. C. Fay .....	280,921	July 10	718	202	24	133
Knuckle-joint. Universal angular .....	E. Mignault .....	289,120	Nov. 27	1664	462	25	821
Knurling-tool .....	W. W. Tucker .....	290,612	Dec. 18	1573	432	25	1178
Label. Bottle .....	W. B. Dean .....	289,813	Dec. 11	551	154	25	989
Label-cutter .....	M. Bradley .....	272,202	Feb. 13	765	{ 211 212	{ 23	584
Label. Elastic .....	J. Nuhn and F. Kuehne .....	281,391	July 17	1314	363	24	245
Lace-fastener .....	H. H. Porter .....	275,942	Apr. 17	1293	384	23	1481
Lace fastening. Shoe .....	E. C. C. Henderson and T. A. McDonald .....	280,173	June 26	1910	537	23	2473
Lacing-book .....	M. N. Bray .....	273,707	Mar. 13	601	161	23	944
Lacing-book for gloves .....	W. F. Foster .....	275,028	Apr. 10	998	270	23	1404
Lacing-book for gloves .....	W. F. Foster .....	276,573	May 1	38	11	23	1634
Lacing-books. Machine for making .....	S. N. Smith .....	272,787	Feb. 20	1514	{ 426 427	{ 23	720
Lacing-stud .....	M. N. Bray .....	273,706	Mar. 13	600	161	23	944
Lacing-stud .....	F. M. Piper .....	290,800	Dec. 25	1824	503	25	1222
Lacing-stud for gloves, &c .....	L. H. Mansbach .....	285,050	Sept. 18	1104	308	24	1107
Lacing-studs. Machine for setting .....	W. C. Bray .....	277,985	May 22	1797	{ 490 491	{ 23	1954
Lactates and lactic acid. Manufacture of .....	G. A. Marsh .....	290,252	Dec. 18	1086	.....	25	1095
Lactates for the production of lactic acid. Manufacture of .....	G. A. Marsh .....	290,253	Dec. 18	1088	.....	25	1095
Lactic acid and lactates. Manufacture of .....	C. O. Thompson .....	290,284	Dec. 18	1132	.....	25	1102

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Ladder.	C. Bridges.	270,008	Jan. 2	216	62	23	44
Ladder.	O. V. Flora.	285,605	Sept. 25	1768	500	24	1232
Ladder.	F. S. Seagrave.	278,051	May 22	1676	513	23	1968
Ladder.	C. B. Shaver and S. C. Schofield.	272,163	Feb. 13	718	197	23	576
Ladder. Adjustable.	N. Coons.	281,977	July 24	2065	566	24	378
Ladder and fire-escape. Combined fireman's	J. Dempster and W. J. Horton.	279,545	June 19	1172	325	23	2336
Ladder and hoist. Combined step.	E. D. Haven.	282,983	Aug. 14	596	168 169	24	613
Ladder and truck. Extension.	D. W. Hoover.	280,475	July 3	177	47	24	32
Ladder attachment.	L. Kinzel.	274,448	Mar. 20	1555	426	23	1117
Ladder. Extension.	C. Frizell.	281,681	July 24	1686	459	24	312
Ladder. Extension.	J. Spangler.	281,805	July 24	1857	507	24	342
Ladder. Extension.	L. Swenson.	284,683	Sept. 11	645	182	24	1019
Ladder. Extension step.	G. A. Bell and W. W. Norman.	287,793	Nov. 6	7	2	25	508
Ladder. Extension step.	F. S. Seagrave.	278,052	May 22	1877	513	23	1969
Ladder. Extension step.	G. W. Stambaugh.	274,526	Mar. 27	1676	465	23	1144
Ladder. Fire.	A. and A. Iske.	272,054	Feb. 13	586	158	23	553
Ladder. Flexible.	P. Brendel.	277,672	May 15	1426	385	23	1883
Ladder. Flexible.	V. Cravens.	279,542	June 19	1169	324	23	2336
Ladder. Folding.	J. K. Landes.	288,455	Nov. 13	848	229	25	663
Ladder. Folding step.	G. Beisner.	276,339	Apr. 24	1896	526	23	1574
Ladder for gathering fruit. Portable.	L. H. Titus.	289,942	Dec. 11	706	199 200	25	1017
Ladder. Fruit.	I. Stevens.	284,920	Sept. 11	931	222	24	1070
Ladder. Fruit step.	D. Van Trump.	285,369	Sept. 18	1479	416	24	1173
Ladder. Gangway.	C. Olsen.	290,348	Dec. 18	1213	339	25	1117
Ladder-book.	J. F. Manahan.	285,637	Sept. 25	1805	514	24	1240
Ladder. Portable.	E. E. Swett.	280,685	July 3	417	117	24	74
Ladder. Step.	G. M. Baker and W. Abbott.	284,356	Sept. 4	242	67	24	945
Ladder. Step.	G. M. Baker and W. Abbott.	285,949	Oct. 2	220	62	25	42
Ladder. Step.	J. J. Baldwin.	283,555	Aug. 21	1308	366	24	749
Ladder. Step.	J. J. Baldwin.	289,059	Nov. 27	1592	440	25	808
Ladder. Step.	H. J. Dennis.	273,474	Mar. 6	304	82	23	885
Ladder. Step.	E. R. Flint.	271,619	Feb. 6	44	11	23	448
Ladder. Step.	C. A. Jones.	286,617	Oct. 16	1055	284	25	208
Ladder. Step.	M. C. McCollum.	283,004	Aug. 14	633	179	24	619
Ladder. Step.	E. A. Shumway.	283,524	Aug. 21	1275	357	24	742
Ladder. Step.	H. P. Spencer.	288,883	Nov. 20	1372	378	25	762
Ladder. Step.	O. M. Sweet.	273,188	Feb. 27	2024	569	23	817
Ladder. Step.	J. F. Trefftz.	274,855	Mar. 27	2056	573	23	1212
Ladder. Step.	J. N. Valley.	279,893	June 19	1575	441	23	2407
Ladder. Step.	W. Varnum.	273,782	Mar. 13	709	191	23	964
Ladder. Top-extension step.	M. G. Gartrell.	272,540	Feb. 20	1203	336	23	665
Ladders. Hook for suspending.	R. T. Greene.	274,758	Mar. 27	1948	541	23	1193
Ladders. Raising and supporting.	T. Witmer.	271,289	Jan. 30	1609	524	23	366
Ladders. Trestle or platform attachment for.	T. J. Nolton.	271,509	Jan. 30	2096	602 603	24	418
Ladle gear. Foundry.	R. Brown.	289,499	Dec. 4	163	44	25	915
Ladle stopper-rods. Covering for.	W. H. Haws.	280,618	July 3	335	94	24	59
Lamp.	H. C. Atkinson.	284,796	Sept. 11	790	220	24	1043
Lamp.	C. H. Briggs and W. Robinson.	272,203	Feb. 13	767	212	23	584
Lamp.	C. F. Chew.	285,393	Sept. 25	1515	427	24	1185
Lamp.	A. L. Dawson.	289,510	Dec. 4	177	49	25	917
Lamp.	W. L. Ewing.	281,678	July 24	1682	458	24	311
Lamp.	T. W. Graydon.	270,420	Jan. 9	715	211	23	149
Lamp.	J. T. Hill.	270,312	Jan. 9	573	168	23	122
Lamp.	J. Hinks.	274,326	Mar. 20	1393	381 382	23	1089
Lamp.	J. Hinks.	274,327	Mar. 20	1395	382	23	1089
Lamp.	C. Hoffmann.	286,006	Oct. 2	278	78	25	52
Lamp.	A. Kaestner.	288,340	Nov. 13	689	190	25	685
Lamp.	J. Kirby, Jr.	274,003	Mar. 13	975	267	23	1009
Lamp.	J. Kirby, Jr.	281,633	July 17	1618	442	24	295
Lamp.	P. Levison.	283,792	Aug. 28	1607	454	24	816
Lamp.	D. D. Lockwood.	275,230	Apr. 3	448	124	23	1303
Lamp.	R. Marsh.	272,567	Feb. 20	1247	348	23	673
Lamp.	W. S. McLewee.	290,340	Dec. 18	1203	337	25	1115
Lamp.	F. W. Merryman.	273,577	Mar. 6	439	118	23	909
Lamp.	W. Newman.	281,716	July 24	1733	470	24	320
Lamp.	A. Ramage.	280,240	June 26	1997	562	23	2488
Lamp.	E. B. Requa.	280,669	July 3	395	110	24	70
Lamp.	H. E. Shaffer.	285,310	Sept. 18	1405	397	24	1161
Lamp.	F. Siemens.	270,345	Jan. 9	618	182 183	23	131
Lamp.	F. A. Taber.	272,373	May 29	2319	634	23	2053
Lamp.	J. H. White.	283,177	Aug. 14	836	234	24	655
Lamp.	H. W. Wright.	271,181	Jan. 23	1674	482	23	335
Lamp. Alcohol.	N. Clark.	279,915	June 26	1608	452	23	2419
Lamp and gas fixture. Convertible.	C. A. Holbrook.	286,007	Oct. 2	280	79	25	53
Lamp and holder. Electric.	E. Weston.	277,646	May 15	1395	376	23	1877
Lamp and holder. Electric incandescent.	C. G. Perkins.	287,314	Oct. 23	1946	531	25	372
Lamp and holder therefor. Electric.	E. Weston.	277,645	May 15	1394	376	23	1877
Lamp and lantern.	J. H. Ewing and E. L. Bill.	275,474	Apr. 10	805	217	23	1371
Lamp and lantern.	C. F. Fellows.	283,989	Aug. 28	1839	519	24	858
Lamp and reflector for street-cars. Side and center.	E. Boesch.	283,693	Aug. 21	1472	415	24	780
Lamp and switch. Electric.	C. G. Perkins.	290,469	Dec. 18	1333	382	25	1146
Lamp and switch. Incandescent electric.	C. G. Perkins.	287,313	Oct. 23	1943	531	25	371
Lamp-black. Process of and apparatus for manufacturing.	M. J. Seymour.	278,749	June 5	91	26, 27	23	2139
Lamp-bracket.	R. L. Stokes.	275,434	Apr. 10	751	200	23	1362
Lamp bracket. Electric-incandescent.	E. Weston.	277,641	May 15	1389	375	23	1876
Lamp bracket. Electric-incandescent.	E. Weston.	277,642	May 15	1391	375	23	1877
Lamp bracket. Incandescent.	E. Weston. (Reissue)	10,299	Mar. 27	2113	588	23	1220
Lamp bracket or fixture. Incandescent.	E. Weston.	278,642	May 29	2046	724	23	2110



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Lamp-burner.	L. J. Atwood	270,722	Jan. 16	1112	318	23	232
Lamp-burner.	W. P. Casperson.	282,958	Aug. 14	573	162	24	609
Lamp-burner.	W. W. Eastman	281,674	July 24	1678	457	24	311
Lamp-burner.	J. B. Greenhalgh	275,901	Apr. 17	1348	371	23	1473
Lamp-burner.	E. J. Hale	285,028	Sept. 18	1082	302	24	1103
Lamp-burner.	E. J. Hale	285,029	Sept. 18	1083	303	24	1103
Lamp-burner.	E. J. Hale	288,232	Nov. 13	546	151	25	612
Lamp-burner.	E. J. Hale	283,108	Aug. 14	759	214	24	642
Lamp-burner.	T. Hipwell.	273,392	Mar. 6	200	54	23	868
Lamp-burner.	F. Ream.	289,571	Dec. 4	251	70, 71	25	931
Lamp-burner and chimney-holder.	C. Schwintzer and W. Gräff.	273,039	Feb. 27	1846	517	23	785
Lamp-burner. Argand.	J. B. Deeds	283,879	Aug. 28	1704	480	24	832
Lamp-burner. Vapor.	P. J. Foulon	290,337	Dec. 18	1199	336	25	1114
Lamp-burners. Extinguisher for	J. C. Ludwig and W. Wainwright.	290,337	Dec. 18	1199	336	25	1114
Lamp-burners. Extinguishing device for	T. Burns	270,631	Jan. 16	995	287	23	211
Lamp-burners. Wick-tube for	W. Goldie	277,477	May 15	1194	321	23	1844
Lamp, candlestick, &c.	L. Tobey	278,295	May 22	2192	603	23	2022
Lamp. Car.	W. S. Tisdale	275,293	Apr. 3	523	143	23	1215
Lamp carbon. Incandescent-electric.	L. W. Schaefer	285,364	Sept. 18	1474	414	24	1172
Lamp carbons. Manufacturing incandescent.	A. Bernstein	280,341	July 3	4	1, 2	24	3
Lamp. Carriage.	H. S. Maxim	277,846	May 15	1627	443	23	1919
Lamp. Carriage.	F. C. Cannon	270,385	Jan. 9	671	197	23	141
Lamp-chimney.	C. F. Waldron	280,101	June 26	1836	517	23	2459
Lamp-chimney cap.	J. C. Gunn	274,489	Mar. 27	1628	451	23	1136
Lamp-chimney cleaner.	E. U. Wiesendanger	286,753	Oct. 16	1226	331	25	237
Lamp-chimney. Glass.	A. Sahlstrom	282,782	Aug. 7	369	104	24	565
Lamp-chimneys. Manufacture of.	W. Pountney	289,932	Dec. 11	696	195	25	1015
Lamp coupling ring.	J. Willets and W. Battlear	285,719	Sept. 25	1908	541	24	1257
Lamp cut-out. Arc.	J. Kirby, Jr.	271,866	Feb. 6	340	94	23	500
Lamp cut-out. Electric.	C. B. Bosworth and F. A. Swan	278,679	June 5	5	2	23	2125
Lamp. Electric.	J. H. Elfering	274,297	Mar. 20	1355	372	23	1082
Lamp. Electric.	F. Bain	283,186	Aug. 14	852	238	24	658
Lamp. Electric.	C. M. Ball	281,229	July 17	1110	306	24	210
Lamp. Electric.	T. A. Edison	274,293	Mar. 20	1350		23	1081
Lamp. Electric.	C. D. Haskins	283,482	Aug. 21	1227	345	24	734
Lamp. Electric.	C. A. Hussey	269,937	Jan. 2	136	40	23	28
Lamp. Electric.	W. F. Jobbins	270,806	Jan. 16	1211	349	23	252
Lamp. Electric.	E. R. Knowles	288,346	Nov. 13	697	192	25	636
Lamp. Electric.	H. S. Maxim	283,629	Aug. 21	1393	390	24	765
Lamp. Electric.	E. Thomson	283,168	Aug. 14	825	231	24	653
Lamp. Electric.	E. Thomson	283,437	Aug. 21	1175	330	24	724
Lamp. Electric.	P. Tihon	278,832	June 5	211	63	23	2159
Lamp. Electric.	J. Unger and S. O. Eisele	290,150	Dec. 11	958	271	25	1064
Lamp. Electric.	C. J. Van Depoele	286,093	Oct. 2	384	106	25	70
Lamp. Electric.	E. Weston	285,451	Sept. 25	1582	445	24	1197
Lamp. Electric.	J. J. Wood	279,472	June 12	1076	298	23	2314
Lamp. Electric.	J. J. Wood	279,512	June 12	1198	312	23	2322
Lamp. Electric-arc.	G. D. Allen	273,336	Mar. 6	124	35	23	855
Lamp. Electric-arc.	J. B. Allen	275,345	Apr. 10	622	167	23	1341
Lamp. Electric-arc.	P. R. Allen	270,361	Jan. 9	636	187	23	134
Lamp. Electric-arc.	E. H. Amet	271,395	Jan. 30	1945	562	23	391
Lamp. Electric-arc.	H. Ansof	279,517	June 19	1139	315	23	2331
Lamp. Electric-arc.	F. Bain	280,709	July 3	444	127	24	79
Lamp. Electric-arc.	G. W. Beardslee	270,725	Jan. 16	1115	319	23	233
Lamp. Electric-arc.	R. Bucker	285,107	Sept. 18	1172	328	24	1119
Lamp. Electric-arc.	L. Daft	276,565	May 1	23	7	23	1632
Lamp. Electric-arc.	L. Daft	276,566	May 1	29	8	23	1632
Lamp. Electric-arc.	L. Daft	276,567	May 1	30	8	23	1632
Lamp. Electric-arc.	J. A. Dalzell	274,916	Apr. 3	35	9	23	1232
Lamp. Electric-arc.	J. Du Shane	274,744	Mar. 27	1926	536	23	1190
Lamp. Electric-arc.	W. L. Dudley and C. F. Rapp	271,816	Feb. 6	280	77	23	490
Lamp. Electric-arc.	N. H. Edgerton	279,363	June 12	948	263	23	2293
Lamp. Electric-arc.	E. A. Edwards	275,168	Apr. 3	369	101	23	1290
Lamp. Electric-arc.	E. A. Edwards	275,170	Apr. 3	371	102	23	1291
Lamp. Electric-arc.	E. A. Edwards	275,171	Apr. 3	373	103	23	1291
Lamp. Electric-arc.	E. A. Edwards	275,172	Apr. 3	374	103	23	1291
Lamp. Electric-arc.	E. A. Edwards	275,173	Apr. 3	376	104	23	1291
Lamp. Electric-arc.	E. A. Edwards	275,174	Apr. 3	377	105	23	1292
Lamp. Electric-arc.	J. R. Finney	271,576	Jan. 30	2173	626	23	431
Lamp. Electric-arc.	J. R. Finney	275,182	Apr. 3	389	107	23	1293
Lamp. Electric-arc.	J. R. Finney	275,183	Apr. 3	390	107	23	1294
Lamp. Electric-arc.	W. P. Freeman	289,823	Dec. 11	562	157	25	991
Lamp. Electric-arc.	F. S. Giel	279,934	June 26	1636	459	23	2424
Lamp. Electric-arc.	J. H. Guest	279,152	June 12	689	188	23	2251
Lamp. Electric-arc.	D. J. Hauss, T. E. McNamara, and J. S. Zerhe	286,925	Oct. 16	1440	396	25	274
Lamp. Electric-arc.	W. Hochhausen	271,456	Jan. 30	2024	584	23	406
Lamp. Electric-arc.	W. Hochhausen	271,458	Jan. 30	2030	585	23	407
Lamp. Electric-arc.	C. A. Hussey	269,938	Jan. 2	137	41	23	28
Lamp. Electric-arc.	C. A. Hussey	269,939	Jan. 2	139	41	23	29
Lamp. Electric-arc.	C. A. Hussey	270,676	Jan. 16	1053	301	23	221
Lamp. Electric-arc.	C. P. Jürgensen	270,954	Jan. 23	1400	404	23	290

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. E.	Vol.	Page.
Lamp. Electric-arc.....	N. S. Keith.....	272,262	Feb. 13	840	234	23	598
Lamp. Electric-arc.....	N. S. Keith.....	281,698	July 24	1710	465		316
Lamp. Electric-arc.....	E. R. Knowles.....	282,461	July 31	2698	741	24	490
Lamp. Electric-arc.....	J. Lea.....	281,891	July 24	1965	537	24	361
Lamp. Electric-arc.....	S. Martin and J. F. Richards.....	270,449	Jan. 9	756	222		156
Lamp. Electric-arc.....	J. T. McConnell.....	288,826	Nov. 20	1303	357	25	749
Lamp. Electric-arc.....	T. J. McTighe and J. T. McConnell.....	288,831	Nov. 20	1310	359	25	750
Lamp. Electric-arc.....	R. R. Moffatt.....	286,144	Oct. 2	445	121	25	83
Lamp. Electric-arc.....	J. Olmsted.....	279,103	June 5	612	166	23	2227
Lamp. Electric-arc.....	C. G. Perkins.....	274,370	Mar. 20	1450	397		1099
Lamp. Electric-arc.....	L. Piette and F. Krizik.....	273,888	Mar. 13	838	227	23	985
Lamp. Electric-arc.....	F. Rabl.....	280,763	July 3	524	147		93
Lamp. Electric-arc.....	C. Richter.....	283,662	Aug. 21	1428	400	24	772
Lamp. Electric-arc.....	A. Shedlock.....	277,166	May 8	881	219	23	1774
Lamp. Electric-arc.....	A. Shedlock.....	277,167	May 8	834	220	23	1774
Lamp. Electric-arc.....	R. J. Sheehy.....	279,824	June 19	1489	417	23	2392
Lamp. Electric-arc.....	R. J. Sheehy.....	284,497	Sept. 4	411	117	24	973
Lamp. Electric-arc.....	W. M. Thomas.....	278,293	May 22	2187	602	23	2021
Lamp. Electric-arc.....	W. M. Thomas.....	283,042	Aug. 14	677	190	24	627
Lamp. Electric-arc.....	E. Thomson.....	272,920	Feb. 27	1706	477		760
Lamp. Electric-arc.....	E. Thomson.....	274,413	Mar. 20	1499	413	23	1108
Lamp. Electric-arc.....	J. B. Tibbits.....	285,445	Sept. 25	1577	443		24
Lamp. Electric-arc.....	J. B. Tibbits.....	287,067	Oct. 23	1631	449	25	315
Lamp. Electric-arc.....	S. F. Van Choate.....	274,997	Apr. 3	143	40	23	1250
Lamp. Electric-arc.....	C. J. Van Depoele.....	286,094	Oct. 2	387	106	25	71
Lamp. Electric-arc.....	F. G. Waterhouse.....	274,999	Apr. 3	145	41		1251
Lamp. Electric-arc.....	E. Weston.....	271,173	Jan. 28	1663	478	23	333
Lamp. Electric-arc.....	E. Weston.....	272,367	Feb. 13	967	270		620
Lamp. Electric-arc.....	E. Weston.....	285,715	Sept. 25	1903	540	24	1257
Lamp. Electric incandescent.....	P. Diehl.....	272,125	Feb. 13	178	185	23	569
Lamp. Electric incandescent.....	C. G. Perkins.....	287,319	Oct. 23	1951	533	25	373
Lamp. Electrical stand.....	J. H. Vail.....	286,350	Oct. 9	724	194	25	141
Lamp. Extension.....	G. and J. E. Bohner.....	285,381	Sept. 25	1499	422	24	1183
Lamp. Extension library.....	D. W. Parker and L. F. Griswold.....	285,063	Sept. 18	1119	313	24	1110
Lamp-extinguisher.....	A. Koegel.....	287,689	Oct. 30	2434	655	25	473
Lamp-extinguisher.....	M. J. Schuch.....	272,335	Feb. 13	928	258	23	613
Lamp-extinguisher and wick-trimmer. Automatic.....	T. J. L. Smiley and C. H. Stombs.....	290,607	Dec. 18	1568	431	25	1177
Lamp-extinguisher and wick-trimmer combined.....	A. Bechtel, E. J. Wunderlich, and D. P. Stetzelberger.....	281,232	July 17	1117	308	24	211
Lamp-filler.....	W. Scott.....	275,419	Apr. 10	737	193	23	1359
Lamp filler and indicator.....	A. Ring.....	270,278	June 12	834	288	23	2274
Lamp filler, lighter, extinguisher, and torch. Combined.....	A. P. W. Skinner.....	282,578	Aug. 7	125	37	24	522
Lamp-filling can.....	W. F. Veber.....	289,585	Dec. 4	268	75	25	934
Lamp-fixture.....	D. W. Bennett.....	280,441	July 3	131	35	24	24
Lamp-fixture.....	C. Gordon.....	275,641	Apr. 10	1018	273	23	1408
Lamp-fixture.....	W. A. Hull and F. S. Truesdell.....	283,891	Aug. 28	1719	485	24	835
Lamp-fixture.....	R. B. Perkins.....	284,889	Sept. 11	891	251	24	1063
Lamp-fixture. Electric.....	E. Weston.....	277,643	May 15	1391	375	23	1677
Lamp-fixture. Extension.....	A. H. Jones.....	271,334	Jan. 30	1866	541	23	376
Lamp-fixture. Extension.....	D. W. Parker and L. F. Griswold.....	282,028	July 24	2125	522	24	387
Lamp-fixture. Extension.....	R. B. Perkins.....	288,852	Nov. 20	1336	367	25	755
Lamp-fixture or bracket. Electric.....	C. W. Holtzer.....	282,521	Aug. 7	55	16	24	509
Lamp. Flameless.....	M. G. Collins.....	277,682	May 15	1437	387	23	1884
Lamp. Foot and scenic.....	C. C. Charles.....	282,497	Aug. 7	21	6	24	504
Lamp for railway-cars, &c.....	J. L. and C. P. Howard.....	271,462	Jan. 30	2040	587	23	408
Lamp-fount.....	W. G. Leonard.....	281,531	July 17	1490	409	24	275
Lamp. Fountain.....	W. Detto.....	290,001	Dec. 11	784	221	25	1031
Lamp. Gas.....	J. Schülke.....	275,528	Apr. 10	869	235	23	1382
Lamp. Gas.....	F. H. Wenham.....	281,590	July 17	1560	427	24	285
Lamp. Gas-generating.....	L. C. Beebe.....	290,200	Dec. 18	1025	288	25	1084
Lamp globe. Electric.....	G. D. Burton.....	282,157	July 31	2308	633	24	423
Lamp globe. Electric.....	G. J. Murdock.....	274,959	Apr. 3	106	23	23	1242
Lamp guard. Signal.....	S. W. Corwin.....	275,469	Apr. 10	800	216	23	1371
Lamp. Hanging.....	C. A. Everts.....	284,955	Sept. 11	977	274	24	1078
Lamp. Hanging.....	A. F. Glaessner.....	272,235	Feb. 13	807	224	23	592
Lamp. Hanging.....	W. S. McLewee.....	290,341	Dec. 18	1204	377	25	1115
Lamp holder and bracket.....	W. Kirk.....	273,857	Mar. 13	805	218	23	980
Lamp holder. Electric.....	A. Shedlock.....	277,168	May 8	836	220	23	1775
Lamp holder. Incandescent.....	E. Weston.....	274,427	Mar. 20	1519	418	23	1111
Lamp hood. Electric.....	S. H. Tacy.....	277,377	May 8	1068	288	23	1816
Lamp. Hydrogen.....	M. J. Hinden.....	275,045	Apr. 3	214	58	23	1263
Lamp. Incandescent.....	C. Richter.....	279,811	June 19	1472	413	23	2389
Lamp. Incandescent electric.....	I. Adams, Jr.....	282,030	July 31	2130	585	24	395
Lamp. Incandescent electric.....	A. Bernstein.....	271,302	Jan. 30	1821	528	23	369
Lamp. Incandescent electric.....	A. Bernstein.....	273,704	Mar. 13	597	161	23	944
Lamp. Incandescent electric.....	A. Bernstein.....	280,340	July 3	3	1	24	3
Lamp. Incandescent electric.....	P. R. D. D'Humy.....	282,261	Aug. 7	463	131	24	582
Lamp. Incandescent electric.....	P. Diehl.....	276,571	May 1	37	10	23	1633
Lamp. Incandescent electric.....	T. A. Edison.....	274,295	Mar. 20	1352	371	23	1081
Lamp. Incandescent electric.....	D. G. Fitz-Gerald.....	286,916	Oct. 16	1432	393	25	273
Lamp. Incandescent electric.....	T. E. Gatehouse.....	284,409	Sept. 4	306	85	24	955
Lamp. Incandescent electric.....	E. R. Knowles.....	282,460	July 31	2697	741	24	490
Lamp. Incandescent electric.....	E. R. Knowles and F. E. Idell.....	282,534	Aug. 7	71	21	24	512



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Lamp. Incandescent electric.	H. Lea.	273,554	Mar. 6	403	108	23	903
Lamp. Incandescent electric.	C. G. Perkins.	274,654	Mar. 27	1827	507	23	1172
Lamp. Incandescent electric.	C. G. Perkins.	290,467	Dec. 18	1380	381	25	1145
Lamp. Incandescent electric.	R. J. Sheehy.	289,456	Dec. 4	97	28	25	904
Lamp. Incandescent electric.	R. H. S. Thompson.	280,367	June 26	2121	595	23	2509
Lamp. Incandescent electric.	E. Weston.	271,171	Jan. 23	1660	478	23	333
Lamp. Incandescent electric.	T. A. Edison.	273,485	Mar. 6	314	85	23	887
Lamp. Incandescent electric.	T. A. Edison.	273,486	Mar. 6	314	85	23	887
Lamp. Incandescent electric.	T. A. Edison.	274,294	Mar. 20	1350	371	23	1081
Lamp. Incandescent electric.	T. A. Edison.	275,613	Apr. 10	974	264	23	1401
Lamp. Incandescent electric.	T. A. Edison.	287,519	Oct. 30	2197	597	25	427
Lamp. Incandescent electric.	J. S. Kelso, Jr.	273,366	Mar. 6	170	46	23	863
Lamp. Incandescent electric.	S. D. Mott.	283,270	Aug. 14	960	267	24	678
Lamp lid. Miner's.	J. B. Deeds and W. Mack.	281,846	July 24	1910	521	24	351
Lamp-lighting device.	A. H. Schluter.	270,849	Jan. 16	1261	363	23	261
Lamp-lighting device. Electric.	H. Van Hooenbergh.	284,516	Sept. 4	438	124	24	978
Lamp. Magazine electric.	A. T. Gifford.	271,059	Jan. 23	1520	439	23	310
Lamp. Miner's.	R. W. Grimes and J. Fern.	280,738	July 3	483	137	24	86
Lamp. Miner's.	C. A. Lee.	284,865	Sept. 11	867	243	24	1058
Lamp. Miner's.	E. K. Rollins.	279,503	June 12	1115	308	23	2320
Lamp. Miner's safety.	J. L. Williams.	290,510	Dec. 18	1443	398	25	1156
Lamp. Night.	T. Bergmann.	281,825	July 24	1881	514	24	347
Lamp. Non-explosive.	L. Baer, T. F. Miner, and T. Taylor.	284,353	Sept. 4	238	66	24	944
Lamp. Oil.	S. Maxim.	275,682	Apr. 10	1065	290	23	1416
Lamp. Oil.	S. Maxim.	284,876	Sept. 11	880	247	24	1061
Lamp or torch.	J. B. Deeds.	274,731	Mar. 27	1910	533	23	1187
Lamp. Plummet.	J. Roach.	287,580	Oct. 30	2293	620	25	446
Lamp regulator. Electric-arc.	A. I. Gravier.	278,304	May 22	2214	607	23	2026
Lamp. Reservoir.	O. Sweeney.	277,808	May 15	1581	432	23	1911
Lamp. Self-extinguishing.	W. H. Kimball.	289,843	Dec. 11	594	165	25	998
Lamp-shade clamp.	L. F. Griswold and R. A. Wooding.	276,030	Apr. 17	1498	412	23	1499
Lamp-shade holder.	W. Somerville.	266,237	Oct. 9	555	152	25	112
Lamp-shades with silver. Apparatus for coating.	J. Dable.	267,636	Oct. 30	2366	638	25	459
Lamp. Signal.	E. S. Piper.	276,278	Apr. 24	1802	502	23	1559
Lamp. Soldering.	C. W. Boehn.	276,404	Apr. 24	1974	546	23	1588
Lamp. Street.	H. S. Belden.	286,763	Oct. 16	1237	334	25	939
Lamp. Street.	C. C. Kiefer.	275,219	Apr. 3	433	119	23	1300
Lamp. Student's.	A. Angell.	270,719	Jan. 16	1109	317	23	232
Lamp-support.	D. W. Parker.	278,729	June 5	69	21	23	2136
Lamp support. Electric.	A. L. Ide.	278,797	June 5	164	48	23	2150
Lamp-support. Tubular.	J. Krummenauer.	272,842	Feb. 20	1602	448	23	736
Lamp-supporting device.	A. French.	290,026	Dec. 11	814	229	25	1037
Lamp switch. Electric.	G. T. Benson.	288,971	Nov. 27	1432	411	25	790
Lamp switch. Electric.	H. Edmunds, Jr.	290,406	Dec. 18	1285	361	25	1130
Lamp switch. Incandescent-electric.	C. G. Perkins.	274,653	Mar. 27	1825	507	23	1172
Lamp-top.	J. W. Cooper.	284,616	Sept. 11	560	158	24	1005
Lamp. Tubular.	J. Krummenauer.	272,841	Feb. 20	1601	448	23	735
Lamp. Voltaic-arc.	O. A. Moses.	276,703	May 1	215	55, 56	23	1661
Lamp. Voltaic-arc.	O. A. Moses.	276,704	May 1	217	56	23	1661
Lamp. Voltaic-arc.	O. A. Moses.	276,705	May 1	218	56	23	1662
Lamp. Voltaic-arc.	O. A. Moses.	286,953	Oct. 16	1479	406	25	281
Lamp-wick raiser.	J. B. Deeds.	282,282	July 31	2459	677	24	450
Lamps and lanterns. Lens for signal.	J. Rogers.	282,376	July 31	2585	710	24	471
Lamps. Automatic cut-out for electric.	W. Hochhausen.	271,457	Jan. 30	2028	585	23	406
Lamps. Automatic regulator for incandescent.	E. T. and E. E. Starr.	281,412	July 17	1340	370	24	249
Lamps. Carbon electrode for electric.	J. E. Atwood.	272,017	Feb. 13	541	146	23	546
Lamps. Carbon for arc.	F. Bain.	284,939	Sept. 11	956	268	24	1074
Lamps. Carbon-holder for incandescent.	C. G. Perkins.	287,323	Oct. 23	1955	534	25	374
Lamps. Clock-work for mechanical.	T. Silver.	287,334	Oct. 23	1968	537	25	376
Lamps. Combined support and switch for electric.	H. W. Spang.	284,505	Sept. 4	425	121	24	976
Lamps. Contact for electric.	H. Edmunds, Jr.	288,217	Nov. 13	526	146	25	608
Lamps. Contact for electric.	H. Edmunds, Jr.	288,218	Nov. 13	526	146	25	609
Lamps. Device for lighting petroleum or gas.	P. Richter.	292,227	July 31	2398	660	24	439
Lamps. Device for suspending.	C. C. Johnson.	271,579	Jan. 30	2177	627	23	431
Lamps. Electrode for electric-arc.	C. J. Van Depoele.	287,344	Oct. 23	1979	540	25	379
Lamps. Focus-regulator for electric-arc.	W. Wheeler.	280,426	July 3	108	29	24	21
Lamps. Glass bulb or globe for incandescent electric.	A. Swan.	276,924	May 1	500	.....	23	1713
Lamps. Globe for incandescent electric.	G. P. Bartlett.	285,784	Oct. 2	6	2	25	4
Lamps. Incandescent conductor for electric.	T. A. Edison.	287,520	Oct. 30	2198	597	25	427
Lamps. Light-extinguisher for.	J. Pohlen.	280,511	July 3	215	56	24	39
Lamps. Lighting buildings by hydrocarbon.	J. R. Burchfield.	271,412	Jan. 30	1968	569	23	395
Lamps. Machine for attaching metal collars to.	A. L. Dawson.	289,509	Dec. 4	174	48, 49	25	916
Lamps. Manufacture of incandescent.	A. Swan.	282,472	July 31	2708	745	24	492
Lamps. Manufacture of incandescent electric.	J. H. Guest.	282,884	Aug. 7	489	137, 138	24	587
Lamps. Manufacture of incandescent.	T. A. Edison.	275,612	Apr. 10	973	.....	23	1401
Lamps. Manufacture of incandescent.	W. Holzer.	289,837	Dec. 11	584	162	25	995
Lamps. Manufacture of incandescent electric.	T. A. Edison.	271,613	Feb. 6	36	9	23	447
Lamps. Manufacture of incandescent electric.	T. A. Edison.	278,415	May 29	2368	647	23	2062
Lamps. Manufacture of incandescent electric.	T. A. Edison.	278,416	May 29	2369	647	23	2063
Lamps. Manufacture of incandescent electric.	T. A. Edison.	278,417	May 29	2370	647	23	2062
Lamps. Manufacture of incandescent electric.	W. Holzer.	289,838	Dec. 11	585	163	25	996
Lamps. Manufacture of peg.	J. Dalzell.	274,917	Apr. 3	37	10	23	1232
Lamps. Manufacturing incandescent electric.	T. A. Edison.	287,518	Oct. 30	2196	596	25	427
Lamps, &c. Molding bulbs for incandescent electric.	A. Swan.	275,730	Apr. 10	1121	307	23	1426
Lamps. Safety cut-out for electric.	C. J. Van Depoele.	288,682	Nov. 20	1123	310	25	718
Lamps. Safety device for electric-arc.	E. Thomson.	289,580	Dec. 4	262	73, 74	25	933
Land-roller.	J. A. Johnson.	288,061	Nov. 6	339	95	25	565
Land-roller.	H. E. Scott.	283,288	Aug. 14	978	273	24	682
Land-roller.	A. J. Stevens.	273,909	Mar. 13	863	234	23	990
Land-roller, clod-crusher, and harrow. Combined.	A. Helman.	289,258	Nov. 27	1823	504	25	851
Linolin. Treating wool-oil to produce.	O. Braun and O. Liebreich.	271,192	Jan. 23	1687	.....	23	337

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Lantern	D. Curtin	270,397	Jan. 9	690	204	23	144
Lantern	F. Dietz	273,711	Mar. 13	604	162	23	945
Lantern	F. Dietz	273,712	Mar. 13	605	163	23	945
Lantern	F. Dietz	285,880	Oct. 2	129	37	25	25
Lantern	J. H. Ewing	278,920	June 5	381	103	23	2188
Lantern	J. Fanning	282,291	July 31	2467	680	24	451
Lantern	G. F. Fisher	278,927	June 5	387	106	23	2189
Lantern	J. Gillig	273,272	Mar. 6	33	10	23	840
Lantern	C. T. Ham	278,540	May 29	2519	687	23	2089
Lantern	C. T. Ham	283,237	Aug. 14	914	255	24	670
Lantern	C. J. Higgins	287,932	Nov. 6	179	51	25	539
Lantern	R. L. Hull	289,348	Nov. 27	1936	538	25	873
Lantern	L. G. Huntington	276,182	Apr. 24	1687	466	23	1539
Lantern	T. Langston	279,403	June 12	1002	278	23	2302
Lantern	T. Langston	283,258	Aug. 14	945	264	24	676
Lantern	T. Langston	284,442	Sept. 4	344	95	24	962
Lantern	J. Moncur	275,509	Apr. 10	843	228	23	1378
Lantern	J. Moncur	285,147	Sept. 18	1226	344	24	1127
Lantern	S. B. Pangborn	285,506	Sept. 25	1646	463	24	1209
Lantern	A. J. Sawyer, C. Woodbury, and E. Lane	281,797	July 24	1847	505	24	340
Lantern	A. Schindler	284,072	Aug. 28	1961	546	24	877
Lantern	F. E. Smothers	281,153	July 10	1001	280	24	184
Lantern	J. B. Stetson	286,087	Oct. 2	377	104	25	69
Lantern	N. Tufts	277,086	May 8	730	191	23	1757
Lantern. Bicycle	F. H. Talbot and F. Brown	281,580	July 17	1547	424	24	283
Lantern. Electric-light	W. G. Levison	289,425	Dec. 4	63	18, 19	25	893
Lantern for railway-cars, &c. Gas-	J. Pintsch	280,761	July 3	521	146	24	92
Lantern-lighting device	G. L. Sackett. (Reissue)	10,410	Dec. 4	522	144	25	977
Lantern. Magic	C. Fontayne	273,055	Feb. 27	1863	523	23	788
Lantern-pinions. Device for making	G. B. Webb	289,478	Dec. 4	128	36	25	909
Lantern. Railway signal	J. H. Berry	270,727	Jan. 16	1117	320	23	233
Lantern. Ship	N. Tufts	276,733	May 1	266	67	23	1670
Lantern. Signal	L. G. Huntington. (Reissue)	10,408	Nov. 20	1472	406	25	781
Lantern. Signal	C. E. Metzler and J. H. Burrell, Jr.	283,633	Aug. 21	1398	391	24	765
Lantern. Switch and signal	L. G. Huntington	280,624	July 3	345	96	24	61
Lantern. Tubular	E. Boesch	277,444	May 15	1156	310	23	1838
Lantern. Tubular	C. T. Ham	285,408	Sept. 25	1531	431	24	1188
Lantern. Tubular	J. H. Stone	273,910	Mar. 13	864	234	23	990
Lanterns. Device for lighting and extinguishing	N. Bragdon	273,342	Mar. 6	133	37	23	856
Lanterns. Fastening for reflectors upon tubular	A. P. Cannon	274,170	Mar. 20	1192	328	23	1054
Lap-forming machine	J. T. Lemaire	276,606	May 1	78	21, 22	23	1641
Lard-cooler	O. G. Burnham	287,362	Oct. 23	2001	545	25	382
Lard-cooler	O. G. Burnham	289,809	Dec. 11	544	152	25	988
Lard cooling and mixing machine	F. Fiedlerlein	280,025	June 26	1750	491	23	2443
Lard. Manufacturing	W. J. Morrison	278,166	May 22	2018	555	23	1993
Lard-press and sausage-stuffer	J. G. Baker	275,567	Apr. 10	916	248	23	1391
Laryngoscope	C. E. De Bow	281,033	July 10	857	238	24	159
Lash-cutter	G. J. Mack	273,749	Mar. 13	655	175	23	954
Last	J. W. Denny	280,724	July 3	463	133	24	83
Last	J. W. D. Field	288,934	Nov. 20	1433	394	25	774
Last	C. W. Glidden	278,426	May 29	2382	650	23	2065
Last	W. Merritt	270,240	Jan. 9	492	145	23	106
Last	W. H. Snyder	283,826	Aug. 28	1643	463	24	822
Last	G. M. Wells	276,651	May 1	131	35	23	1649
Last	G. M. Wells	288,286	Nov. 13	616	169	25	623
Last-block fastener	R. Butterfield	270,013	Jan. 2	222	64	23	46
Last-block fastener	H. R. Silliman	281,147	July 10	996	278	24	183
Last. Changeable	J. Fieldhouse	283,587	Aug. 21	1350	377	24	756
Last-jack	G. M. Wells	281,742	July 24	1769	481	24	326
Last. Metal	J. Markie	272,143	Feb. 13	698	191	23	572
Last. Shoe-maker's	M. J. Dunn	273,482	Mar. 6	311	84	23	886
Lasts. Method of and apparatus for making anatomical	A. Stürmer	290,652	Dec. 18	1618	445	25	1186
Lasting and tacking machine	F. Huré	282,524	Aug. 7	60	18	24	510
Lasting-machine	E. F. Beal	277,664	May 15	1416	382	23	1881
Lasting-machine	M. Brock	286,898	Oct. 16	1409	387	25	269
Lasting-machine	M. Brock	288,689	Nov. 20	1137	313	25	720
Lasting-machine	M. R. Ethridge	269,841	Jan. 2	27	8, 9	23	8
Lasting-machine	J. E. Matzeliger	274,207	Mar. 20	1230	338	23	1061
Lasting-tool	L. Schrepel	289,861	Dec. 11	613	171	25	1001
Lasting tool. Shank	A. Jackson and W. B. Jefferis	273,283	Mar. 6	44	14	23	842
Latch	H. C. Doughty and D. Hall	281,036	July 10	860	239	24	159
Latch	C. Inward	288,639	Nov. 20	1071	294	25	709
Latch	E. M. and J. E. Mix	283,268	Aug. 14	957	266	24	678
Latch	L. A. Randall	273,152	Feb. 27	1985	559	23	810
Latch	W. E. Sparks	279,837	June 19	1505	421	23	2395
Latch and hinge. Combined gate	J. Forney	273,501	Mar. 6	329	89	23	890
Latch. Door	J. A. Baldwin	276,333	Apr. 24	1891	525	23	1573
Latch. Door	S. W. Billingsley	276,342	Apr. 24	1890	527	23	1575
Latch. Door	C. G. Burkhardt	277,879	May 22	1673	456	23	1933
Latch. Door	S. L. Coates	280,581	July 3	295	81, 82	24	53
Latch. Door	F. J. Lee	286,935	Oct. 16	1453	399	25	276
Latch. Door	P. Mathes	276,255	Apr. 24	1775	494	23	1555
Latch. Door	E. N. Porter	279,797	June 19	1456	407	23	2387
Latch. Door	E. N. Porter	287,715	Oct. 30	2470	666	25	479
Latch. Door	A. L. Scranton	284,336	Sept. 4	217	61	24	941
Latch. Door	W. E. Sparks	273,403	Mar. 6	212	57	23	870



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Latch. Door.....	W. E. Sparks.....	275,533	Apr. 10	874	236	23	1383
Latch for sliding doors.....	E. M. Clough.....	275,149	Apr. 3	351	96	23	1287
Latch. Gate.....	T. Crane.....	290,176	Dec. 11	985	278	25	1069
Latch. Gate.....	A. Holeman.....	283,243	Aug. 14	924	257	24	671
Latch. Gate.....	F. Kroedel and W. Wesp.....	284,743	Sept. 11	723	202	24	1033
Latch. Gate.....	L. A. Saunders and J. S. Funkhouser.....	275,082	Apr. 3	268	73	23	1272
Latch. Gate.....	W. L. Stovall.....	277,807	May 15	1580	432	23	1911
Latch. Gate.....	W. L. Stovall.....	290,717	Dec. 25	1717	473	25	1211
Latch. Knob.....	J. Milton.....	281,109	July 10	946	265	24	174
Latch. Locking.....	F. Palmer.....	276,623	May 1	96	26	23	1644
Latch. Locking.....	G. H. Van Winkle.....	276,507	Apr. 24	2098	583	23	1610
Latch. Reversible.....	C. E. Billings.....	286,580	Oct. 16	1004	271	25	199
Latch. Reversible store-door.....	A. Arens.....	286,250	Oct. 9	578	159	25	116
Lathe.....	J. Birkenhead.....	272,849	Feb. 27	1618	452	23	746
Lathe.....	A. Marshall.....	281,539	July 17	1497	411	24	276
Lathe.....	F. B. Miles.....	280,211	June 26	1956	550	23	2481
Lathe.....	F. M. Stevens and C. E. Moore.....	280,259	June 26	2018	567		
Lathe-center rest.....	E. L. Conkey.....	285,115	Sept. 18	1184	332	24	1121
Lathe-cutter and holder.....	J. W. Douglas.....	280,146	June 26	1884	530	23	2468
Lathe-cutters. Apparatus for grinding.....	C. V. Woerd.....	271,966	Feb. 6	460	126	23	521
Lathe-dog.....	W. E. Sidnell.....	282,577	Aug. 7	124	37	24	522
Lathe-driver.....	F. C. Beard.....	280,119	June 26	1854	522	23	2463
Lathe for turning irregular forms.....	O. Kromer and F. Rinkleff.....	278,025	May 22	1847	504	23	1963
Lathe for turning lasts.....	H. H. Bemis.....	276,129	Apr. 17	1622	447	23	1520
Lathe for turning ovals.....	M. Quinn.....	270,479	Jan. 9	790	231	23	164
Lathe planing attachment.....	M. G. Nixon.....	275,693	Apr. 10	1075	293	23	1418
Lathe-rest.....	G. O. Griggs.....	271,702	Feb. 6	139	38		
Lathe-slide-feeding device.....	A. W. Schleicher.....	274,394	Mar. 20	1480	406	23	1104
Lathe. Slide-knife.....	J. Chase.....	289,978	Dec. 11	752	212	25	1026
Lathe-stand.....	E. A. Warren.....	270,166	Jan. 2	399	115		
Lathe stop mechanism. Engine.....	W. H. Coxon.....	286,786	Oct. 16	1266	343	25	244
Lathe-tool holder.....	C. Müller.....	272,304	Feb. 13	884	248	23	606
Lathe-tool-post.....	C. A. Lieb.....	272,277	Feb. 13	861	240	23	602
Lathe-tool-rest.....	E. S. M. Fernald.....	286,690	Oct. 16	1151	309	25	224
Lathe. Turning.....	F. Hanson.....	286,811	Oct. 16	1295	351	25	250
Lathe. Turning.....	G. D. Hayden.....	287,673	Oct. 30	2412	650		
Lathe. Turning.....	E. R. Kugler.....	286,933	Oct. 16	1449	398	25	276
Lathe. Turning.....	E. H. Leland.....	275,051	Apr. 3	219	59, 60	23	1264
Lathe. Turning.....	F. H. Richards.....	285,931	Oct. 2	196	55	25	38
Lathe. Watch-maker's.....	H. M. Potter.....	288,854	Nov. 20	1338	367	25	755
Lathe. Watch-maker's.....	S. Sawyer.....	280,867	July 10	637	185	24	123
Lathe. Wood-turning.....	C. H. Cowdrey.....	273,227	Feb. 27	2078	584	23	826
Lathe. Wood-turning.....	F. Hanson.....	286,810	Oct. 16	1294	350	25	249
Lathe. Wood-turning.....	H. and J. Kelly.....	287,688	Oct. 30	2431	654		
Lathe. Wood-turning.....	A. I. Sanborn.....	271,368	Jan. 30	1917	554	23	385
Lathes, &c. Cutter and holder for.....	J. W. Douglas.....	280,147	June 26	1885	530	23	2469
Lathes, &c. Cutter and holder for.....	J. W. Douglas.....	280,148	June 26	1887	531	23	2469
Lathes. Counting attachment for gage.....	J. D. Lammel.....	274,950	Apr. 3	86	24	23	1240
Lathes for turning crank-pins. Attachment to.....	J. W. Wilbraham.....	272,520	Feb. 20	1557	437	23	728
Lathes. Manufacturing turning.....	E. T. Gordon.....	281,263	July 17	1159	320	24	218
Lathes. Work-rest for wood-turning.....	N. Geisen.....	288,994	Nov. 27	1508	417	25	795
Lathing and furring.....	W. H. Brown.....	271,309	Jan. 30	1828	531	23	370
Lathing device.....	S. Perry.....	270,839	Jan. 16	1251	360	23	259
Lathing device.....	S. Perry.....	277,058	May 8	688	179	23	1750
Lathing. Metal.....	A. R. Hancock.....	279,748	June 19	1406	392	23	2377
Lathing. Metallic.....	C. H. Watters.....	273,412	Mar. 6	223	60	23	872
Lathing. Support for wire-cloth.....	W. Orr, Jr.....	278,263	May 22	2151	591	23	2015
Latrine and water-closet.....	W. E. Parfitt.....	284,976	Sept. 11	998	281	24	1083
Laundry-iron.....	J. N. Pedder.....	277,605	May 15	1348	363	23	1868
Lawn edge-trimmer.....	P. Adie.....	274,100	Mar. 20	1098	303	23	1037
Lawn-rake.....	J. R. Benton.....	281,003	July 10	820	228	24	152
Lawn-sprinkler.....	H. Bonninghausen.....	273,940	Mar. 13	903	247	23	996
Lawn-sprinkler.....	R. M. Widney.....	287,984	Nov. 6	251	72	25	551
Lawn-tennis courts. Marker for.....	D. D. Williamson.....	285,092	Sept. 18	1155	322	24	1115
Lawn-tennis net. Metal.....	S. Cunningham.....	277,551	May 15	1287	346	23	1858
Lawn-tennis nets. Pole for.....	J. Dwight.....	282,506	Aug. 7	36	11	24	506
Lay-boy.....	G. A. Smith and M. W. Voigtman.....	281,150	July 10	999	279	24	183
Lead and crayon holder.....	G. B. Adams.....	270,197	Jan. 9	437	129	23	97
Lead and crayon holder.....	J. Hoffman.....	290,684	Dec. 25	1666	459	25	1200
Lead and crayon holder.....	P. Schrag.....	271,926	Feb. 6	418	114	23	514
Lead. Apparatus for drying white.....	J. C. Martin.....	286,721	Oct. 16	1187	320	25	231
Lead, &c. Apparatus for grinding white.....	J. C. Martin.....	286,720	Oct. 16	1186	320	25	231
Lead. Manufacture of white.....	J. C. Martin.....	290,444	Dec. 18	1348	450	25	1130
Lead or crayon holder.....	G. B. Adams.....	272,931	Feb. 27	1719	450	23	762
Lead or crayon holder.....	C. W. Boman.....	275,125	Apr. 3	326	90	23	1282
Lead or crayon holder.....	M. Dittenhoefer.....	290,178	Dec. 11	987	279	25	1069
Lead or crayon holder.....	G. L. Jaeger.....	273,093	Feb. 27	1917	537	23	797
Lead or crayon holder.....	G. L. Jaeger.....	273,546	Mar. 6	394	106	23	901
Lead or crayon holder.....	F. J. Kaldenberg.....	282,530	Aug. 7	67	20	24	512
Lead or crayon holder.....	W. H. H. Knight.....	270,681	Jan. 16	1059	303	23	223
Lead or crayon holder.....	W. H. H. Knight.....	277,138	May 8	799	210	23	1769
Lead or crayon holder.....	W. H. H. Knight.....	277,139	May 8	800	210	23	1769
Lead or crayon holder.....	B. G. Platt.....	290,191	Dec. 11	1003	253	25	1072
Lead or crayon holder.....	R. W. Uhlig.....	276,543	Apr. 24	2144	596	23	1617
Lead or crayon holders. Point-protecting attachment to.....	P. Schrag.....	271,136	Jan. 23	1613	464	23	325
Lead pipe. Coiling.....	J. Farrell.....	278,695	June 5	25	7	23	2129
Lead pipe. Coiling.....	J. Farrell.....	278,696	June 5	26	8	23	2129

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Lead. Process of and apparatus for the manufacture of white	H. Frasch	281,047	July 10	873	242	24	161
Lead to impart to it the property of adhering to other metals. Treating	F. J. Clamer	283,077	Aug. 14	719	.....	24	635
Leather and a substitute therefor. Patent	J. B. Edson	289,241	Nov. 27	1805	.....	25	848
Leather. Artificial Russian	E. M. Freeley	285,475	Sept. 25	1610	.....	24	1202
Leather-assorting machine	M. H. Merriam	270,968	Jan. 23	1417	{ 407 408 }	23	293
Leather blacking, dressing, and finishing apparatus.	F. B. Batchelder	271,971	Feb. 6	467	128	23	522
Leather box	F. W. T. Glover	288,227	Nov. 13	539	149	25	611
Leather case	A. and H. Hoff	274,603	Mar. 27	1771	{ 490 491 }	23	1161
Leather-creasing wheel	H. F. Osborne	290,262	Dec. 18	1105	310	25	1097
Leather-cutter	W. W. Brigg	273,018	Feb. 27	1890	510	23	780
Leather-cutter	W. W. Brigg	273,019	Feb. 27	1821	510	23	780
Leather disks. Roll made from	C. Grander and J. H. Moyer	289,910	Dec. 11	676	188	25	1011
Leather-dressing roller	J. W. Vaughn	274,859	Mar. 27	2066	575	23	1214
Leather-folding machine	J. E. Lawton	285,823	Oct. 2	49	16	25	11
Leather gaging and marking machine	C. Dancel	276,782	May 1	327	85	23	1683
Leather, horn, tortoise-shell, &c. Process of and composition for the manufacture of substitutes for	E. Bauer	277,977	May 22	1784	.....	23	1952
Leather. Machine for treating	J. D. McDonald	270,964	Jan. 23	1412	406	23	292
Leather. Manufacture of artificial	E. Pollak	270,475	Jan. 9	786	.....	23	163
Leather. Preparing japanned and enameled	S. J. Patterson	282,664	Aug. 7	226	.....	24	539
Leather-preserving composition	R. T. Barber and J. Raker	289,880	Dec. 11	636	.....	25	1004
Leather-rounding machine	C. W. Rogers	283,024	Aug. 14	659	186	24	625
Leather-scap. Apparatus for treating	E. B. Bragg	289,001	Nov. 6	272	76	25	554
Leather. Seam for uniting pieces of	Q. Kai	283,252	Aug. 14	936	261	24	674
Leather-shaving machine	C. H. Taylor	277,631	May 15	1379	372	23	1874
Leather-skiving machine	C. Amazeen	273,931	Mar. 13	892	244	23	994
Leather-skiving machine	G. Beddow	275,458	Apr. 10	779	208	23	1367
Leather-skiving machine	W. W. Currier	281,979	July 24	2067	566	24	379
Leather-skiving machine	A. Knowlton	272,888	Feb. 27	1672	{ 467 468 }	23	755
Leather-smutting machine	C. B. Bryant	272,025	Feb. 13	550	149	23	548
Leather splitting and beveling knife	E. C. Smith	285,315	Sept. 18	1412	399	24	1163
Leather-splitting machine	E. Cummings	288,551	Nov. 13	958	{ 263 264 }	25	682
Leather-splitting machine	J. A. Enos	277,413	May 8	1109	298	23	1823
Leather-splitting machine	J. D. McDonald and W. Beggs	279,659	June 19	1304	363	23	2360
Leather strings. Machine for rolling	J. A. Smith	287,970	Nov. 6	228	65	25	547
Leather washer	T. Gingras	281,760	July 24	1796	490	24	331
Leg and foot protector	H. A. Ducat	274,114	Mar. 20	1123	309	23	1041
Leg. Artificial	J. Furrer	277,562	May 15	1298	349	23	1860
Leg. Artificial	W. D. Lewis	278,566	May 29	2549	695	23	2094
Leg. Artificial	J. O'Brien	290,915	Dec. 25	1958	541	25	1253
Leggin	E. B. Stimpson	271,150	Jan. 23	1627	468	23	328
Leggin	S. L. Waldman	276,737	May 1	271	68	23	1671
Leggings and overgaiters. Fastening for	E. B. Stimpson	270,147	Jan. 2	379	110	23	77
Lemon-squeezer	A. C. Kelly and G. W. Wimmer	276,424	Apr. 24	1998	553	23	1592
Lemon-squeezer	L. Kysor and A. C. Rex	281,378	July 17	1296	359	24	242
Lemon-squeezer	J. J. Tower	271,002	Jan. 23	1456	420	23	299
Lemonade-mixer	P. H. Cherry	288,775	Nov. 20	1243	341	25	738
Lemonade-shaker	W. M. Reed	281,925	July 24	2009	549	24	368
Lenses. Device for focusing	J. B. Colt	288,035	Nov. 6	299	84	25	558
Letter-box	J. H. Carter	290,532	Dec. 18	1472	407	25	1161
Letter-box	J. W. Jeffers	284,857	Sept. 11	858	241	24	1056
Letter-box	M. R. Jones	271,861	Feb. 6	335	92	23	499
Letter-box	T. E. Lowerre	277,526	May 15	1325	356	23	1865
Letter-box connection	J. G. Cutler	284,951	Sept. 11	971	273	24	1077
Letter for signs. Enameled	J. Caesar	273,024	Feb. 27	1827	511	23	781
Letter sheet and envelope. Combined	T. Breen	272,552	Feb. 27	1621	453	23	746
Letter sheet and envelope. Combined	G. R. Lockwood	279,405	June 12	1005	278	23	2302
Letter-sheet and envelope. Combined	B. Loewenbach	287,555	Oct. 30	2244	609	25	437
Levee	J. Torras	283,684	Aug. 21	1462	411	24	778
Levees and embankments. Constructing	S. Howell	277,732	May 15	1491	404	23	1894
Level	J. T. Ketchledge and R. J. Pepper	277,842	May 15	1622	442	23	1918
Level	L. Van Alstyne	287,342	Oct. 23	1976	540	25	378
Level and plumb. Spirit	L. L. Davis	288,624	Nov. 20	1053	290	25	706
Level. Artificer's	J. W. Harmon	270,951	Jan. 23	1393	402	23	289
Level. Combination	J. H. Sands	279,443	June 12	1046	290	23	2309
Level. Drain-tile-ditch	L. F. Pontious	281,133	July 10	979	273	24	180
Level. Plumb	W. L. Eveland	274,089	Mar. 13	1080	298	23	1027
Level. Right-angled	B. B. Butt	283,564	Aug. 21	1325	370	24	751
Level. Spirit	N. H. Bearse	284,712	Sept. 11	684	193	24	1026
Level. Spirit	S. H. Lemon	281,086	July 10	918	256	24	169
Level. Spirit	T. W. Wood	280,706	July 3	441	126	24	78
Level. Spirit	G. B. Youngs	285,775	Sept. 25	1990	563	24	1269
Leveling-instrument	E. A. Bastrom	280,713	July 3	449	128	24	80
Leveling-instrument	W. and L. E. Gurley	286,606	Oct. 16	1037	281	25	204
Leveling-instrument	W. C. Holmes	284,424	Sept. 4	325	90	24	958
Leveling-instrument	W. W. Le Grande	277,037	May 8	662	172	23	1745
Leveling-instrument	J. A. McCurry	280,203	June 26	1946	547	23	2479
Leveling-instrument. Artificer's	J. W. Harmon	281,267	July 17	1162	321	24	219
Leveling-rod	W. Gurley	287,021	Oct. 23	1574	434	25	304
Leveling-rod. Surveyor's	J. M. Tebar	284,513	Sept. 4	434	123	24	977
Leveling, surveying, &c. Combined instrument for	R. P. Gallis	272,231	Feb. 13	801	223	23	591
Lever-jack	J. O. Joyce	271,864	Feb. 6	338	93	23	500
Lewis	C. W. Ash	277,532	May 15	1261	338	23	1855
Library-table	G. N. Fletcher	283,386	Aug. 21	1112	314	24	713
Lid for pots, &c.	P. B. Connely	276,359	Apr. 24	1916	531	23	1578
Lid for pots, kettles, &c.	W. D. Elwell	287,227	Aug. 14	898	251	24	647
Lid-lifter, tongs, and poker. Combined	H. Ackermann	273,531	May 15	1260	338	23	1855
Life-boat	M. Besosa	289,208	Nov. 27	1771	491	25	841



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Life-boat.....	P. Duval.....	281,622	July 17	1606	439	24	293
Life-boat.....	D. Dwyer.....	273,713	Mar. 13	605	163	23	945
Life-boat.....	T. Hamilton.....	278,542	May 29	2521	688	23	2089
Life-boat.....	F. Vaughan.....	273,197	Feb. 27	2036	573	23	819
Life-guard and track-clearer.....	R. B. Locke.....	287,036	Oct. 23	1592	438	25	307
Life-lines. Gun and its projectile for throwing.....	J. Evans and R. Low.....	281,041	July 10	866	241	24	160
Life-preserver.....	E. Bauer.....	281,824	July 24	1880	513	24	346
Life-preserver.....	E. R. Cogswell.....	270,745	Jan. 16	1142	327	23	238
Life-preserver.....	E. R. Cogswell.....	281,178	July 10	1039	288	24	191
Life-preserver.....	C. E. Gensch.....	282,627	Aug. 7	185	54	24	532
Life-preserver.....	J. N. Hoefflich.....	278,432	May 29	2391	652	23	2066
Life-preserver.....	G. P. Hunt.....	278,240	May 22	2117	583	23	2010
Life-preserver.....	S. A. L. Klixbüll.....	271,870	Feb. 6	344	95	23	581
Life-preserver.....	C. Ledue.....	282,651	Aug. 7	211	61	24	536
Life-preserver.....	D. A. Woodbury.....	276,121	Apr. 17	1613	444	23	1518
Life-preserver holder.....	W. P. Gray.....	277,269	May 8	943	253	23	1795
Life-preserving mattress.....	W. Miller.....	289,122	Nov. 27	1666	462	25	822
Life-raft.....	E. A. Hayes.....	281,689	July 24	1697	462	24	313
Life-saving apparatus for boats.....	D. W. Low.....	280,842	July 10	630	177	24	117
Life-saving apparatus for privy-vaults.....	J. Fleck.....	270,295	Jan. 9	556	163	23	118
Life-saving scaf for vessels.....	R. E. Pinhey.....	284,229	Sept. 4	94	25, 26	24	920
Life-saver.....	J. S. Stevens, C. G. Major, and D. P. Edwards.....	282,236	July 31	2410	662	24	441
Lift. Safety.....	M. Martin.....	271,884	Feb. 6	357	99	23	503
Lifter:							
See Coffin-lifter.	Pan or stove-cover lifter.						
Cooking-utensil lifter.	Rail-lifter.						
Corpse-lifter.	Sash-lifter.						
Dish or plate lifter.	Stove-cover lifter.						
Invalid-lifter.	Stove-lid lifter.						
Lid-lifter.	Transom-lifter.						
Lifting-jack.....	J. C. Burruss.....	270,012	Jan. 2	221	63	23	46
Lifting-jack.....	T. Carney.....	288,009	Nov. 6	283	80	25	555
Lifting-jack.....	H. C. Chandler.....	283,204	Aug. 14	876	244	24	663
Lifting-jack.....	L. J. Creechius.....	270,394	Jan. 9	656	203	23	144
Lifting-jack.....	J. Dawson.....	278,317	May 29	2237	613	23	2039
Lifting-jack.....	M. Eaton.....	277,247	May 8	920	216	23	1790
Lifting-jack.....	W. M. Eichholtz.....	276,371	Apr. 24	1932	536	23	1581
Lifting-jack.....	E. J. Evans.....	270,649	Jan. 16	1021	293	23	215
Lifting-jack.....	J. H. Fiske.....	273,050	Feb. 27	1856	520	23	787
Lifting-jack.....	H. Garrett.....	273,507	Mar. 6	334	91	23	891
Lifting-jack.....	J. W. Hawkins.....	287,539	Oct. 30	2222	603	25	432
Lifting-jack.....	L. D. Jones.....	276,140	Apr. 17	1635	450	23	1522
Lifting-jack.....	J. O. Joyce.....	271,863	Feb. 6	337	93	23	500
Lifting-jack.....	J. O. Joyce.....	276,827	May 1	378	101	23	1692
Lifting-jack.....	J. S. Kirkwood.....	272,837	Feb. 20	1588	446	23	733
Lifting-jack.....	I. L. Landis.....	274,007	Mar. 13	979	268	23	1010
Lifting-jack.....	C. L. Martin.....	284,875	Sept. 11	879	247	24	1060
Lifting-jack.....	H. Miller.....	272,969	Feb. 27	1760	492	23	769
Lifting-jack.....	H. Miller.....	283,635	Aug. 21	1400	392	24	766
Lifting-jack.....	G. W. Null.....	284,975	Sept. 11	996	281	24	1082
Lifting-jack.....	W. L. Porter.....	284,482	Sept. 4	389	107	24	970
Lifting-jack.....	E. Prescott.....	272,899	Feb. 27	1684	471	23	756
Lifting-jack.....	W. M. Riggan.....	276,471	Apr. 24	2056	571	23	1602
Lifting-jack.....	D. R. Roberts.....	286,488	Oct. 9	881	239	25	171
Lifting-jack.....	I. Rose.....	288,367	Nov. 13	734	199	25	643
Lifting-jack.....	J. Schwegler.....	278,280	May 22	2169	597	23	2018
Lifting-jack.....	J. Sewell, Jr.....	271,137	Jan. 23	1614	464	23	325
Lifting-jack.....	E. D. Sloat.....	270,608	June 19	1242	314	23	2349
Lifting-jack.....	T. Thom.....	287,066	Oct. 23	1629	448	25	314
Lifting-jack.....	J. Weathers.....	273,649	Mar. 6	524	140	23	923
Lifting-jack.....	H. Weis.....	271,959	Feb. 6	452	124	23	520
Lifting-jack.....	P. Witt.....	280,000	June 26	1712	480	23	2437
Lifting-jack and spike and stump puller.....	W. V. Flynn.....	277,294	May 22	1690	461	23	1936
Lifting-jack crank-handle.....	J. M. Vance.....	287,198	Oct. 23	1798	493	25	345
Lifting-jack for raising railway-tracks.....	J. W. Snapp.....	276,088	Apr. 17	1569	432	23	1511
Lifting-jack. Wagon-bed.....	F. Funk.....	286,806	Oct. 16	1290	349	25	249
Lifting-machine.....	H. E. Townsend.....	271,545	Jan. 30	2139	565	23	435
Lifting mechanism.....	G. A. Shoudy.....	274,834	Mar. 27	2034	616	23	1208
Light:							
See Car signal-light.	Sidewalk-light.						
Electric light.	Signal-light.						
Electric-arc light.	Sky-light.						
Head-light.	Voltaic light.						
Oven-light.	Voltaic arc light.						
Lights. Arch for street.....	R. T. Stanard.....	288,132	Nov. 6	420	119	25	581
Lightning-arrester.....	J. W. Dyer.....	287,647	Oct. 30	2377	641	25	461
Lightning-arrester.....	J. W. Dyer.....	289,629	Dec. 4	316	88	25	943
Lightning-arrester.....	J. L. Finn.....	273,049	Feb. 27	1855	520	23	787
Lightning-arrester.....	C. S. Shepard.....	287,875	Nov. 6	104	31	25	525
Lightning-arrester for electric wires.....	W. R. Patterson.....	281,723	July 24	1749	474	24	322
Lightning-arrester for telegraph-circuits.....	J. W. Dyer.....	272,867	Feb. 27	1640	459	23	750
Lightning-conductor.....	W. Brown.....	271,029	Jan. 23	1485	428	23	304
Lightning-conductor.....	J. H. Coon.....	274,564	Mar. 27	1721	478	23	1152
Lightning-conductor.....	T. H. Dodge.....	289,076	Nov. 27	1614	446	25	812
Lightning-conductor.....	H. W. Spang.....	273,179	Feb. 27	2017	567	26	815
Lightning-conductor.....	H. W. Spang.....	284,082	Aug. 28	1973	550	24	879
Lightning-rod.....	J. H. Brandon.....	270,379	Jan. 9	666	195	23	140
Lightning-rod.....	T. H. Dodge.....	282,449	July 31	2686	737	24	489
Lightning-rod.....	A. C. Lobdell.....	278,028	May 22	1851	506	23	1964
Lightning-rod.....	T. H. Patee.....	282,562	Aug. 7	108	33	24	519
Lightning-rod coupling.....	W. Hewitt.....	287,929	Nov. 6	174	50	25	538
Lightning-rod joint.....	W. Hewitt.....	287,286	Oct. 23	1907	521	25	365

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Lightning-rods. Tripod-standard for .....	T. H. Patee and T. D. Ridge .....	271,733	Feb. 6	176	47	23	470
Limb. Artificial .....	G. A. Ingram .....	288,239	Nov. 13	558	155	25	614
Line. Apparatus for preparing sulphureted cream of .....	H. A. Hughes .....	290,642	Dec. 18	1609	442	25	1184
Line-bin .....	J. W. Ormsby .....	270,464	Jan. 9	773	226	23	160
Line from gas-works for cyanides. Treating spent .....	A. T. Schnessler .....	277,851	May 15	1633	.....	23	1920
Linekiln .....	P. McLoon .....	285,911	Oct. 2	168	48	25	33
Line-wash for coating buildings, &c. ....	J. H. Sharpless .....	276,293	Apr. 24	1822	.....	23	1562
Line-loop .....	J. Hudson .....	289,264	Nov. 27	1831	505	25	853
Lineameter .....	V. Von Reitzner .....	275,734	Apr. 10	1124	308	23	1426
Linearscope .....	A. Chappel .....	281,020	July 10	839	233	24	155
Liniment .....	F. Guillauma .....	284,629	Sept. 11	575	.....	24	1008
Liniment .....	J. Quinlan .....	282,769	Aug. 7	357	.....	24	562
Link-bending machine .....	J. Baird .....	287,359	Oct. 23	1997	544	25	381
Link-bending machine .....	C. O. Sobinski .....	287,736	Oct. 30	2497	{ 673 674	25	484
Link-bending machine .....	H. G. Tidemann .....	280,097	June 26	1831	{ 515 516	23	2458
Link forming and cutting machine .....	H. A. Iddings .....	290,773	Dec. 25	1787	{ 493 494	25	1223
Link-making machine .....	J. Phelan .....	283,919	Ang. 28	1748	{ 493 494	24	840
Link-protector .....	A. V. Smith .....	279,831	June 19	1500	410	23	2394
Link-welding die .....	F. A. Iddings .....	271,466	Jan. 30	2046	589	23	400
Link-winding machine .....	A. T. Trimble .....	270,861	Jan. 16	1271	367	23	263
Links. Die for forming .....	H. A. Iddings .....	286,013	Oct. 2	288	81	25	54
Lint. Manufacture of surgical .....	W. T. Browne .....	282,264	July 31	2440	671	24	446
Liquid-cooler .....	H. S. Dimock .....	277,689	May 15	1445	390	23	1886
Liquid-meter .....	D. B. Spooner .....	287,587	Oct. 30	2300	622	25	447
Liquids. Apparatus for drawing .....	G. D. Burton .....	275,134	Apr. 3	336	93	23	1284
Liquids from barrels. Apparatus for drawing .....	J. Cox .....	288,978	Nov. 27	1493	413	25	792
Liquids from barrels. Apparatus for forcing .....	H. B. Park .....	286,631	Oct. 16	1073	258	25	211
Liquids. Increasing the flow and delivery of .....	J. L. Douglass .....	286,185	Oct. 9	499	138	25	103
Liquors. Apparatus for purifying alcoholic .....	G. Fleury .....	286,126	Oct. 2	424	116	25	78
Liquors. Apparatus for treating fermented, fermentable, and distilled .....	C. W. Ramsay .....	271,656	Feb. 6	84	23	23	455
Liquors to the action of atmospheric air. Apparatus for exposing .....	E. Luck .....	278,986	June 5	451	124	23	2200
Liquors with electricity. Treating alcoholic .....	A. C. Tichenor .....	280,882	July 10	671	189	24	125
Lister and drill. Combined .....	L. Kirlin .....	274,004	Mar. 13	976	268	23	1009
Lithographic process .....	A. Hoen .....	277,730	May 15	1487	403	23	1894
Load-binder .....	A. H. Johnston .....	289,109	Nov. 27	1650	458	25	819
Lock:							
See Alarm-lock. Hasp-lock.							
Bag-lock. Indicator-lock.							
Bag or satchel lock. Knob-lock.							
Bed-rail-slat lock. Mat-lock.							
Berth-lock. Milk-can lock.							
Bicycle-lock. Nut-lock.							
Bolt-lock. Oar-lock.							
Book-lock. Padlock.							
Bottle-lock. Permutation-lock.							
Brake-lock. Post-office-box lock.							
Cabinet-lock. Railway-rail lock.							
Car-door lock. Reclining-chair lock.							
Carriage-top lock. Revolver-lock.							
Carriage-wheel lock. Safe-lock.							
Combination-lock. Sash-lock.							
Cylinder-lock. Satchel-lock.							
Door-lock. Seal-lock.							
Drawer-lock. Seat-lock.							
Electric lock. Stencil-plate lock.							
Elevator-gate lock. Switch-lock.							
Fence-lock. Time-lock.							
Fire-alarm-box lock. Time and non-time lock.							
Fire-arm lock. Track-bolt lock.							
Fire-arm safety-lock. Trunk-lock.							
Galley type-lock. Vehicle-seat lock.							
Gun-lock. Wagon-lock.							
Lock .....	J. S. Aydelott .....	281,822	July 24	1878	513	24	346
Lock .....	W. C. and E. I. Blount .....	273,939	Mar. 13	901	246	23	996
Lock .....	J. Breyer .....	285,382	Sept. 25	1500	422	24	1183
Lock .....	F. S. Clarkson .....	281,615	July 17	1598	437	24	291
Lock .....	N. J. Coté .....	276,004	Apr. 17	1463	403	23	1494
Lock .....	F. A. Guthrie .....	283,776	Aug. 28	1586	448	24	813
Lock .....	F. P. Krings .....	289,542	Dec. 4	212	59, 60	25	923
Lock .....	C. S. Lewis and G. H. Blakesley .....	270,318	Jan. 9	579	170	23	123
Lock .....	C. A. Ludlow .....	283,125	Ang. 14	777	218	24	645
Lock .....	F. W. Mix .....	281,713	July 24	1729	469	24	319
Lock .....	L. Rhoades .....	271,271	Jan. 30	1781	517	23	362
Lock .....	J. Roche .....	280,517	July 3	219	58	24	39
Lock .....	S. P. Stoddard .....	271,662	Feb. 6	92	25	23	456
Lock .....	S. P. Stoddard .....	271,663	Feb. 6	93	25	23	456
Lock .....	E. P. Teeters .....	272,796	Feb. 20	1526	430	23	723
Lock .....	J. P. White .....	271,962	Feb. 6	454	124	23	521
Lock .....	O. H. and O. L. Woodward .....	279,112	June 5	632	172	23	2230
Lock and latch .....	H. H. Freeman .....	290,024	Dec. 11	812	228	25	1036
Lock and latch. Combined .....	T. Friedrich .....	279,932	June 26	1631	458	23	2423
Lock and latch. Combined .....	M. E. Hamilton .....	282,886	Aug. 7	492	138	24	587
Lock-bolts. Machine for putting springs in .....	G. B. Cowles .....	283,081	Aug. 14	723	{ 202 203	24	636
Lock-case .....	E. Parker .....	281,294	July 17	1191	329	24	224
Lock-case .....	H. L. Spiegel. (Reissue) .....	10,361	July 31	2721	749	24	494
Lock for rocking-chairs, cribs, &c. ....	J. H. McLean .....	278,162	May 22	2013	554	23	1992



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Lock-gates. Apparatus for opening and closing	T. H. Pollock	287,575	Oct. 30	2275	617	25	442
Lock-nut	J. C. Butterfield	290,849	Dec. 25	1882	520	25	1210
Lock-nut	B. S. Crocker	281,180	July 10	1041	289	24	191
Lock-nut	F. Maxwell	289,430	Dec. 4	70	20	25	899
Lock nut and bolt	D. Hull	271,852	Feb. 6	323	89	23	498
Lock-nut for pipe-couplings	M. A. Maus	288,250	Nov. 13	571	158	25	616
Lock-plates. Machine for securing the key-post in	G. B. Cowles	283,326	Aug. 14	1023	296 287	24	690
Lock striking-plate	E. Parker	279,006	June 5	476	131	23	2204
Lock-tumblers. Machine for slotting and driving springs into	G. B. Cowles	286,269	Oct. 9	598	164	25	119
Locked joint	R. W. and F. Grinnell	277,479	May 15	1196	321	23	1845
Locked joint	R. W. and F. Grinnell	277,480	May 15	1197	321	23	1845
Locking-nut	G. W. Sampson	289,146	Nov. 27	1694	470	25	827
Locket	T. W. Foster	270,296	Jan. 9	556	164	23	118
Locket	T. W. Foster	273,057	Feb. 27	1864	524	23	788
Locket	F. B. Gould	277,022	May 8	645	168	23	1742
Locket	C. R. Harris	281,688	July 24	1696	461	24	313
Lockets. Manufacture of	C. S. Pine	277,339	May 8	1030	276	23	1810
Locomotive	A. A., E., and H. Blackman	272,633	Feb. 20	1326	372	23	687
Locomotive	W. E. Cole	277,994	May 22	1809	494	23	1956
Locomotive	M. A. Dees	272,218	Feb. 13	784	217 218	23	588
Locomotive	D. R. Murphy	279,102	June 5	611	166	23	2227
Locomotive	O. Rothrock	277,423	May 8	1128	303 304	23	1826
Locomotive	E. A. Trapp	278,470	May 29	2436	664	23	2074
Locomotive	W. T. Wells	275,739	Apr. 10	1130	309	23	1427
Locomotive and tender brake	C. W. Lanpher	275,831	Apr. 17	1261	347	23	1457
Locomotive and traction engine	F. W. Webb	270,167	Jan. 2	399	115 116	23	81
Locomotive and train brake	D. Torrey	276,928	May 1	506	132	23	1713
Locomotive ash-pan	E. Bignell	286,579	Oct. 16	1003	271	25	199
Locomotive ash-pan	C. K. Dodge	270,541	Jan. 9	879	255	23	182
Locomotive ash-pan	C. F. Smith	281,936	July 24	2015	552	24	370
Locomotive attachment	O. Wetmore	284,520	Sept. 4	443	126	24	979
Locomotive-boiler	C. B. Coventry	287,505	Oct. 30	2182	592 593	25	423
Locomotive-boiler	C. B. Coventry	290,542	Dec. 18	1482	409	25	1162
Locomotive-boilers. Apparatus for washing out	J. T. McKenna	273,753	Mar. 13	662	177 178	23	955
Locomotive-brake	E. Beals	271,189	Jan. 23	1685	486	23	336
Locomotive-brake	E. B. Leigh	278,242	May 22	2119	584	23	2010
Locomotive-brake	G. H. Poor	285,068	Sept. 18	1124	314	24	1111
Locomotive-brake	C. J. Schiller	283,028	Aug. 14	663	187	24	625
Locomotive-brake	W. B. Turner	278,471	May 29	2437	665	23	2074
Locomotive-cab window	J. Shields	276,907	May 1	478	126	23	1710
Locomotive-chair	G. Arbogast	287,789	Nov. 6	2	1	25	507
Locomotive cinder-chambers. Ventilator for	J. K. Taylor	282,404	July 31	2618	719	24	477
Locomotive cow-catcher	W. Phillips	289,705	Dec. 4	427	119	25	960
Locomotive cow-catchers. Revolving guard for	J. D. Fisk	288,788	Nov. 20	1262	345	25	742
Locomotive deflecting-plate	H. Millholland	282,104	July 31	2229	613	24	412
Locomotive drive-wheels. Device for magnetizing the tires of	E. J. Molera	288,356	Nov. 13	710	195	25	639
Locomotive. Electric	C. G. Curtis and F. B. Crocker	271,042	Jan. 23	1498	433	23	306
Locomotive. Electric	L. Daft	283,759	Aug. 28	1567	442	24	809
Locomotive. Electric	L. Daft	283,761	Aug. 28	1568	443	24	809
Locomotive. Electro-magnetic	S. H. Beckwith	280,559	July 3	264	72, 73	24	48
Locomotive-engine. Electric	L. Daft	289,895	Dec. 11	656	183	25	1008
Locomotive-engine cow-catcher	E. B. Lake	284,438	Sept. 4	340	04	24	961
Locomotive fuel-feeding device	J. W. Cloud	289,226	Nov. 27	1790	496	25	845
Locomotive grate-bar	I. W. Swallow	288,599	Nov. 13	1021	280	25	695
Locomotive. Logging	J. Dolbeer	290,755	Dec. 25	1769	488 489	25	1220
Locomotive or car brake	W. B. Guernsey and W. B. Turner	278,429	May 29	2387	651	23	2065
Locomotive-pilots. Safety device for	O. Rothrock	280,959	July 10	771	214	24	141
Locomotive. Rotary-engine	I. N. Forbes	274,480	Mar. 27	1610	444 445 446 447 448 449	23	1134
Locomotive sanding device	J. B. Collin	271,039	Jan. 23	1494	421	23	305
Locomotive sanding device	J. B. Collin	272,414	Feb. 20	1049	294	23	638
Locomotive smoke-box	J. C. Farmer	275,812	Apr. 17	1243	342	23	1454
Locomotive steam-brake	W. B. Wallace	278,299	May 22	2206	606	23	2025
Locomotive-tender	T. Mulheirn	270,330	Jan. 9	599	177	23	127
Locomotive-tenders. Coupling attachment for	G. H. Colby	288,209	Nov. 13	518	144	25	607
Locomotive-tenders while in motion. Method of and device for coaling	M. H. Lantz	276,051	Apr. 17	1522	419	23	1503
Locomotive. Tramway	J. and J. Quick, Jr	276,075	Apr. 17	1548	426 427	23	1508
Locomotive. Tramway	W. Wilkinson	276,948	May 1	541	141	23	1718
Locomotive-whistle attachment. Automatic	J. W. Strickle and H. W. Manning	290,718	Dec. 25	1717	473 474 475	25	1211
Locomotives. Blast-concentrator for	H. Millholland	282,103	July 31	2227	612 613	24	411
Locomotives. Device for increasing the traction of	J. Elder	290,012	Dec. 11	799	225	25	1034
Locomotives. Reflecting-mirror attachment for	D. Frost and H. Cartwright	282,623	Ang. 7	179	52	24	531
Locomotives with coal. Supplying	J. B. Collin. (Reissue)	10,417	Dec. 4	523	144	25	977
Log-canter	G. Mee	279,660	June 19	1305	363	23	2360
Log-roller	F. S. Farr and J. Evered	288,415	Nov. 13	796	216	25	654
Log-roller	L. T. Kline	278,022	May 22	1845	503	23	1962
Logging-crab. Steam	C. C. Badgley	270,873	Jan. 16	1287	371	23	266

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Disc.	Vol.	Page.
Logging-engine	J. Dolbeer	290,755	Dec. 25	1768	488	25	1220
Logging-wheel	G. W. Dossie	273,043	Feb. 27	1850	518	23	786
Looking-glass frame. Portable	F. Roeder	270,130	Jan. 2	355	104	23	72
Loom	G. Crompton	274,913	Apr. 3	27	8	23	1231
Loom	G. Crompton	282,502	Aug. 7	31	9, 10	24	506
Loom	W. Evans	281,476	July 17	1424	{ 390 391	24	263
Loom	L. J. Knowles	272,062	Feb. 13	596	161	23	555
Loom	L. J. Knowles	274,502	Mar. 27	1643	457	23	1139
Loom for making French harness	A. Urbahn	289,872	Dec. 11	626	{ 174 175	25	1003
Loom for weaving bags, &c	J. Laird, Jr.	286,711	Oct. 16	1176	{ 316 317	25	229
Loom for weaving carpets	W. H. Bairstow	289,955	Dec. 11	731	204	25	1020
Loom for weaving double-pile fabrics	S. C. Lister and J. Reixach	282,552	Aug. 7	212	62	24	536
Loom for weaving figured double-pile fabrics. Power.	S. C. Lister and J. Reixach	289,671	Dec. 4	368	{ 104 105 106	25	952
Loom for weaving flag matting	J. S. Winsor	280,891	July 10	682	{ 192 193 558	24	127
Loom for weaving moquette carpets	H. Skinner	285,767	Sept. 25	1970	{ 559 560	24	1267
Loom for weaving tufted fabrics	C. E. Skinner	270,346	Jan. 9	619	183	23	131
Loom for weaving tufted fabrics	C. E. Skinner	270,495	Jan. 9	808	{ 235 236	23	168
Loom for weaving tufted fabrics	C. E. Skinner	288,266	Nov. 13	595	163	25	620
Loom for weaving tufted fabrics	C. E. Skinner	288,267	Nov. 13	597	164	25	620
Loom for weaving tufted fabrics	C. E. Skinner and E. Tymeson	288,268	Nov. 13	599	164	25	620
Loom. Hand	W. Schilling	276,478	Apr. 24	2063	573	23	1604
Loom. Hand	A. Wright	273,333	Mar. 6	120	34	23	854
Loom-harness-motion	W. G. Tillon and J. W. Clapp	290,286	Dec. 18	1134	318	25	1102
Loom-harness straps. Machine for making	S. L. Johnston	272,055	Feb. 13	587	158	23	554
Loom. Jacquard	J. O. Fryer. (Reissue)	10,379	Sept. 11	1020	{ 286 287	24	1087
Loom lease-rod	W. Brown	288,303	Nov. 13	635	174	25	627
Loom let-off mechanism	S. H. Jones	289,420	Dec. 4	57	16	25	896
Loom let-off mechanism. Locking attachment for.	T. Platt	273,889	Mar. 13	839	228	23	986
Loom letting-off motion	J. Williamson, J. and G. Swindells	279,626	June 19	1263	350	23	2353
Loom picker-staff check	A. Hallowell	288,631	Nov. 20	1062	292	25	708
Loom picker-staff check	J. S. Richardson	279,597	June 19	1232	341	23	2347
Loom picker-staff check	L. Whitney and H. K. Jackson	285,941	Oct. 2	210	59	25	40
Loom picker-stick holder	W. J. Dunn	278,111	May 22	1945	533	23	1980
Loom picker-stick-operating mechanism	W. Evans	281,254	July 17	1148	316	24	216
Loom. Power	R. Simon	286,081	Oct. 2	372	103	25	68
Loom. Ribbon	R. Kohlhaas	289,916	Dec. 11	683	190	25	1013
Loom shedding mechanism	H. Bünzli	271,033	Jan. 23	1489	429	23	305
Loom shedding mechanism	R. S., E., and R. Collinge	286,783	Oct. 16	1262	342	25	244
Loom-shuttle	A. Claus	280,797	July 10	578	161	24	109
Loom-shuttle	G. W. Doe	271,433	Jan. 30	1998	577	23	401
Loom-shuttle	F. J. Freese	276,019	Apr. 17	1483	409	23	1497
Loom-shuttle	J. P. Thompson	284,089	Aug. 28	1983	552	24	881
Loom-shuttle	W. P. Uhlinger	288,602	Nov. 13	1025	281	25	695
Loom shuttle-binder	W. Kothe	270,228	Jan. 9	477	140	23	104
Loom shuttle-motion	W. G. Tillon and J. W. Clapp	290,285	Dec. 18	1133	318	25	1102
Loom-shuttle spindle	W. T. Coggeshall	273,468	Mar. 6	296	80	23	883
Loom-shuttle threader	W. E. N. Potter	286,731	Oct. 16	1201	324	25	233
Loom-stopping mechanism	T. W. Sharkey	283,289	Aug. 14	979	273	24	682
Loom take-up motion	W. G. Tillon and J. W. Clapp	290,287	Dec. 18	1136	319	25	1102
Loom-temple	G. Crompton and H. Wymann	284,120	Aug. 28	2025	563	24	889
Loom-temple	J. H. Crowley	276,959	May 1	558	145	23	1721
Loom-temple	J. B. Stamour	274,404	Mar. 20	1490	410	23	1106
Loom-temple	E. S. Stimpson	288,742	Nov. 20	1207	330	25	731
Loom. Vertical	J. MacFarlane	278,715	June 5	51	16	23	2133
Loom warp-stop-motion	W. G. Tillon and J. W. Clapp	289,871	Dec. 11	624	{ 173 174	25	1002
Loom weft-stop mechanism	T. Isherwood	288,814	Nov. 20	1290	353	25	747
Loom weft stop-motion	J. M. Linscott	278,904	June 5	171	50	23	2152
Loom weft stop-motion	F. O. Tucker	273,193	Feb. 27	2031	{ 571 572	23	818
Looms. Anchor shuttle-box motion for	C. Strobel	290,138	Dec. 11	945	268	25	1062
Looms. Brake mechanism for anchor shuttle-box motions for	F. Leclère	274,127	Mar. 20	1138	313	23	1044
Looms. Cloth-holding roller for	O. W. Kenison	277,742	May 15	1501	407	23	1896
Looms. Device for connecting picking-straps to the picking-sticks of	T. H. Logan	290,899	Dec. 25	1943	536	25	1250
Looms for weaving elastic webbing. Stop-motion for.	B. A. Mann	288,462	Nov. 13	855	231	25	664
Looms for weaving tubular fabrics. Temple for.	L. C. Mason	283,127	Aug. 14	779	219	24	645
Looms. Pattern chain-bar for	H. P. Rice	283,816	Aug. 28	1634	460	24	820
Looms. Pile-wire motion for	J. Hobson	281,069	July 10	899	250	24	166
Looms. Positive shuttle-motion for	C. B. Rumsey	280,960	July 10	772	214	24	142
Looms. Sweep-strap connection for picker-sticks of.	S. W. Sykes	286,971	Oct. 16	1501	413	25	225
Lounges. Adjustable leg for folding	A. S. Newby	279,789	June 19	1448	405	23	2385
Lounges. Combined leg and clasp for folding	F. E. Campbell	279,536	June 19	1164	322	23	2335
Low-water alarm. Electrical	J. E. Blake and C. A. Hall	286,581	Oct. 16	1005	271	25	199
Lozenge-machine	O. R. Chase	279,913	June 26	1604	{ 450 451	23	2419
Lozenge-machine	C. H. Hall	273,518	Mar. 6	357	94, 95	23	895
Lubricant for steam-cylinders	T. Colgan	280,134	June 26	1871	50	23	2466
Lubricant for the cocks and valves of gas apparatus	W. M. Jackson	280,625	July 3	346	.....	24	61
Lubricant for wire	W. E. Rico	270,338	Jan. 9	609	.....	23	129
Lubricating and cooling compound. Combined	J. W. Williamson	278,067	May 22	1890	.....	23	1971
Lubricating apparatus	O. Colvin	277,410	May 8	1105	297	23	1822
Lubricating apparatus	F. Jarecki	283,401	Aug. 21	1129	319	24	716



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Lubricating attachment. Steam-engine	H. H. Westinghouse	271,065	Jan. 23	1461	420	23	300
Lubricating-axles. Composition for	H. W. Reddan	276,711	May 1	230		23	1664
Lubricating bearings. Apparatus for	H. Roisert	287,963	Nov. 6	221	62, 63	25	546
Lubricating compound	G. Dimick	287,643	Oct. 30	2372		25	460
Lubricating compound	H. E. Lepper	278,243	May 22	2121		23	2011
Lubricating compound for the plates of tobacco-presses.	W. A. and W. M. Strother	280,879	July 10	669		24	125
Lubricating-cup	S. P. Weller and G. R. Roesch	280,423	July 3	105	28	24	20
Lubricating-eccentric	B. S. Roy	276,885	May 1	451	121	23	1706
Lubricating gas-meter shafts	J. Burton	282,610	Aug. 7	162	49	24	529
Lubricating journal-bearings	J. Garland and J. Kenyon	274,755	Mar. 27	1943	540	23	1193
Lubricating mechanism	W. M. Brinkerhoff	282,837	Aug. 7	431	122	24	576
Lubricating vertical bearings	A. Hatch	280,742	July 3	490	138	24	87
Lubricator:							
See Automatic lubri- Engine-cylinder lubri-							
cator.	cator.						
Axle-lubricator.	Engine-slide lubricator.						
Car-journal lubri- Gearing-lubricator.							
cator.	Journal-lubricator.						
Car-wheel lubricator.	Pneumatic lubricator.						
Engine-lubricator.	Wrist-pin lubricator.						
Lubricator	H. Allton	275,971	Apr. 17	1424	{ 392 293 }	23	1487
Lubricator	D. Appol and R. G. McAuley	290,728	Dec. 25	1730	478	25	1213
Lubricator	C. W. Baldwin	287,085	Oct. 23	1653	454	25	319
Lubricator	A. E. Barthel	287,900	Nov. 6	140	41	25	532
Lubricator	J. M. Battin, Jr.	579,120	June 12	648	177	23	2244
Lubricator	C. W. Booth	283,695	Aug. 21	1475	415	24	781
Lubricator	W. H. Bowen	270,626	Jan. 16	984	284	23	209
Lubricator	C. F. Bowman	279,699	June 10	1352	376	23	2368
Lubricator	A. Bradford	280,562	July 3	270	74	24	49
Lubricator	W. W. Brisben	281,010	July 10	826	230	24	153
Lubricator	M. S. Cabell	280,888	Dec. 11	648	180	25	1006
Lubricator	S. G. Cabell	283,860	Aug. 28	1650	475	24	828
Lubricator	M. L. Conway	285,465	Sept. 25	1601	449	24	1201
Lubricator	W. H. Craig	277,464	May 15	1180	317	23	1842
Lubricator	W. H. Craig	281,241	July 17	1128	310	24	213
Lubricator	L. P. Dollison	270,762	Jan. 16	1162	332	23	242
Lubricator	T. R. Freemaun	286,289	Oct. 9	648	172	25	128
Lubricator	J. Graham	283,481	Aug. 21	1226	345	24	733
Lubricator	J. A. Green	288,328	Nov. 13	676	186	25	632
Lubricator	C. C. Hodges	275,768	Apr. 10	1179	323	23	1435
Lubricator	H. F. Hodges	290,428	Dec. 18	1330	369	25	1136
Lubricator	R. J. Hoffman	286,005	Oct. 2	278	78	25	52
Lubricator	R. J. Hoffman	288,434	Nov. 13	817	221	25	658
Lubricator	T. Holland	290,685	Dec. 25	1668	460	25	1201
Lubricator	A. Ittner	284,303	Sept. 4	182	51	24	935
Lubricator	F. Jarecki	283,399	Aug. 21	1127	319	24	716
Lubricator	F. Jarecki	283,400	Aug. 21	1128	319	24	716
Lubricator	O. H. Jewell	270,805	Jan. 16	1210	349	23	252
Lubricator	J. Kelly	281,699	July 24	1714	466	24	317
Lubricator	E. McCoy	270,238	Jan. 9	489	144	23	106
Lubricator	W. L. Parker	279,592	June 19	1224	340	23	2346
Lubricator	C. H. Parshall, Jr.	283,017	Aug. 14	652	184	24	623
Lubricator	W. P. Phillips	276,068	Apr. 17	1542	424	23	1506
Lubricator	S. Reid	273,312	Mar. 6	89	27	23	849
Lubricator	F. J. Renchard	278,741	June 5	83	24	23	2138
Lubricator	J. V. Renchard	273,158	Feb. 27	1991	{ 560 561 }	23	810
Lubricator	J. V. Renchard	273,314	Mar. 6	93	27, 28	23	849
Lubricator	J. V. Renchard	275,707	Apr. 10	1090	{ 297 298 }	23	1420
Lubricator	J. V. Renchard	285,432	Sept. 25	1562	440	24	1194
Lubricator	J. V. Renchard	288,665	Nov. 20	1104	303	25	715
Lubricator	J. Rudolpb	282,781	Aug. 7	367	104	24	565
Lubricator	F. S. Somes and S. H. Kimball	282,127	July 31	2277	625	24	418
Lubricator	R. Stevens and W. I. Mann	283,361	Aug. 14	1079	303	24	701
Lubricator	A. W. Swift	272,793	Feb. 20	1524	429	23	722
Lubricator	A. W. Swift	283,931	Aug. 28	1767	499	24	844
Lubricator	A. W. Swift	284,340	Sept. 4	220	62	24	942
Lubricator	J. Walker, Jr.	289,477	Dec. 4	127	36	25	909
Lubricator	J. Yule	287,988	Nov. 6	256	73	25	552
Lubricator	H. Zweifel	290,382	Dec. 18	1256	352	25	1124
Lumber. Apparatus for drying and seasoning	J. O. Smith. (Reissue)	10,393	Oct. 16	1523	419	25	288
Lumber-drier	W. S. Bates	280,440	July 3	130	34, 35	24	24
Lumber-drier	J. J. Curran	274,282	Mar. 20	1333	368	23	1079
Lumber-drier	D. P. Noyes	286,552	Oct. 9	961	259	25	185
Lumber-drier	J. O. Smith	286,234	Oct. 9	551	151	25	111
Lumber. Drying and seasoning	J. F. Walter, Jr.	287,351	Oct. 23	1988		25	380
Lumber drying and seasoning apparatus	J. O. Smith	270,138	Jan. 2	367	106	23	75
Lumber-edging machine	H. R. Barnhurst	272,190	Feb. 13	749	207	23	581
Lumber. Elevating-machine for cross-piling	S. Lee and R. Weir	285,073	Nov. 6	350	98	25	567
Lumber for walls	J. E. Brong and E. A. Carter	285,218	Sept. 18	1302	367	24	1142
Lumber-jointing device	C. A. Williams	289,948	Dec. 11	713	{ 201 202 }	25	1018
Lumber. Treating	E. J. Story	276,499	Apr. 24	2089	580	23	1608
Lumber-trimming machine	W. B. Swartwout	279,040	June 5	523	143	23	2212
Lunch-box	W. Felstead	277,251	May 8	925	248	23	1791
Lunch-box	J. R. Olinger	279,602	June 19	1308	364	23	2361
Lunch-case	D. H. Mathias	271,724	Feb. 6	163	45	23	469
Machine-table	M. Dainard	284,391	Sept. 4	285	79, 80	24	952
Machine-table	W. H. Doane and G. W. Bugbee	272,220	Feb. 13	786	{ 218 219 }	23	588
Machine-wrench	J. Davis	289,396	Dec. 4	28	9	25	892

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Machinery. Repe-driving	W. A. Roebling	270,129	Jan. 2	354	103	23	72
Magnetic plaster	C. S. Russell	272,904	Feb. 27	1690	473	23	757
Magnetic separator	J. La Breche Viger	273,976	June 5	441	120	23	2198
Magneto and dynamo electric machine	A. I. Gravier	276,390	Apr. 24	1958	542 543	23	1585
Magneto call	H. Than	290,495	Dec. 18	1417	392	25	1152
Magneto-electric generator	M. S. Conly	285,799	Oct. 2	21	7	25	6
Magneto-electric generator	C. C. Peck and W. H. Chapman	276,274	Apr. 24	1797	500 501	23	1559
Magneto-electric generators. Automatic shunt for	E. T. Gilliland	272,234	Feb. 13	806	224	23	592
Magneto-electric generators. Break-key attachment for	J. S. Ross	290,709	Dec. 25	1707	470	25	1209
Magneto-electric machine	C. M. Ball	290,199	Dec. 18	1021	288	25	1083
Magneto-electric machine	J. S. Beeman	288,915	Nov. 20	1411	389	25	770
Magneto-electric machine	S. Marcus	275,237	Apr. 3	454	126	23	1304
Magneto-electric machine	A. Millar	270,457	Jan. 9	766	225	23	159
Magneto-electric machine	P. P. Nungesser	287,773	Oct. 30	2552	686 687 340	25	494
Magneto-electric machine	H. M. Paine	290,350	Dec. 18	1214	341 342	25	1117
Magneto-electric machine	C. A. Seeley	277,069	May 8	709	184	23	1753
Magneto-electric machines. Armature for	E. T. Gilliland	270,945	Jan. 23	1385	400	23	288
Magneto-electric signaling apparatus	T. A. Edison	273,714	Mar. 13	607	163	23	945
Magneto-electric signaling apparatus	T. A. Edison	282,287	July 31	2463	679	24	450
Magneto-generator of electricity	J. P. Stabler	286,497	Oct. 9	892	241	25	172
Mail-bag	D. Bloom	282,152	July 31	2303	632	24	422
Mail-bag	I. H. Northrup	272,577	Feb. 20	1256	350	23	674
Mail-bag	W. A. Williams	280,429	July 3	114	30	24	22
Mail-bag catcher	J. A. Kellogg	286,932	Oct. 16	1448	398	25	275
Mail-bag catcher	J. L. Oliver	273,381	Mar. 6	187	51	23	866
Mail-bag catcher and deliverer	E. W. Thompson and A. M. Moore	271,543	Jan. 30	2136	614	23	424
Mail-bag fastening	T. H. Smith	285,518	Sept. 25	1660	467	24	1212
Mail-bag fastening	D. W. Snyder	286,339	Oct. 9	712	190	25	139
Mail-conveyor. Electric	E. Nicolaisen	271,904	Feb. 6	385	106	23	508
Mail-elevator. Automatic	J. W. Paine	276,707	May 1	221	57	23	1662
Mail-pouches. Hinged mouth-piece for	T. M. Cardwell and N. B. Perry	280,572	July 3	281	77	24	51
Mailing-packet	C. H. Leonard	281,892	July 24	1967	538	24	361
Mains and pipes for the distribution of gas, &c. System of	H. C. Rew	290,925	Dec. 25	1972	544	25	1255
Mallet	S. G. Howe	276,247	Apr. 24	1765	491	23	1553
Mallet. Electric	J. R. Finney	270,187	Jan. 2	422	122	23	86
Mallet. Stone-cutter's	D. Lewers	280,050	June 26	1780	499	23	2449
Malt, &c. Apparatus for drying and roasting	L. Mautner	275,097	Apr. 3	286	78, 79	23	1275
Malt. Apparatus for making	D. D. Weschler	270,619	Jan. 16	977	282	23	208
Malt-drying apparatus	J. W. Brown	277,876	May 22	1670	456	23	1933
Malt extract. Manufacture of	J. W. Forbes	288,702	Nov. 20	1152	.....	25	722
Malt-kiln	H. Altenbrand	271,164	Jan. 23	1681	485	23	336
Malt-kiln	G. and P. Renner and G. H. Knight	283,723	Aug. 21	1510	426 427	24	787
Malt-kiln. Continuous	J. Ulrich	271,551	Jan. 30	2145	617 618	23	426
Malt-kiln floor	P. Weinig	281,326	July 17	1235	342	24	231
Malting apparatus	C. G. Bosch	277,107	May 8	753	198	23	1760
Malting apparatus	W. F. Howe	272,257	Feb. 13	833	232 233	23	597
Malting grain. Process of and apparatus for	H. Kropff	283,494	Aug. 21	1245	349	24	736
Maltsters' steep-tanks. Discharge-valve for	F. W. Wolf	282,477	July 31	2715	747 748	24	493
Mandrel for bending tubes	E. S. Leaycraft	279,573	June 19	1206	333	23	2342
Manger. Folding	L. Birdleough	288,917	Nov. 20	1412	389	25	770
Mangle	A. T. Abbott	289,054	Nov. 27	1588	439	25	807
Mantel, ceiling, &c. Ornamental	J. McCully	280,492	July 3	196	52	24	36
Mantua-making	M. B. Ross	273,160	Feb. 27	1997	561 562	23	811
Mannal power	J. Bates	278,306	May 29	2227	611	23	2037
Manure-distributor	V. M. Snow	287,735	Oct. 30	2496	672 673	25	484
Manure-drill	H. T. King	281,191	July 10	1055	291	24	193
Manure-fork, &c. Wheel-mounted	G. H. Hewland	285,486	Sept. 25	1622	455	24	1205
Manure-spreader	E. C. Strange	285,086	Sept. 18	1146	320	24	1114
Map and chart case	H. E. Moon	276,267	Apr. 24	1788	497	23	1557
Map-case	H. R. Fry	273,059	Feb. 27	1866	524	23	788
Map. Educational	W. R. Norris	279,268	June 12	813	225	23	2272
Map-holder	C. Marlin	279,961	June 26	1667	468	23	2429
Marble and rendering the same fire-proof and water-proof. Producing artificial	R. Gueltlen	290,417	Dec. 18	1299	.....	25	1132
Marble-playing board	E. W. A. Meyer	284,880	Sept. 11	884	248	24	1062
Marble surfaces. Composition for cleaning	R. F. Dickson	290,754	Dec. 25	1768	.....	25	1320
Marker. Check-row	J. Heald	282,888	Aug. 7	495	139	24	588
Marker. Ground	J. S. Lake	284,439	Sept. 4	341	94	24	961
Marker. Land	L. Gairaud	287,118	Oct. 23	1696	464	25	327
Marker. Land	J. J. Melville	270,823	Jan. 16	1232	356	23	256
Marking boots, shoes, and other articles. Device for	F. Venn	284,149	Aug. 28	2063	572	24	894
Martingale-ring of celluloid, &c.	D. C. Lockwood	276,435	Apr. 24	2010	557	23	1595
Mash for fermentation. Apparatus for preparing	H. F. Moore	275,247	Apr. 3	463	129	23	1306
Mash heating and cooling device	C. Dodswoth and P. Burke	271,692	Feb. 6	127	35	23	462
Mash. Making and cooling	T. Hayes	288,333	Nov. 13	681	187	25	634
Mash-tun. Compound	C. Pfeiffer	280,396	July 3	68	19	24	15
Mash-fastener	C. H. Dessart	282,285	July 31	2461	678	24	450
Mash for base-ball catchers	A. K. Schaap	287,331	Oct. 23	1963	536	25	375
Mask. Wire	H. C. Lee	287,137	Oct. 23	1715	470	25	332
Mast and spar	E. S. Hicks	273,529	Mar. 6	369	98	23	897
Mast-shield	J. A. Avery	288,153	Nov. 6	442	124	25	585



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Masts. Device for unshipping.	J. F. Walthour	282,592	Aug. 7	144	43	24	596
Mat:							
See Cuspidor-mat.	Oil-press mat.						
Floor-mat.	Oil-press hair mat.						
Oil-mat.	Slop-jar mat.						
Mat	R. Martinez	283,501	Aug. 21	1254	352	24	738
Mat	R. Martinez	284,457	Sept. 4	362	100	24	965
Mat	R. Martinez	284,567	Sept. 4	498	140	24	988
Mat-lock	J. J. King	274,788	Mar. 27	1985	552	23	1200
Mat or removable floor-covering	R. Martinez	281,540	July 17	1499	412	24	276
Match	R. Platz	275,074	Apr. 3	254	70	23	1269
Match and box therefor	G. L. Jaeger	280,181	June 26	1918	539	23	2474
Match and tooth-pick box. Combined	L. B. Wilson	271,011	Jan. 23	1469	422	23	301
Match-box	W. S. Beecher	284,596	Sept. 11	536	151	24	1001
Match-box	J. Darling and J. J. Long	283,579	Aug. 21	1342	374	24	755
Match-box	H. E. Hutchinson	278,555	May 29	2536	692	23	2092
Match-box	G. L. Jaeger	270,073	Jan. 2	287	85	23	58
Match-box	G. L. Jaeger	281,075	July 10	908	253	24	168
Match-box	T. Remus	283,143	Aug. 14	795	222	24	648
Match-box	R. Wallace	274,864	Mar. 27	2077	577	23	1215
Match-boxes. Machine for making	E. B. Beecher and R. T. Elliott	281,958	July 24	2040	558 560	24	374
Match-card	C. B. Gardiner	280,810	July 10	590	165	24	111
Match-cards. Machine for sawing	G. Flewelling and G. J. Harris	272,675	Feb. 20	1376	386 387	23	696
Match-dipping apparatus	G. H. Millen, J. H. Mantion, F. Labelle, and T. A. Cook	280,650	July 3	374	104	24	66
Match-dipping machine	T. A. Cook and F. Labelle	277,462	May 15	1178	316	23	1842
Match. Friction	F. Gerken	285,010	Sept. 25	1772	502	24	1233
Match-holder	R. V. Jones	271,580	Jan. 30	2178	627	23	432
Match-igniter	J. Pusey	271,737	Feb. 6	180	49	23	471
Match-lighter and cigar-cutter. Combined	T. W. Rickel	281,298	July 17	1198	331	24	225
Match-machine	P. Beer	272,113	Feb. 13	666	181	23	567
Match-machine	C. J. Donnelly	270,403	Jan. 9	697	206	23	146
Match-making machine	C. B. Gardiner	270,783	Jan. 16	1187	342	23	247
Match-making machine	G. L. Jaeger	273,848	Mar. 13	786	213 214	23	977
Match-making machine	G. L. Jaeger	273,849	Mar. 13	789	214	23	978
Match-receptacle	F. H. Johnson	282,731	Aug. 7	316	90	24	555
Match-safe	T. B. Brown	280,500	Dec. 4	164	44	25	915
Match-safe	H. S. Cochran	282,272	July 31	2451	674	24	448
Match-safe	F. H. Waite	280,190	Nov. 27	1749	486	25	837
Match-safe. Wall	A. T. Gillender	274,310	Mar. 20	1371	376	23	1085
Match-sawing machine	G. Flewelling and G. J. Harris	290,560	Dec. 18	1506	415	25	1167
Match-splint-adjusting machine	B. T. Steber	281,206	July 10	1077	296	24	197
Match-splint machine	G. H. Millen	281,778	July 24	1820	497	24	335
Match-splint machine	B. T. Steber	273,908	Mar. 13	859	233 234	23	989
Match-splint separator and gatherer	B. T. Steber	271,376	Jan. 30	1924	556	23	387
Match-splints for dipping. Apparatus for filling	M. Young	271,563	Jan. 30	2159	621 622 623	23	429
Match-splints. Machine for making	H. A. Steber	290,492	Dec. 18	1412	390	25	1151
Match-sticks. Machine for bunching	W. H. H. Sisum	281,408	July 17	1335	369 370	24	248
Match-sticks. Machine for bunching	W. H. H. Sisum	288,506	Nov. 13	909	248 249	25	673
Matches. Frame for dipping	G. H. Millen	281,777	July 24	1819	496	24	335
Matches from the dipping-frame, &c. Machine for transferring	G. H. Millen	281,776	July 24	1818	496	24	335
Matches. Machinery for the manufacture of	J. H. Mitchell	284,650	Sept. 11	599	169 170	24	1012
Matches. Manufacture of	H. Endemann	275,617	Apr. 10	987	.....	23	1403
Matches. Manufacture of	G. L. Jaeger	282,326	July 31	2525	692	24	460
Matches. Manufacture of friction	J. H. Mitchell	284,651	Sept. 11	602	.....	24	1012
Matrix-drying press	W. J. Johnson	271,858	Feb. 6	332	91	23	499
Mattress	L. Heath	274,495	Mar. 27	1635	454	23	1138
Mattress	M. E. Smith	278,055	May 22	1880	514	23	1969
Mattress. Electric galvanic	R. Stilwell	285,852	Oct. 2	88	26	25	18
Mattress. Folding spring	P. J. Olander	274,963	Apr. 3	105	29	23	1243
Mattress-frame	C. H. Hard	288,431	Nov. 13	815	821	25	658
Mattress-frame	W. S. Thatcher	286,866	Oct. 16	1367	374	25	262
Mattress-frames. Apparatus for stretching woven-wire fabrics upon	H. Roberts	274,142	Mar. 20	1153	318	23	1047
Mattress or bed-bottom	F. A. Palmer	282,561	Aug. 7	107	32	24	519
Mattress-spread. Electric	R. Stilwell	285,854	Oct. 2	90	27	25	18
Mattress. Spring	G. F. Hiams	270,793	Jan. 16	1202	347	23	251
Mattress-stuffing. Manufacture of	F. Hagedorn	289,409	Dec. 4	43	.....	25	894
Mattress. Wire	S. B. Gleason	274,312	Mar. 20	1372	376	23	1085
Maul-stick	G. F. Parker	282,700	Dec. 4	421	118	25	959
Meal or flour and process of making the same. Compound	J. and M. Masters	286,033	Oct. 2	315	.....	25	58
Measure	W. A. Carpenter	289,974	Dec. 11	748	211	25	1025
Measure. Ale-cooling	T. W. Sheridan	286,967	Oct. 16	1495	411	25	284
Measure and funnel. Combined	J. P. Schüssler, Jr., and H. C. Kersten	285,168	Sept. 18	1248	350	24	1132
Measure and funnel. Sirup	J. J. Van Kersen	272,924	Feb. 27	1710	478	23	761
Measure and scale. Combined	A. B. Upham	290,945	Dec. 25	2004	552	25	1360
Measure and weigher combined	F. Schneider	281,567	July 17	1529	419	24	280
Measure. Automatic grain	W. R. Dunkel	282,063	July 31	2174	597	24	402
Measure. Automatic grain	J. L. Mayer and J. Sutter	274,626	Mar. 27	1793	498	23	1165
Measure. Dress-maker's	F. E. Biddington	272,304	Feb. 13	768	213	23	585
Measure. Dress-maker's	D. C. Hamilton	276,032	Apr. 17	1500	413	23	1499

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Drig.	Vol.	Page.
Measure. Fluid.....	M. Wolf.....	276,652	May 1	132	35	23	1649
Measure for furs and other materials. Automatic.....	N. J. Bishoprick.....	273,340	Mar. 6	129	36,37	23	855
Measure for grain-spouts.....	W. T. Bell.....	280,120	June 26	1854	523	23	2463
Measure. Liquid.....	H. C. Armstrong.....	269,909	Jan. 2	102	30	23	22
Measure. Lumber.....	E. N. Barber.....	287,995	Nov. 6	263	75	25	553
Measure. Molasses.....	W. E. Barcus.....	274,698	Mar. 27	1880	524	23	1181
Measure of length. Graduated.....	S. Darling.....	289,512	Dec. 4	178	49	25	917
Measure. Powder and shot.....	J. E. Langdon.....	289,111	Nov. 27	1652	458	25	819
Measure. Tailor's.....	H. Brolly.....	277,453	May 15	1166	{ 313 314 }	23	1840
Measure. Tailor's.....	S. C. Rugland.....	282,670	Aug. 7	234	68	24	540
Measure. Vinegar.....	J. A. Knight.....	288,946	Nov. 20	1448	399	25	776
Measured lengths. Machine for cutting fabrics in.....	G. Hoyer.....	280,179	June 26	1914	538	23	2473
Measurements on fabrics. Machine for marking linear.....	D. J. Bushorr.....	279,078	June 5	570	157	23	2321
Measurements upon fabrics. Machine for marking linear.....	B. Tatham.....	273,189	Feb. 27	2025	570	23	817
Measuring and cutting out garments. Apparatus for.....	W. Abrahamart.....	272,611	Feb. 20	1297	361	23	681
Measuring and fitting dresses. Device for.....	J. Monjou.....	283,638	Aug. 21	1402	393	24	766
Measuring and recording electric currents. Apparatus for.....	J. Hopkinson.....	277,731	May 15	1488	{ 403 404 }	23	1894
Measuring and weighing grain. Apparatus for.....	F. C. Mason.....	272,729	Feb. 20	1443	405	23	708
Measuring apparatus. Electrical.....	C. S. Bradley.....	280,563	July 3	271	74	24	49
Measuring bagging and other fabrics. Machine for.....	J. C. Williams.....	280,547	July 3	253	68	24	45
Measuring device. Cream.....	W. W. Scott and S. A. Emerson.....	284,493	Sept. 4	404	213	24	972
Measuring device for shot-pouches, powder-flasks, &c.....	H. T. Hazard.....	276,690	May 1	200	51	23	1658
Measuring device for tailors, &c.....	N. Lennards.....	281,530	July 17	1489	409	24	274
Measuring electric currents. Apparatus for.....	S. Z. De Ferranti and A. Thompson.....	282,447	July 31	2684	736	24	488
Measuring electric currents. Apparatus for.....	S. L. Fox.....	279,371	June 12	959	266	23	2295
Measuring fluids. Apparatus for.....	C. H. Bacon.....	289,058	Nov. 27	1591	440	25	898
Measuring ice-cream. Vessel for.....	H. B. Taddicken.....	283,165	Aug. 14	832	230	24	653
Measuring machine. Cloth.....	H. J. Barrows.....	289,602	Dec. 4	287	80, 81	25	938
Measuring machine. Cloth.....	C. C. and J. R. Henderson.....	274,768	Mar. 27	1961	545	23	1196
Measuring machine. Cloth.....	S. B. Luckett.....	271,879	Feb. 6	352	98	23	502
Measuring machine. Cloth.....	F. Sanderson.....	272,483	Feb. 20	1133	318	23	653
Measuring machine. Cloth.....	C. B. Shaw.....	276,722	May 1	248	63	23	1667
Measuring machine. Cloth.....	A. Winter.....	270,870	Jan. 16	1284	370	23	265
Measuring machine. Skin.....	C. G. Winter.....	281,745	July 24	1771	492	24	326
Measuring-tank.....	E. A. Smead.....	279,030	June 5	511	139	23	2210
Measuring the area of surfaces. Machine for.....	W. A. Sawyer.....	269,962	Jan. 2	167	48	23	35
Measuring the areas of surfaces. Machine for.....	W. A. Sawyer.....	286,078	Oct. 2	368	102	25	67
Measuring the current energy received by a secondary battery. Apparatus for.....	C. F. Brush.....	281,176	July 10	1034	{ 287 288 }	24	190
Measuring the density of liquids. Apparatus for.....	N. Borodoulin.....	288,402	Nov. 13	783	211	25	651
Measuring-vessels. Apparatus for cutting the scales on glass.....	R. M. Atwater.....	273,795	Mar. 13	721	196	23	966
Measuring-vessels. Apparatus for determining the scale of glass.....	R. M. Atwater.....	278,845	June 5	234	69	23	2163
Meat-chopper.....	C. Schmidt.....	271,135	Jan. 23	1612	464	23	325
Meat-cutter.....	W. G. Bell.....	273,220	Feb. 27	2071	522	23	824
Meat-cutter.....	A. Metz.....	281,545	July 17	1504	413	24	277
Meat-cutting machine.....	W. G. Bell.....	287,360	Oct. 23	1998	{ 544 545 }	25	381
Meat-cutting machine.....	F. Lindner.....	270,319	Jan. 9	580	{ 170 171 }	23	123
Meat-cutting machine.....	J. Winnen and A. Heusch.....	289,051	Nov. 27	1583	{ 437 438 }	25	807
Meat extract.....	J. Robertson.....	283,147	Aug. 14	801	.....	24	649
Meat. Preparation of extracts of.....	F. S. Barfi and A. P. Wire.....	273,800	Mar. 13	727	.....	23	967
Meat. Preserving.....	M. Closset.....	275,148	Apr. 3	350	96	23	1287
Meat-tenderer.....	J. G. Perry, Jr.....	274,372	Mar. 20	1453	398	23	1099
Meat-tenderer.....	G. W. Ramsey.....	282,566	Aug. 7	112	34	24	519
Meats. Preserving.....	W. C. Marshall.....	270,069	Jan. 2	302	.....	23	63
Meats. Preserving.....	G. W. Scollay.....	284,242	Sept. 4	112	.....	24	923
Mechanical motion.....	D. Mills.....	286,215	Oct. 9	532	146	25	108
Mechanical motor.....	R. M. Odell and D. L. McKittrick, Sr.....	270,688	Jan. 16	1070	{ 306 307 }	23	224
Mechanical movement.....	W. M. Ammerman.....	290,383	Dec. 18	1257	353	25	1124
Mechanical movement.....	E. Anderson.....	271,295	Jan. 30	1814	526	23	367
Mechanical movement.....	A. Beck and G. Creter.....	289,881	Dec. 11	637	177	25	1004
Mechanical movement.....	W. H. Behrens.....	287,408	Oct. 30	2063	561	25	400
Mechanical movement.....	C. A. Bentzen.....	271,594	Feb. 6	12	3	23	442
Mechanical movement.....	J. P. Birch.....	273,015	Feb. 27	1815	508	23	779
Mechanical movement.....	A. Boecher.....	272,200	Feb. 13	763	211	23	584
Mechanical movement.....	W. E. Burk.....	277,988	May 22	1803	492	23	1955
Mechanical movement.....	W. V. Campen.....	284,816	Sept. 11	811	226	24	1048
Mechanical movement.....	J. Cochran, Jr.....	281,976	July 24	2064	566	24	378
Mechanical movement.....	J. B. Crocker.....	282,962	Aug. 14	577	163	24	610
Mechanical movement.....	G. Crompton.....	274,914	Apr. 3	32	9	23	1231
Mechanical movement.....	G. Crompton and H. Wyman.....	281,842	July 24	1899	518	24	350
Mechanical movement.....	F. H. Dexter.....	273,040	Feb. 27	1848	517	23	785
Mechanical movement.....	A. Fahrney.....	290,220	Dec. 18	1052	296	25	1089
Mechanical movement.....	G. S. Follensbee.....	233,591	Aug. 21	1354	378	24	757
Mechanical movement.....	W. G. Gass and W. A. Galashan.....	273,509	Mar. 6	337	91	23	892
Mechanical movement.....	F. W. Goodyear.....	289,645	Dec. 4	340	96	25	947
Mechanical movement.....	H. W. Hadley and W. L. Grout.....	277,025	May 8	647	168	23	1742
Mechanical movement.....	M. Hallheimer.....	279,941	June 26	1644	461	23	2425
Mechanical movement.....	C. Hammelmann.....	282,076	July 31	2192	602	24	406
Mechanical movement.....	D. B. Hartley.....	278,011	May 22	1833	500	23	1960
Mechanical movement.....	W. S. How.....	275,657	Apr. 10	1035	280	23	1411
Mechanical movement.....	P. F. Jonte.....	281,078	July 10	911	254	24	168
Mechanical movement.....	R. Larter.....	279,571	June 19	1203	333	23	2342
Mechanical movement.....	B. B. Lewis.....	271,481	Jan. 30	2064	504	23	412
Mechanical movement.....	T. A. Macaulay.....	278,806	June 5	173	51	23	2152
Mechanical movement.....	H. E. Marchand.....	290,901	Dec. 25	1945	536	25	1250



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Mechanical movement	G. A. Metcalf and N. Hicks	276,264	Apr. 24	1786	496	23	1556
Mechanical movement	C. Monson	273,876	Mar. 13	827	224	23	983
Mechanical movement	D. E. Myers	280,757	July 3	515	145	24	91
Mechanical movement	J. H. Palmer	290,796	Dec. 25	1818	502	25	1228
Mechanical movement	W. R. Park	277,849	May 15	1629	444	23	1920
Mechanical movement	H. F. Parsons and H. Borchardt	281,720	July 24	1744	473	24	321
Mechanical movement	G. R. Peare	272,760	Feb. 20	1460	416 417	23	714
Mechanical movement	W. M. Phelps	287,574	Oct. 30	2273	616	25	442
Mechanical movement	J. S. Sackett	279,441	June 12	1045	289	23	2309
Mechanical movement	J. S. Sackett	284,491	Sept. 4	402	113	24	972
Mechanical movement	L. Schultze	288,497	Nov. 13	899	245	25	672
Mechanical movement	L. Skinner	288,130	Nov. 6	418	118	25	581
Mechanical movement	O. F. Stedman	281,939	July 24	2019	553	24	371
Mechanical movement	T. Taylor	285,178	Sept. 18	1261	354	24	1134
Mechanical movement	N. A. Veline	290,372	Dec. 18	1240	349	25	1122
Mechanical movement	A. G. Waterhouse	277,964	May 2	1770	482 483	23	1949
Mechanical movement	F. M. Waters	271,556	Jan. 30	2151	619	23	427
Mechanical movement	M. H. Webber	279,058	June 5	548	151	23	2217
Mechanical movement	O. C. White	279,897	June 19	1578	442	23	2408
Mechanical movement	J. T. Wickersham	278,644	May 29	2649	724	23	2111
Mechanical movement	H. Wyman	275,008	Apr. 3	163	44	23	1254
Mechanical movement	H. Wyman	275,109	Apr. 3	299	82	23	1278
Mechanical movement	H. Wyman	283,364	Aug. 14	1082	304	24	701
Mechanical movement	H. Wyman	283,451	Aug. 21	1191	334 335	24	727
Mechanical-movement device	I. W. Hucksins	277,733	May 15	1492	405	23	1694
Mechanical movement. Reciprocating	J. C. Chapman	275,144	Apr. 3	346	95	23	1286
Mechanical power	J. M. Davis and D. H. Brown	280,357	July 3	23	6	24	6
Mechanical power	W. J. Perrin	281,130	July 10	977	273	24	179
Mechanical power	B. R. Trull	278,376	May 29	2322	635	23	2054
Medical appliance. Electro-	J. W. Dennis	285,977	Oct. 2	247	70	25	47
Medical treatment of the male urinary organs. De- vice for	H. E. Finney	281,043	July 10	867	241	24	160
Medical compound	J. C. Blackman	276,153	Apr. 24	1654	.....	23	1534
Medical compound	H. C. F. Meyer	271,694	Feb. 6	370	.....	23	506
Medical compound	J. Michells	274,014	Mar. 13	986	.....	23	1011
Medical compound for horses, &c.	R. Dorn	275,472	Apr. 10	803	.....	23	1371
Medicated effervescent salts	C. B. Shafer	287,781	Oct. 30	2562	.....	25	496
Medicated vapors. Apparatus for administering	M. Goldberg	279,091	June 5	588	160	23	2224
Medicinal compound	H. S. Bright	275,352	Apr. 10	636	.....	23	1343
Medicinal compound	E. H. Lawrence	276,835	May 1	390	.....	23	1694
Medicine for dyspepsia	J. M. Jacobs	282,898	Aug. 7	506	.....	24	590
Medicine for scrofula	C. Atkins	280,281	June 26	2044	.....	23	2496
Medicine. Veterinary	F. F. Green	288,630	Nov. 20	1062	.....	25	708
Medicine. Veterinary	W. Huffman	279,166	June 12	703	.....	23	2253
Medicine. Veterinary	T. L. Miller	287,701	Oct. 30	2452	.....	25	476
Meeting-rails. Machine for shaping	G. W. Steele	283,678	Aug. 21	1453	408 409 410	24	777
Melons. Apparatus for packing and transporting	W. Davis	287,106	Oct. 23	1682	461	25	325
Melons. Packing and transporting	W. Davis	289,993	Dec. 11	775	218	25	1030
Memorandum or sales slip. Duplicate.	J. H. Frink	288,048	Nov. 6	325	91	25	563
Memorandum-pointer	A. J. Young	282,829	Aug. 7	421	119	24	575
Mercury-seal trap	A. Edwards	280,155	June 26	1893	533	23	2470
Merry-go-round	T. G. Clifford	288,018	Nov. 6	294	82	25	557
Metal bands. Method of and mechanism for straight- ening	E. H. Hill	290,231	Dec. 18	1064	298	25	1091
Metal-bending machine	T. R. Freeman	288,936	Nov. 20	1434	394	25	774
Metal boxes. Machine for manufacturing	C. Dauché and P. Deniaud	281,980	July 24	2068	567	24	379
Metal by the Bessemer process. Dephosphorizing	J. Reese	278,738	June 5	79	.....	23	2137
Metal. Chill for chilling	W. Tuttle	272,497	Feb. 20	1153	324	23	656
Metal-crimping tool	R. Whitaker	287,784	Oct. 30	2565	690	25	497
Metal-cutting and punching machine	J. E. L. Bradeen	283,198	Aug. 14	868	242	24	661
Metal-grooving tool	A. G. Brust	288,159	Nov. 6	451	126	25	586
Metal. Manufacture of.	G. H. Chinnock	286,904	Oct. 16	1417	.....	25	270
Metal. Manufacture of Bessemer	W. R. Jones	287,687	Oct. 30	2429	.....	25	472
Metal-melting furnace	G. M. Bryant	282,265	July 31	2442	672	24	446
Metal-pipe-bending machine	R. Reach	280,662	July 10	651	184	24	121
Metal pipe. Machine for making spirally-jointed	J. B. Root	280,403	July 3	78	21	24	17
Metal plates, &c. Apparatus for pickling and swill- ing	R. J. Hutchings	282,083	July 31	2200	604 605 606	24	407
Metal plates, &c. Apparatus for pickling and swill- ing	R. J. Hutchings	282,084	July 31	2204	606 607 608	24	407
Metal plates. Dishing	H. C. Jones	270,077	Jan. 2	291	86	23	59
Metal. Producing Babbitt	A. C. Mann	285,638	Sept. 25	1866	.....	24	1240
Metal rods. Reheating and reducing	H. H. Andrew	276,743	May 1	277	70	23	1672
Metal. Removing surplus material from articles coated with melted	H. A. Young	287,076	Oct. 23	1643	451	25	317
Metal sharpening and grinding composition	A. W. Sperry	290,368	Dec. 18	1236	.....	25	1121
Metal-shearing machine	A. W. C. Arnold and C. Morrill	279,314	June 12	867	242	23	2281
Metal-sheet gage	H. and H. B. Chess	289,503	Dec. 4	166	45	25	915
Metal-slotting machines. Work-holding device for	C. Huke	281,272	July 17	1166	322	24	219
Metal-straightening machine	U. Haskin	273,682	Mar. 6	570	151	23	931
Metal surfaces. Machine for ornamenting	E. Horton	278,139	May 22	1967	546	23	1987
Metal surfaces. Machine for ornamenting	J. H. Rossiter	282,377	July 31	2586	710	24	471
Metal surfaces. Ornamenting	E. Horton	278,552	May 29	2534	691	23	2091
Metal-tube former	H. E. Lea	275,504	Apr. 10	837	227	23	1377
Metal tubes. Making	E. K. Coas	285,576	Sept. 25	1727	488	24	1225
Metal tubes. Making	G. H. Fox	285,025	Sept. 18	1076	300 301	24	1103
Metal. Upsetting	W. and G. H. Sellers	276,291	Apr. 24	1818	507	23	1562
Metal-working machine. Compound	G. McDonald	288,827	Nov. 20	1306	358	25	750

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Drig.	Vol.	Page.
Metal-working plant.....	A. Cooper.....	274,911	Apr. 3	22	7	23	1230
Metals and apparatus therefor. Process of redncng and smelting.....	J. T. Morgan, H. F. Hayden, and J. H. Morgan.....	290,343	Dec. 18	1206	338	25	1115
Metals. Composition or alloy of.....	J. Webster.....	274,537	Mar. 27	1689		23	1147
Metals. Extracting.....	A. Drouin.....	290,548	Dec. 18	1490		25	1164
Metals. Extracting.....	I. L. Roberts.....	284,063	Aug. 28	1948	544	24	875
Metals from their ores. Process of and apparatus for extracting.....	A. Thiollier.....	272,391	Feb. 13	1008	283	23	626
Metals from their ores. Reducing.....	J. Clark.....	277,884	May 22	1677	458	23	1934
Metals from their ores. Reducing.....	J. Clark.....	277,885	May 22	1678	458	23	1934
Metals. Machine for shaping, drilling, boring, and facing.....	E. F. D. Deboutteville.....	275,604	Apr. 10	960	261	23	1399
Metals. Ornamenting.....	H. Baner.....	289,956	Dec. 11	723		25	1020
Metals. Recovering.....	J. Miller.....	290,458	Dec. 18	1367	378	25	1143
Metallic clamp.....	W. H. Reed.....	269,882	Jan. 2	68	21	23	16
Metallic clasp.....	M. A. Reidy.....	288,118	Nov. 6	406	114	25	578
Metallic fastener.....	H. Harris.....	285,260	Sept. 18	1353	381	24	1152
Metallic fastening.....	F. A. Smith, Jr.....	269,891	Jan. 2	83	25	23	18
Metallic particles. Apparatus for collecting and saving.....	J. Miller.....	290,258	Dec. 18	1093	305	25	1096
Metallic particles from water. Recovering.....	J. Miller.....	288,838	Nov. 20	1317	361	25	752
Metallic pipe. Machine for making spiral-jointed.....	J. B. Root.....	271,740	Feb. 6	183	50, 51	23	472
Metallic pipes. Machine for finishing.....	W. Collins.....	273,258	Mar. 6	18	6	23	837
Metallic rake and rake-blank.....	J. M. Young.....	277,529	May 15	1257	338	23	1854
Metallic surfaces. Applying impervious coatings to.....	W. F. Peek.....	273,384	Mar. 6	192	51	23	867
Metallic surfaces. Composition for coating.....	C. F. Reststock.....	280,864	July 10	654		24	122
Metallic wrapper.....	T. E. Allen.....	290,831	Dec. 25	1862	514	25	1236
Metallurgic furnace.....	L. D. and L. C. Chapin.....	283,075	Aug. 14	716	201	24	635
Metallurgic furnace.....	S. P. Spooner.....	274,403	Mar. 20	1489	409	23	1106
Metallurgic furnace.....	E. D. Wassell.....	285,860	Oct. 2	101	29, 30	25	20
Metallurgic-furnace chill.....	J. Morrison.....	279,970	June 26	1676	471	23	2430
Metallurgic furnaces. Water-jacket for.....	C. E. Gore.....	283,098	Aug. 14	745	209	24	639
Metallurgical furnace.....	S. Bissell.....	286,110	Oct. 2	406	111	25	75
Metallurgical furnace and water-heater. Combined.....	A. Riegler.....	280,955	July 10	767	212	24	140
Metallurgical plant.....	R. Forsyth.....	276,384	Apr. 24	1950	539	23	1584
Meter:					540		
See Diaphragm-meter. Gas-meter.							
Electric meter. Grain-meter.							
Electrical meter. Rotary meter.							
Fluid-meter. Water-meter.							
Meter.....	R. Heinle.....	287,283	Oct. 23	1904	521	25	365
Metronome.....	E. B. Greene and C. J. Emerson, Jr.....	271,448	Jan. 30	2016	581	23	404
Micrometer.....	S. Darling.....	287,420	Oct. 30	2075	564	25	403
Micrometer-gage.....	G. W. Church.....	278,094	May 22	1926	528	23	1977
Micrometer-gage.....	S. Darling.....	289,513	Dec. 4	179	50	25	918
Micrometer indicating-gage.....	M. M. Barnes.....	271,401	Jan. 30	1954	565	23	393
Microscope.....	L. D. McIntosh.....	273,752	Mar. 13	661	177	23	955
Microscope.....	D. Tetlow.....	287,978	Nov. 6	237	68	25	549
Microscopes. Objective attachment in.....	W. H. Bulloch.....	287,904	Nov. 6	143	42	25	533
Microscopic illuminator.....	E. Bansch.....	277,869	May 22	1661	454	23	1931
Middlings-purifier.....	G. R. Cannefax.....	280,571	July 3	280	77	24	50
Middlings-purifier.....	J. Harvey.....	285,128	Sept. 18	1198	335	24	1123
Middlings-purifier.....	A. Hunter.....	278,142	May 22	1990	547	23	1988
Middlings-purifier.....	J. Kuhn-munch.....	288,068	Nov. 6	345	96	25	566
Middlings-purifier.....	T. H. Neander.....	288,844	Nov. 20	1325	363	25	753
Middlings-purifier.....	F. Prinz.....	272,475	Feb. 20	1121	316	23	651
Middlings-purifier.....	J. Russell.....	284,488	Sept. 4	398	111	24	971
Middlings-purifier.....	J. R. Smith.....	271,932	Feb. 6	1423	115	23	515
Middlings-purifier.....	J. T. Walter.....	290,504	Dec. 18	1429	396	25	1154
Middlings-purifier.....	C. Wehner.....	287,597	Oct. 30	2315	626	25	449
Middlings-purifier.....	J. W. Wilson.....	278,207	May 22	2074	571	23	2003
Milk and cream can.....	G. W. Evans.....	274,745	Mar. 27	1928	537	23	1190
Milk and cream gage.....	J. M. Burnett.....	273,947	Mar. 13	910	248	23	997
Milk and cream transporting can.....	J. G. Cherry.....	288,844	Aug. 7	443	125	24	578
Milk-can.....	O. M. Allaben.....	284,792	Sept. 11	787	219	24	1043
Milk-can.....	D. C. Cripe.....	276,780	May 1	326	85	23	1682
Milk-can.....	F. A. Hickson.....	280,820	July 10	601	168	24	113
Milk-can.....	D. Wilkie and G. A. Duggan.....	287,205	Oct. 23	1807	496	25	347
Milk-can cover.....	J. W. Lane.....	277,140	May 8	801	210	23	1769
Milk-can lock.....	C. Graff.....	284,412	Sept. 4	309	86	24	956
Milk-can top.....	G. Abbott, Jr.....	288,391	Nov. 13	768	207	25	648
Milk-can top.....	R. M. Rockey.....	277,613	May 15	1357	366	23	1870
Milk-cooler.....	I. S. Brandenburg.....	290,519	Dec. 18	1455	402	25	1158
Milk-cooler.....	J. S. Carter and I. C. Wightman.....	288,011	Nov. 6	284	80	25	556
Milk-cooler.....	J. Deline.....	280,359	July 3	24	7	24	6
Milk-cooler.....	J. W. Irish.....	276,590	May 1	60	17	23	1638
Milk-cooler.....	C. L. Kneeland.....	288,711	Nov. 20	1162	319	25	724
Milk-cooler.....	T. H. Mallory.....	290,900	Dec. 25	1944	536	25	1250
Milk-cooler.....	A. H. Reid.....	283,921	Aug. 28	1752	495	24	841
Milk-cooler.....	B. C. Richardson.....	286,331	Oct. 9	703	187	25	137
Milk-cooler.....	M. O. Roberts.....	273,764	Mar. 13	685	184	23	959
Milk-cooler.....	S. J. and N. T. Wilson.....	273,659	Mar. 6	534	143	23	925
Milk-cooler.....	D. B. Wooster.....	275,315	Apr. 3	552	150	23	1320
Milk-cooler.....	D. B. Wooster.....	285,773	Sept. 25	1985	562	24	1269
Milk cooler and heater.....	H. W. Weiss.....	280,695	July 3	428	121	24	76
Milk for the manufacture of butter and cheese. Apparatus for the treatment of.....	E. R. Powell.....	275,264	Apr. 3	485	135	23	1308
Milk for the manufacture of butter and cheese. Treatment of.....	E. R. Powell.....	275,263	Apr. 3	483	134	23	1308



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Milk. Making condensed.	J. W. Decastro	274,469	Mar. 27	1581	.....	23	1130
Milk or cream carrier.	W. M. Hauey	280,308	June 26	2081	586	23	2503
Milk-pan.	S. Kingsland	286,310	Oct. 9	671	179	25	132
Milk. Preserving.	E. Scherff.	277,352	May 8	1044	.....	23	1612
Milk-setting apparatus.	F. G. Butler. (Roissue)	10,357	July 17	1651	450	24	300
Milk-skimmer.	C. C. Kribs	282,093	July 31	2215	609	24	409
Milk-skimming apparatus.	J. Besley	285,958	Oct. 2	229	64	25	44
Milk-skimming device.	W. Colditz	272,655	Feb. 20	1354	380	23	692
Milk-vessels. Earthenware cover for.	A. W. Eddy	288,931	Nov. 20	1431	393	25	773
Milking cows. Apparatus for.	J. P. Martin	289,546	Dec. 4	217	61	25	924
Milking cows. Hand device for.	H. D. Thatcher and H. P. Barnhart.	282,683	Aug. 7	249	72	24	543
Mill:							
<i>See</i> Apple-mill.	Grinding and decorticat-						
Attrition-mill.	ing mill.						
Bark-mill.	Grist or flouring mill.						
Cane-mill.	Hominy-mill.						
Cider-mill.	Ore-pulverizing mill.						
Coffee-mill.	Roller-mill.						
Crushing-mill.	Roller grain-mill.						
Curd-mill.	Rolling-mill.						
Disintegrating-mill.	Saw-mill.						
Fanning-mill.	Shingle-planing mill.						
Fulling-mill.	Stamp-mill.						
Grain and seed clean-	Water-mill.						
ing mill.	Windmill.						
Grinding-mill.							
Mill-disk dress.	L. Gathmann	274,116	Mar. 20	1125	310	23	1042
Mill machinery. Drop-lift step for.	L. B. Kohnle and W. B. Hamilton	276,603	May 1	73	20	23	1640
Mill-roll feeder.	T. Reid	279,982	June 26	1689	474	23	2433
					64		
Mill-rollers. Device for grinding and grooving.	E. Rein	289,556	Dec. 4	231	65	25	927
					66		
Mill-stuff-recovering machine.	D. H. Lord	277,301	May 8	984	264	23	1802
Milling and apparatus used therein.	A. Mariotte	270,906	Jan. 23	1335	385	23	280
					386		
Milling links for engines. Machine for.	W. H. Denney	271,431	Jan. 30	1995	575	23	400
					576		
Milling-machine. Multiple.	W. Krutzsch	277,746	May 15	1504	408	23	1897
					409		
Milling-machine. Universal.	L. Cosgrove	282,704	Aug. 7	288	81	24	549
Milling-machines. Adjustable head for.	A. Schurch	283,668	Aug. 21	1437	402	24	774
Millstone.	J. J. Ethell	285,118	Sept. 18	1186	332	24	1121
Millstone bail and driver.	J. M. Replogle	271,270	Jan. 30	1780	517	23	361
Millstone-balance.	W. C. Hale	277,273	May 8	948	254	23	1796
Millstone-dress.	D. D. Brooks	284,535	Sept. 4	460	130	24	982
Millstone-dress.	J. C. Spindle	285,081	Sept. 18	1138	318	24	1113
Millstone-dress.	L. B. Woolever	291,010	Dec. 25	2096	578	25	1274
Millstone-dressing machine.	C. S. Hoover	271,849	Feb. 6	319	88	23	497
Millstone-dressing machine.	C. S. Hoover	278,335	May 29	2271	621	23	2045
Millstone-dressing machine.	J. T. Obenchain	282,760	Aug. 7	345	98	24	560
Millstone-dressing machine. Diamond.	T. C. Barnes	286,251	Oct. 9	579	159	25	116
Millstone-driver.	A. Callahan	271,034	Jan. 23	1491	430	23	305
Millstone-driver.	J. F. Callahan	271,572	Jan. 30	2170	625	23	430
Millstone-driver.	J. Dempster	277,688	May 15	1444	389	23	1886
Millstone-driver.	G. C. Gordon	283,597	Aug. 21	1360	380	24	758
Millstone-driver.	W. C. Hale	285,613	Sept. 25	1776	503	24	1234
Millstone-driver.	H. Heard	269,853	Jan. 2	42	13	23	10
Millstone-driver.	J. S. Park and J. W. Hackett	289,303	Nov. 27	1879	522	25	863
					523		
Millstone-driver.	P. Steinmetz	271,942	Feb. 6	432	118	23	516
Millstone-facing machine.	J. T. Obenchain	282,761	Aug. 7	347	98	24	561
Millstone paint-staff.	M. W. Leonhardt	273,555	Mar. 6	405	108	23	903
Millstone-pick.	W. C. McDonnell and A. L. Anderson.	280,647	July 3	371	103	24	65
Millstone-spindles. Bushing for.	J. A. McAllister	290,904	Dec. 25	1947	537	25	1251
Millstone-ventilator.	H. J. Nellesen	282,357	July 31	2567	703	24	467
Millstones, &c. Adjusting and supporting.	G. Milbank	275,929	Apr. 17	1377	379	23	1478
Millstones. Gage for dressing and truing.	H. D. Coleman	275,024	Apr. 3	191	51	23	1258
Mincing-knife.	C. Gilberts	279,643	June 19	1284	357	23	2357
Mincing-knife and meat-tenderer. Combined.	J. Murphy	281,200	July 10	1067	294	24	195
Mine air-regulator.	J. Sawyer	283,286	Aug. 14	976	272	24	682
Mine-shaft elevator.	M. S. Coleman	289,231	Nov. 27	1795	497	25	846
Miner's combination-tool.	J. Jones	270,315	Jan. 9	576	169	23	123
Mines. Device for automatically opening and shut-	J. Case and J. A. Whitaker	282,269	July 31	2448	673	24	447
ting doors in coal.							
Mining apparatus. Hydraulic.	J. H. Martin	277,762	May 15	1532	416	23	1902
Mining-machine.	H. Barditzky	280,781	July 10	560	157	24	106
Mining-machine.	A. Brandenberger, W. Tirre, and H. Barditzky.	283,858	Aug. 28	1678	474	24	828
Mining-machine.	M. W. Colvin	282,274	July 31	2452	675	24	448
Mining-machine.	C. Hardsocg	282,632	Aug. 7	192	56	24	533
Mining-machine.	X. Kern, Jr., and J. Hammer	291,012	Dec. 25	2099	578	25	1275
					579		
Mining-machine.	H. Wilverth	289,742	Dec. 4	466	131	25	968
Mining-machine.	B. Yoch	286,364	Oct. 9	740	198	25	145
Mining-machine brake and truck.	B. Yoch	283,943	Aug. 28	1784	504	24	848
Mining machine. Coal.	B. F. Asper	289,745	Dec. 4	469	132	25	968
					133		
Mining machine. Coal.	W. Hilton	287,436	Oct. 30	2095	569	25	407
					570		
Mining machine. Coal.	R. Johnson	284,560	Sept. 4	485	136	24	986
					137		
Mining machine. Coal.	S. C. Lechner	287,032	Oct. 23	1586	437	25	306
Mining machine. Coal.	G. D. Whitcomb	280,544	July 3	248	67	24	45
Mining-machine. Hydraulic.	J. E. Russell	273,397	Mar. 6	206	55	23	869

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Mining-machine pick	G. D. Whitcomb	280,541	July 3	246	66	24	44
Mining-machine pick	G. D. Whitcomb	280,542	July 3	247	66	24	44
Mining-machine pick	G. D. Whitcomb	280,543	July 3	248	66	24	45
Mining-tool	T. A. Mayes	279,962	June 26	1668	469	23	2429
Mirror	R. K. McMurray and E. M. Carey	272,297	Feb. 13	878	246	23	605
Mirror and picture support	P. Hufeland	274,773	Mar. 27	1968	548	23	1197
Mirror and picture support	P. Hufeland	274,774	Mar. 27	1969	548	23	1197
Mirror. Glass	J. M. Conroy and F. E. Youngs	290,744	Dec. 25	1754	494	25	1217
Mirror. Hand	J. Hornberger	286,639	Oct. 16	1162	312	25	226
Mirror. Hand	P. Hufeland	270,190	Jan. 2	426	123	23	87
Mirror holder for toilet-cases. Hand	A. Schulze	275,949	Apr. 17	1399	385	23	1482
Mirror. Window	P. L. Johnson	285,037	Sept. 18	1092	305	24	1105
Mirrors. Coating the backs of silvered	J. M. Conroy and F. E. Youngs	290,745	Dec. 25	1755		25	1217
Mirrors. Electrically-heated	B. H. Goodsell, C. Adamson, and C. O. Hering	281,224	July 10	1099	303	24	201
Mirrors, transoms, &c. Friction supporting device for	M. Safford	278,364	May 29	2310	631	23	2052
Miter-box	W. Wassung	286,097	Oct. 2	393	108	25	72
Miter-box and jack-board	H. W. De Courtenay	285,583	Sept. 25	1737	490	24	1227
Miter-cutting machine	D. H. Grant	290,768	Dec. 25	1781	492	25	1222
Miter-wheel guard and frame	H. Nadermann	281,289	July 17	1185	328	24	223
Mitering-machine	C. L. Dayton	270,026	Jan. 2	236	68	23	49
Mitering-machine	D. C. Rogers	272,903	Feb. 27	1689	473	23	757
Mitten	W. Carter	275,142	Apr. 3	344	95	23	1285
Mitten	I. N. Moore	290,787	Dec. 25	1801	498	25	1226
Mitten and knitting the same	W. G. McOmber	276,444	Apr. 24	2021	560	23	1597
Mitten or glove	N. B. Slayton and W. D. Wells	286,738	Oct. 16	1208	326	25	234
Mittens and gloves and method of making the same.	S. M. Levy	273,111	Feb. 27	1936	542	23	800
Knit foundation for							
Mixer:							
See Dough-mixer. Glass-batch mixer.							
Egg and flour mixer. Lemonade-mixer.							
Mixing flour, &c. Machine for	P. Thorpe	276,646	May 1	126	33, 34	23	1649
Mixing-machine	J. Burns	279,328	June 12	896	250	23	2285
Mixing meal or flour. Apparatus for	C. Le Mée	286,716	Oct. 16	1183	318	25	230
Mixing sugar, &c. Apparatus for	C. C. Miller	277,319	May 8	1005	270	23	1805
Moistening device. Automatic.	E. C. McVoy	274,804	Mar. 27	2000	556	23	1203
Molasses evaporator	J. S. Boren	277,206	May 8	874	232	23	1781
Mold:							
See Brick-mold. Glass-mold.							
Burial-case mold. Glassware-mold.							
Butter-mold. Sand.							
Candle-mold. Pipe-mold.							
Carbonizing-mold. Pottery-mold.							
Casting-mold. Roofing-tile mold.							
Cupel-mold.							
Mold	J. Harrison	277,131	May 8	792	{ 207 208 }	23	1767
Molds and cores. Compound for coating dry-sand	J. F. Richards	276,628	May 1	105		23	1645
Molds for roll-pinions. Apparatus for blacking	J. C. Sims	282,676	Aug. 7	239	70	24	541
Molds. Method of and apparatus for forming	S. J. Adams	274,691	Mar. 27	1870	{ 521 522 }	23	1180
Molded and plastic ware. Manufacture of	J. F. Peacock	273,142	Feb. 27	1976	555	23	808
Molder's jointless plate	W. S. Withers	279,627	June 19	1264	{ 350 351 }	23	2353
Molding	C. F. Biele	289,606	Dec. 4	292	82	25	939
Molding	A. Lyon	280,752	July 3	504	143	24	90
Molding	A. Vogt	291,008	Dec. 25	2095	577	25	1274
Molding-flask	J. H. Bawden	280,557	July 3	262	71	24	47
Molding-machine	J. North	274,646	Mar. 27	1816	{ 504 505 }	23	1170
Molding-machine	H. Reynolds	281,926	July 24	2003	549	24	368
Molding-machine	G. Sebold	284,494	Sept. 4	405	{ 113 114 115 116 69 }	24	973
Molding-machine	J. Walker	287,983	Nov. 6	245	{ 70 71 72 }	25	550
Molding-machine for foundry use	F. Bardez	287,996	Nov. 6	265	75	25	553
Molding-machine. Power	F. S. Hawkins	270,898	Jan. 23	1325	383	23	278
Molding machine. Sand	J. Latshaw	283,905	Aug. 28	1733	489	24	837
Molding machine. Wood	W. O. Smith	289,319	Nov. 27	1896	528	25	866
Molding screw-forms in plastic material	H. Brooke	283,321	Aug. 14	1017	285	24	690
Moldings. Composition for gilt	L. Eberle	289,237	Nov. 27	1802		25	847
Moldings. Machine for cutting	E. L. Gaylord	286,423	Oct. 9	809	{ 219 220 221 }	25	157
Moldings. Machine for making picture	C. W. Moeller and M. Schmid	285,646	Sept. 25	1812	{ 516 517 }	24	1241
Moldings. Mold for forming ornamental	L. Blohm	283,560	Aug. 21	1319	368	24	750
Moldings. Ornamenting	F. J. Newcomb	288,473	Nov. 13	871	236	25	667
Mole-trap	J. Eversd	285,400	Sept. 25	1523	429	24	1187
Mole-trap	J. G. Gilleland and J. Ziegele	280,811	July 10	591	165	24	111
Mole-trap	J. G. Soners	275,280	Apr. 3	506	140	23	1312
Monacylised hydro-bases. Producing	A. Böhringer	282,488	Aug. 7	10		24	502
Money-changer. Automatic	C. B. Hopkins	288,942	Nov. 20	1441	{ 397 398 }	25	775
Money-changing cabinet	J. Lockwood and C. McIntire	288,714	Nov. 20	1165	320	25	724
Money-strip. Gummed	Z. G. Wilson	271,964	Feb. 6	457	125	23	521
Monkey-wrench	F. H. Seymour	273,170	Feb. 27	2007	564	23	813
Monkey-wrench	E. H. Seymour	273,899	Mar. 13	850	230	23	987
Monkey-wrenches. Blank for	M. E. Campfield	285,796	Oct. 2	18	6	25	5
Monthly-protector	G. Campbell	276,770	May 1	314	82	23	1680
Monument	G. W. Bush and H. H. Wilzin	275,464	Apr. 10	784	210	23	1368



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Monument	C. J. Heidmeyer	271,453	Jan. 30	2022	584	23	405
Mop and wringer. Combined	W. Malick	290,187	Dec. 11	999	282	25	1071
Mop-head	A. Titus	275,294	Apr. 3	524	143	23	1315
Mop-holder	W. H. Bowen	285,003	Sept. 18	1046	293	24	1097
Mop-holder	F. W. Burns and W. Malick	270,930	Jan. 23	1366	394	23	285
Mop-holder	J. K. Johnson	285,039	Sept. 18	1094	305	24	1106
Mop-holder	J. T. B. Lee	283,121	Aug. 14	773	217	24	645
Mop-wringer	J. McCarthy	283,911	Aug. 28	1740	491	24	839
Mordant	C. N. Waite	290,294	Dec. 18	1144	.....	25	1104
Mordant for aniline black	A. N. Dubois	287,112	Oct. 23	1690	.....	25	327
Mortar and building composition	J. A. Shinn	280,679	July 3	408	.....	24	73
Mortar-tub	J. P. and D. J. Thomas	280,415	July 3	93	25	24	19
Mortising-machine	H. Feyh	281,855	July 24	1917	524	24	353
Mortising-machine	R. S. Greenlee	283,341	Aug. 14	1044	294	24	695
Mortising-machine	I. W. Johnson	286,016	Oct. 2	290	81	25	54
Mortising-machine	L. O. Orton and L. H. Berry	280,326	June 26	2105	591	23	2507
Mortising-metals. Tool for	T. Ryan	280,866	July 10	656	185	24	122
Mortising-tool	C. H. Pettit	278,177	May 22	2032	558	23	1995
Mosquito-bar frame	G. L. Williams	286,665	Oct. 16	1113	300	25	218
Mosquito-guard	W. H. Harvey	281,502	July 17	1455	399	24	269
Mosquitoes. Apparatus for killing	I. Elkins	286,407	Oct. 9	791	213	25	154
Moss-bark. Coating articles in imitation of	O. Speiser	284,771	Sept. 11	758	211	24	1039
Moth-proof receptacle	G. L. and E. G. H. Cooper	286,179	Oct. 9	490	135	25	102
Moth trap and tree-protector. Coddling	G. W. Thissell	275,093	Apr. 3	281	77	23	1274
Motion. Apparatus for starting, stopping, and reversing rotary	F. Reuleaux	271,987	Feb. 6	495	133	23	526
Motion. Apparatus for starting, stopping, and reversing rotary	F. Reuleaux	272,325	Feb. 13	913	255	23	611
Motion. Apparatus for transmitting differential rotary	G. F. Clemons	276,776	May 1	321	83, 84	23	1681
Motion-converting mechanism	E. Butler	285,223	Sept. 18	1308	368	24	1143
Motion. Device for converting	G. J. Altham	273,699	Mar. 13	592	159	23	943
Motion. Device for converting	A. M. Babcock	285,372	Sept. 25	1486	419	24	1181
Motion. Device for converting	S. O. Campbell	279,513	June 12	1131	313	23	2322
Motion. Device for converting	C. W. Colony	289,622	Dec. 4	308	86	25	942
Motion. Device for converting	C. H. Ercanbrack	286,596	Oct. 16	1027	278	25	203
Motion. Device for converting	A. Elson and F. M. Crockett	278,899	June 5	303	88	23	2175
Motion. Device for converting	A. Gould	276,028	Apr. 17	1497	412	23	1498
Motion. Device for converting	C. A. Hodge	282,727	Aug. 7	313	89	24	554
Motion. Device for converting	W. T. Kellogg	279,651	June 19	1295	360	23	2358
Motion. Device for converting	R. G. Moody	287,307	Oct. 23	1935	529	25	370
Motion. Device for converting	J. S. Parmenter	271,909	Feb. 6	392	108	23	510
Motion. Device for converting	G. W. Richardson	288,739	Nov. 20	1202	329	25	730
Motion. Device for converting	J. R. Ricketts	277,345	May 8	1035	278	23	1811
Motion. Device for converting	M. A. Sayles	271,132	Jan. 23	1609	402	23	324
Motion. Device for converting	F. M. Stevens	285,083	Sept. 18	1140	{ 318 319 }	24	1113
Motion. Device for converting	F. Zassenhaus	284,530	Sept. 4	453	128	24	981
Motion. Device for transmitting	J. W. See	280,247	June 26	2004	564	23	2489
Motion. Engine for converting	F. W. Link	273,557	Mar. 6	407	{ 109 110 }	23	904
Motion. Machinery for converting	J. C. Tanber	275,436	Apr. 10	753	201	23	1363
Motion. Mechanical device for changing reciprocating to rotary	A. Trousdale	272,602	Feb. 20	1285	358	23	679
Motion. Mechanism for converting	J. D. Clarke	271,421	Jan. 30	1977	571	23	397
Motion. Mechanism for converting	F. H. Cross	281,347	July 17	1260	350	24	236
Motion. Mechanism for converting	F. S. Gable	290,566	Dec. 18	1519	418	25	1169
Motion. Mechanism for converting	L. B. Miller	274,094	Mar. 13	1086	299	23	1028
Motion. Mechanism for converting	E. S. Plimpton	274,374	Mar. 20	1454	398	23	1100
Motion. Mechanism for converting	F. H. Richards	286,225	Oct. 9	541	149	25	110
Motion. Mechanism for converting	T. Wilson	276,206	Apr. 24	1717	475	23	1545
Motion. Mechanism for transmitting	E. P. Needham	274,812	Mar. 27	2010	560	23	1204
Motion. Substitute for crank	E. Burke	275,988	Apr. 17	1448	399	23	1491
Motion. Substitute for crank	E. Burke	286,900	Oct. 16	1412	388	25	269
Motion. Transmitting	L. D. Goodwin	273,982	Mar. 13	946	260	23	1004
Motion. Transmitting reciprocal to rotary	D. J. Ames	285,943	Oct. 2	212	60	25	40
Motive power	H. Blake	283,063	Aug. 14	704	197	24	632
Motive power	J. Harris	270,796	Jan. 16	1198	346	23	249
Motive power	L. Seebach and J. Bettschen	281,929	July 24	2008	550	24	369
Motive power. Hand	W. H. S. Burguyn	276,665	May 1	155	40	23	1652
Motive power. Means or apparatus for obtaining	J. E. Barry	274,256	Mar. 20	1303	{ 358 359 }	23	1074
Motive power. Obtaining	T. M. Fell	287,917	Nov. 6	160	46, 47	25	535
Motor:							
See Air-motor.	Mechanical motor.						
Car-motor.	Oscillating motor.						
Churn-motor.	Power-motor.						
Cradle-motor.	Rotary motor.						
Current-motor.	Sewing-machine motor.						
Electric motor.	Spring-motor.						
Electro-magnetic motor.	Water-motor.						
Fluid-motor.	Weight-motor.						
Gas-motor.	Wind-motor.						
Hydraulic motor.	Windmill-motor.						
Motor	D. L. Croft	283,757	Aug. 28	1565	441	24	808
Motor	G. E. Danlies	280,297	June 26	2068	{ 581 582 }	23	2501
Motor	C. De Mézerville	289,899	Dec. 11	661	185	25	1009
Motor	J. S. Fletcher	277,893	May 22	1689	461	23	1936
Motor	J. R. Ford	281,558	July 24	1921	525	24	353
Motor	H. W. Gurney	272,429	Feb. 20	1067	390	23	641
Motor	D. Hansz	277,717	May 15	1475	399	23	1891
Motor	J. B. Hunter	286,702	Oct. 16	1164	313	25	226

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. to	Vol.	Page.
Motor.....	A. Lance and M. Yolton.....	274,203	Mar. 20	1226	337	23	1060
Motor.....	T. Poore.....	282,564	Aug. 7	110	33	24	519
Motor.....	M. L. Rison.....	287,777	Oct. 30	2557	688	25	495
Motor.....	S. N. Silver.....	281,571	July 17	1535	421	24	281
Motor.....	W. H. Swartout.....	272,349	Feb. 13	942	261	23	615
Motor.....	S. H. Watkins.....	287,893	Nov. 6	130	38	25	530
Motor for light machinery.....	B. A. Wilton.....	276,518	Apr. 24	2112	587	23	1612
Mouse-trap.....	T. Crooke.....	270,753	Jan. 16	1154	330	23	240
Mouse-trap.....	J. C. Gould.....	280,369	July 3	37	10	24	9
Moving earth and excavated material. Mechanism for.....	H. A. Carson.....	282,163	July 31	2314	635	24	424
Mower.....	W. W. Ball.....	279,074	June 5	565	155	23	2220
Mower and reaper.....	H. A. Hyle.....	273,994	Mar. 13	959	264 265	23	1006
Mower and reaper cutter-bar.....	C. H. Myers.....	285,361	Sept. 18	1467	413	24	1171
Mower and reaper knives. Holder for.....	J. R. Hamilton.....	270,790	Jan. 16	1194	345	23	248
Mower and reaper knives. Machine for grinding.....	J. N. Parker.....	287,854	Nov. 6	74	22	23	520
Mower and reaper knives. Machine for sharpening.....	P. Straith.....	270,858	Jan. 16	1269	366	23	263
Mower and tedder. Combined.....	J. M. Burdick.....	285,792	Oct. 2	14	5	25	5
Mower handle. Lawn.....	T. Johnston.....	271,471	Jan. 30	2051	591	23	410
Mower. Lawn.....	J. J. Berrigan.....	273,705	Mar. 13	598	161	23	944
Mower. Lawn.....	T. and W. H. Coldwell.....	273,469	Mar. 6	297	81	23	884
Mower. Lawn.....	J. W. Hobson.....	275,338	Apr. 3	596	160	23	1327
Mower. Lawn.....	A. J. Whitcomb.....	274,239	Mar. 20	1283	353	23	1071
Mower. Lawn and field.....	H. D. Martin.....	270,090	Jan. 2	303	90	23	62
Mowers and reapers. Adjustable holder for the sickle-bars of.....	G. W. Freeman.....	273,504	Mar. 6	332	90	23	891
Mowing and reaping machine.....	I. Branch.....	279,077	June 5	569	156	23	2221
Mowing and reaping machine.....	L. M. Hawes.....	281,872	July 24	1937	530	24	356
Mowing and reaping machine.....	S. Tilley and J. M. Sanford.....	269,899	Jan. 2	93	27	23	20
Mowing and reaping machine finger-bar.....	J. F. Miller.....	282,749	Aug. 7	333	95	24	558
Mowing and reaping machine sickle-eye.....	L. Hoffman.....	274,942	Apr. 3	76	20	23	1238
Mowing-machine.....	F. Bramer.....	277,984	May 22	1795	489 490	23	1954
Mowing-machine.....	C. W. Cheney.....	278,508	May 29	2482	677 678	23	2082
Mowing-machine.....	R. Dutton.....	271,819	Feb. 6	284	78	23	491
Mowing-machine.....	J. H. Elward.....	279,926	June 26	1620	455	23	2421
Mowing-machine.....	G. W. Keeler.....	284,435	Sept. 4	336	93	24	960
Mowing-machine.....	R. A. Leonard.....	274,793	Mar. 27	1989	553	23	1200
Mowing-machine.....	R. A. Leonard.....	275,227	Apr. 3	443	123	23	1302
Mowing-machine.....	N. C. Lewis.....	270,231	Jan. 9	481	142	23	104
Mowing-machine knives. Machine for sharpening.....	R. R. Isaac.....	290,236	Dec. 18	1070	299	25	1092
Mueilage-wafer.....	J. I. Donahue.....	276,164	Apr. 24	1668	460	23	1636
Muff.....	H. A. Farnsworth.....	275,373	Apr. 10	665	177	23	1348
Muff.....	H. Ganss.....	272,380	Feb. 13	993	277	23	624
Muff.....	M. Smith.....	282,391	July 31	2605	715	24	475
Mug. Beer.....	J. E. Jeffords.....	272,261	Feb. 13	840	234	23	598
Mule. Self-acting.....	E. A. Baldwin.....	272,401	Feb. 20	1027	287 288	23	635
Music-box.....	W. N. Weeden.....	283,307	Aug. 14	1000	280	24	686
Music-cabinet.....	D. Schuyler.....	289,569	Dec. 4	248	70	25	931
Music-cabinet.....	D. Schuyler.....	289,570	Dec. 4	250	70	25	931
Music dealer's furnishing-case.....	C. Spray.....	285,317	Sept. 18	1414	400	24	1163
Music-holder.....	W. R. Hoffmann.....	289,658	Dec. 4	356	100	25	950
Music-leaf holder.....	E. B. Phelps.....	275,696	Apr. 10	1078	294	23	1419
Music-leaf holder.....	W. G. Seely.....	274,037	Mar. 13	1009	277	23	1015
Music-leaf turner.....	W. J. Arnold.....	288,966	Nov. 27	1477	409	25	789
Music-leaf turner.....	J. I. Barnum.....	272,938	Feb. 27	1728	482 483	23	763
Music-leaf turner.....	A. T. and D. T. Fox.....	279,737	June 19	1393	389	23	2375
Music-leaf turner.....	W. H. Geisler.....	273,062	Feb. 27	1869	525	23	789
Music-leaf turner.....	O. S. Hall.....	286,297	Oct. 9	658	175	25	129
Music-leaf turner.....	C. Onslow.....	282,110	July 31	2238	616	24	413
Music-paper for automatic musical instruments. Machine for perforating.....	R. T. Smith.....	287,062	Oct. 23	1623	447	25	313
Music-roll.....	H. Schmoele.....	272,090	Feb. 13	629	171	23	560
Music-sheet for mechanical musical instruments.....	J. Bailey.....	286,108	Oct. 2	405	111	25	75
Music-stand.....	R. C. Barrie.....	274,166	Mar. 20	1188	327	23	1053
Music-stand for organs, &c.....	P. Mabile.....	270,234	Jan. 9	485	143	23	105
Musical instrument and stool. Combined.....	H. Jaeschke.....	270,075	Jan. 2	289	85, 86	23	59
Musical instrument. Automatic.....	J. McTammany, Jr.....	290,697	Dec. 25	1682	463 464	25	1203
Musical-instrument case.....	H. Distin.....	286,399	Oct. 9	782	211	25	152
Musical-instrument finger-board.....	C. Van Haagen.....	281,584	July 17	1553	425	24	284
Musical-instrument key.....	W. H. Laughlin.....	274,504	Mar. 27	1646	458	23	1140
Musical-instrument key-board.....	M. H. McChesney.....	281,898	July 24	1972	540	24	362
Musical-instrument key-board attachment.....	J. M. Hooper.....	290,430	Dec. 18	1332	369	25	1136
Musical instrument. Mechanical.....	O. H. Arno. (Reissue).....	10,279	Jan. 30	2186	628 629	23	433
Musical instrument. Mechanical.....	E. H. Brown.....	278,771	June 5	116	33	23	2143
Musical instrument. Mechanical.....	A. Durkee.....	282,179	July 31	2345	646	24	428
Musical instrument. Mechanical.....	P. Ehrlich.....	290,672	Dec. 25	1650	454	25	1198
Musical instrument. Mechanical.....	M. Gally.....	279,933	June 26	1633	458 459	23	2423
Musical instrument. Mechanical.....	M. Gally.....	282,877	Aug. 7	483	136	24	586
Musical instrument. Mechanical.....	A. H. Hammond.....	277,129	May 8	787	207	23	1766
Musical instrument. Mechanical.....	A. H. Hammond.....	284,844	Sept. 11	844	237	24	1054
Musical instrument. Mechanical.....	J. Lacape.....	272,269	Feb. 13	849	236 237	23	600
Musical instrument. Mechanical.....	N. R. Marshman.....	277,309	May 8	995	267	23	1804
Musical instrument. Mechanical.....	J. McTammany, Jr.....	273,120	Feb. 27	1944	545 546	23	802



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Musical instrument. Mechanical.	J. McTammany, Jr.	273,870	Mar. 13	818	{ 221 222 }	23	982
Musical instrument. Mechanical.	J. McTammany, Jr.	284,315	Sept. 4	193	54, 55	24	937
Musical instrument. Mechanical.	J. Metzger	270,686	Jan. 16	1068	306	23	924
Musical instrument. Mechanical.	R. W. Pain	270,606	Jan. 16	966	279	23	206
Musical instrument. Mechanical.	E. Wette	287,599	Oct. 30	2318	627	25	450
Musical instrument. Mechanical.	O. Zabokow	290,736	Dec. 25	1727	477	25	1213
Musical-instrument pedal	H. Haas	290,043	Dec. 11	836	236	25	1040
Musical-instrument reed	M. Bray and G. W. McClutock	280,789	July 10	570	159	24	107
Musical-instrument sound-board	O. H. Needham	274,813	Mar. 27	2012	560	23	1204
Musical instruments. Covering key-boards of	S. J. Hoggson and G. C. Pettis	274,328	Mar. 20	1397	383	23	1029
Musical instruments. Harmonic coupler for	L. K. Fuller	290,984	Dec. 25	2065	568	25	1269
Musical instruments. Key-board attachment for	S. Jenkins	280,043	June 26	1772	498	23	2447
Musical instruments. Key-board attachment for	J. Schwertner	277,067	May 8	705	183	23	1753
Musical instruments. Manufacture of	H. Distin	286,398	Oct. 9	781	211	25	152
Musical instruments. Mechanical key-board attachment for	W. Thorpe	281,947	July 24	2029	555	24	373
Musical instruments. Mute for wind	A. P. Tyler	285,183	Sept. 18	1267	35	24	1135
Musical instruments. Transposing key-board for	W. J. Guernsey	276,682	May 1	192	49	23	1657
Musical instruments. Winding-roller for	A. H. Hammond	271,064	Jan. 23	1529	442	23	311
Mustache-holder	J. A. Moore	278,999	June 5	468	128	23	2203
Mustache-protector	J. H. Betts	276,214	Apr. 24	1725	478	23	1546
Muzzle	J. D. Crockett	272,214	Feb. 13	778	{ 215 216 }	23	586
Nail:							
See Fence-nail.	Wire nail.						
Furniture-nail.							
Nail.	W. Z. Bean	282,603	Aug. 7	154	47	24	528
Nail.	H. S. Cushman	280,801	July 10	582	162	24	109
Nail.	W. G. Howell	271,983	Feb. 6	490	132	23	525
Nail.	J. H. Huguen	269,859	Jan. 2	47	15	23	12
Nail.	G. H. Perkins	273,385	Mar. 6	193	52	23	867
Nail-cutting die	H. D. Cowles	288,165	Nov. 6	457	128	25	587
Nail-cutting machine	W. Wickersham	269,904	Jan. 2	96	29	23	20
Nail-driver's harness and lath-holder	S. Perry	285,510	Sept. 25	1650	464	24	1210
Nail-driving machine	E. Merritt	278,252	May 22	2130	587	23	2012
Nail-driving machine	E. Merritt	279,579	June 19	1212	353	23	2343
Nail-driving machine. Portable	S. Perry	279,427	June 12	1025	{ 285 286 }	23	2306
Nail-extractor.	G. W. Lewis	270,085	Jan. 2	299	89	23	61
Nail-feeder and nailing-machine	J. J. Sullivan	289,360	Nov. 27	1949	{ 541 542 }	25	875
Nail-machine cutter.	W. Wickersham	287,600	Oct. 30	2319	627	25	450
Nail or spike	W. Taylor	272,600	Feb. 20	1284	357	23	679
Nail-plate feeder	J. H. Dunbar	286,121	Oct. 2	417	114	25	77
Nail-plate feeder	J. H. Dunbar	287,368	Oct. 23	2008	546	25	383
Nail-plate feeder	J. F. Hammond	278,943	June 5	403	111	23	2192
Nail-plate feeder. Automatic	W. Brown	277,215	May 8	883	{ 234 235 }	23	1783
Nail-plate feeders. Feeding attachment for	S. S. Dean	288,982	Nov. 27	1495	414	25	792
Nail-puller	M. D. Edgerton	283,223	Aug. 14	895	249	24	667
Nail, tack, and rivet plates. Machine for cutting	H. R. Packard and W. H. Wilber	277,923	May 22	1719	{ 469 470 }	23	1941
Nail trimming and polishing device	G. N. Stanton	282,793	Aug. 7	383	108	24	567
Nails. Implement for feeding	S. Perry	285,667	Sept. 25	1835	524	24	1245
Nails in serial order. Device for arranging	S. Perry	282,666	Aug. 7	228	66	24	539
Nails. Machine for driving headless	F. M. Carter	270,280	Jan. 9	534	{ 157 158 }	23	114
Nails. Machine for making shoe and upholsterers'	R. Egli	280,458	July 3	152	41, 42	24	28
Nails. Machine for making wire	W. Taylor	273,190	Feb. 27	2027	{ 570 571 }	23	817
Nails. Making brass-headed	C. H. Yarrington	272,010	Feb. 6	520	140	23	530
Nails. Manufacture of	W. W. Titzell	288,958	Nov. 20	1464	404	25	779
Nails. Manufacture of steel	J. T. Torrence	288,138	Nov. 6	426		25	582
Nailing-machine	W. Z. Bean	282,602	Aug. 7	152	46, 47	24	527
Nailing-machine	A. Eppler, Jr.	283,228	Aug. 14	899	{ 251 252 }	24	667
Nailing-machine	L. Goddu	288,421	Nov. 13	803	218	25	656
Nailing-machine	L. Goddu	288,422	Nov. 13	805	218	25	656
Nailing-machine	L. Goddu	288,423	Nov. 13	806	218	25	656
Nailing-machine	L. Goddu	288,424	Nov. 13	807	219	25	656
Nailing-machine	L. Goddu	288,425	Nov. 13	809	219	25	657
Nailing-machine	W. P. Hopkins	289,103	Nov. 27	1645	455	25	818
Nailing-machine	A. Knowlton	280,190	June 26	1928	542	23	2476
Nailing-machine	R. W. Tavener	290,493	Dec. 18	1414	390	25	1151
Nailing-machine	H. Weeks	280,267	June 26	2027	570	23	2493
Nailing-machine feeder	T. L. Smith and W. S. Doig	276,639	May 1	117	31, 32	23	1647
Naphtha-engine	F. W. Ofeldt	279,270	June 12	815	{ 225 226 }	23	2272
Naphtha from oil. Process of and apparatus for separating	J. W. Evans	281,039	July 10	863	240	24	160
Napkin-holder	C. S. Dikeman	282,286	July 31	2462	678	24	450
Napkin-holder	A. H. Meisenbach	280,058	June 26	1786	501	23	2450
Napkin-ring	F. W. Smith	275,723	Apr. 10	1114	305	23	1424
Napkin-ring and menu-holder	F. Ratcliff	279,805	June 19	1467	411	23	2388
Nautical signal	M. D. Porter	285,841	Oct. 2	71	21, 22	25	15
Nautical signal	M. White	284,522	Sept. 4	444	126	24	980
Neck-bow fastener	W. D. Sloucum	277,362	May 8	1055	284	23	1814
Neck-wear	C. C. Hancock	284,736	Sept. 11	713	200	24	1031
Neck-wear hook	W. W. Fichtenberg	274,924	Apr. 3	47	12	23	1233
Neck-wear shield	D. E. Mayer	272,731	Feb. 20	1447	405	23	708
Neck-wear shields. Pin-holder for	W. Fichtenberg	287,652	Oct. 30	2386	644	25	463
Neck-wear. Spring clasping-loop for	W. H. Rose	283,284	Aug. 14	974	272	24	681
Necktie	W. C. Cross	288,192	Nov. 6	491	137	25	593

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Necktie	W. C. Cross	288,561	Nov. 13	971	267	25	685
Necktie and collar stay	J. G. Minnich, Jr.	287,043	Oct. 23	1600	440	25	309
Necktie-fastener	N. H. Baldwin	270,173	Jan. 2	407	118	23	83
Necktie-fastener	W. A. Bates	275,878	Apr. 17	1324	364	23	1468
Necktie-fastener	E. T. M. Boenke	282,153	July 31	2304	632	24	423
Necktie-fastener	G. W. Bowers	279,697	June 19	1350	376	23	2367
Necktie-fastener	J. D. Brant, Jr.	282,952	Aug. 14	567	160	24	608
Necktie-fastener	J. W. Dimock	278,690	June 5	20	6	23	2128
Necktie-fastener	L. C. F. Frees	282,976	Aug. 14	590	167	24	612
Necktie-fastener	B. J. Horton	283,889	Aug. 28	1714	483	24	834
Necktie-fastener	F. C. C. Kahler	287,442	Oct. 30	2102	571	25	408
Necktie-fastener	R. E. Kelsey	278,342	May 29	2321	623	23	2047
Necktie-fastener	J. F. Potter	288,735	Nov. 20	1199	328	25	730
Necktie-fastener	O. J. Teriault	289,175	Nov. 27	1724	481	25	832
Necktie-fastening	F. L. Garrigues	287,119	Oct. 23	1697	464	25	328
Necktie-holder	W. A. Keys and J. Lockwood	277,905	May 22	1701	464	23	1939
Necktie-holder	D. E. Ladd	281,703	July 24	1718	467	24	318
Necktie-holder	W. Rickards	274,827	Mar. 27	2036	564	23	1207
Necktie-holder	E. R. Seabury	280,246	June 26	2004	563	23	2489
Necktie-holder	E. B. Warner	280,694	July 3	427	121	24	76
Necktie or cravat holder	A. I. Burton	278,871	June 5	271	78	23	2169
Necktie or scarf fastener	C. H. Crossette	277,465	May 15	1181	317	23	1842
Necktie or scarf holder	J. E. Vanderbilt	287,594	Oct. 30	2311	625	25	449
Necktie-retainer	W. E. De Groff	288,695	Nov. 20	1143	314	25	721
Necktie-support	B. B. Scully	272,337	Feb. 13	930	258	23	613
Neckties. Device for attaching	W. L. Linder	289,670	Dec. 4	368	104	25	952
Neckties to collars. Device for attaching	G. F. Abbott	275,876	Apr. 17	1323	364	23	1468
Needle and cutter for sewing boned hams. Combined.	J. H. Rathmann	273,153	Feb. 27	1987	559	23	810
Needle-blanks. Machine for feeding	J. Berry	281,961	July 24	2050	561 562	24	375
Needle-blanks. Machine for swaging	I. T. Smith	280,682	July 3	410	115	24	73
Needle-eyes. Machine for polishing	P. M. Beers	278,854	June 5	248	72	23	2165
Needle for fancy work	J. S. Blinn	279,693	June 19	1345	374	23	2366
Needle-grooving machine	J. Berry	275,750	Apr. 10	1147	314 315	23	1430
Needle-machine	F. W. Mallett	275,782	Apr. 10	1192	327	23	1438
Needle. Sewing	J. F. Rusling and E. E. Odell	278,459	May 29	2425	661	23	2072
Needle-threading device	J. Darling	275,157	Apr. 3	361	99	23	1289
Needles while grinding them. Clamp for holding and rotating	J. Berry	279,075	June 5	565	155 156	23	2220
Nest-egg. Medicated artificial	C. B. Wainwright	275,297	Apr. 3	530	144	23	1316
Nest. Hen's	B. J. Downing	271,318	Jan. 30	1843	535	23	372
Nest. Hen's	J. Q. Sook	275,088	Apr. 3	274	75	23	1273
Net. Fish	J. N. Dodge	270,641	Jan. 16	1006	290	23	213
Net. Fly	T. Gingras	285,026	Sept. 18	1078	301	24	1103
Net. Fly	A. C. Smith	289,038	Nov. 27	1568	432	25	804
Net for horses. Fly	W. Feigley	270,040	Jan. 2	251	73	23	51
Net frame. Hand	R. H. Hosen	273,279	Mar. 6	40	13	23	841
Net frame. Horse-fly	W. H. Osmer	275,071	Apr. 3	250	69	23	1269
Net. Horse head	L. B. and G. W. Lee	284,445	Sept. 4	347	96	24	962
Net. Landing	O. M. Muncaster	272,305	Feb. 13	885	248	23	607
Net. Landing	R. J. Welles	273,651	Mar. 6	526	141	23	924
Netting	W. H. Boyd	287,616	Oct. 30	2346	633	25	455
Newspaper stand and rack	R. Pelz	276,277	Apr. 24	1802	502	23	1559
Newspaper-wrapper	G. Fay	278,923	June 5	384	105	23	2188
Newspaper wrapping, addressing, and sorting machine.	B. W. Tomlinson and A. Balch	272,355	Feb. 13	952	265 266	23	616
Newspaper wrapping and addressing machine	H. Swain	274,529	Mar. 27	1680	466 467	23	1145
Newspapers. Machine for sealing	J. H. Woodard	285,337	Sept. 18	1434	405	24	1166
Newspapers. Seal for	J. H. Woodard	285,370	Sept. 18	1480	417	24	1173
Nickel from ores. Extracting	J. P. Prat and J. P. Laroche	276,074	Apr. 17	1547	23	1508	
Nippers	G. W. Hubbard	287,437	Oct. 30	2097	570	25	407
Nippers. Cutting	J. Stevens	287,589	Oct. 30	2303	623	25	448
Nippers. Cutting	H. B. Todd	285,446	Sept. 25	1578	444	24	1196
Nippers for pile-drivers	S. Hadlock	274,189	Mar. 20	1211	333	23	1058
Nippers. Police	J. J. Tower	276,307	Apr. 24	1842	512	23	1566
Non-conducting compound	J. M. Hammill	286,922	Oct. 16	1437	395	25	274
Nozzle. Exhaust	H. N. Wickersham and W. Huston	285,192	Sept. 18	1275	358	24	1137
Nozzle for fire-engines, &c	C. Oyston	280,759	July 3	518	145	24	92
Numbering-machine. Automatic	N. F. Olson	283,016	Aug. 14	649	183 184	24	692
Numbering-machine. Automatic	C. L. Ware	276,986	May 1	588	154	23	1727
Numeral-frame	R. T. Martin	279,263	June 12	807	223	23	2271
Nursery-chair	J. W. Kenna	283,405	Aug. 21	1133	320	24	717
Nursery-chair	E. T. Reed	284,671	Sept. 11	629	178	24	1016
Nut and bolt	H. A. Harvey	273,731	Mar. 13	637	169 170	23	951
Nut and lock for the same	W. V. R. and D. F. Blighton	275,570	Apr. 10	920	249	23	1391
Nut and pipe wrench. Combined	J. G. Moomy	288,095	Nov. 6	381	108	25	573
Nut-arbor	P. Dnffy	278,896	June 5	299	87	23	2174
Nut. Capped screw	A. Searls	276,482	Apr. 24	2068	574	23	1605
Nut-fastener	W. Dunn	270,677	Jan. 16	1292	373	23	267
Nut-lock	J. Q. Adams	277,866	May 22	1659	453	23	1931
Nut-lock	M. M. Beeman	270,372	Jan. 9	657	192	23	138
Nut-lock	T. Bell	284,366	Sept. 4	252	70	24	947
Nut-lock	H. C. Bender	289,494	Dec. 4	155	42	25	913
Nut-lock	W. V. R. Blighton	287,796	Nov. 6	10	3	25	509
Nut-lock	J. N. Bradford	271,026	Jan. 23	1483	427	23	304
Nut-lock	F. C. Braucher	280,125	June 26	1860	524	23	2464
Nut-lock	G. Cado	271,414	Jan. 30	1970	569	23	396
Nut-lock	F. H. Cranford	287,003	Oct. 23	1547	426	25	298
Nut-lock	A. J. Danner	274,285	Mar. 20	1339	368	23	1080
Nut-lock	W. M. Eccles	276,527	Apr. 24	2127	592	23	1614



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Nut-lock	W. B. Eltonhead	285,399	Sept. 25	1522	429	24	1187
Nut-lock	C. C. Fairlamb	278,230	May 22	2104	579	23	2008
Nut-lock	E. F. Fisher	283,092	Aug. 14	736	206	24	638
Nut-lock	H. Fletcher	277,474	May 15	1191	320	23	1844
Nut-lock	J. Ford	275,898	Apr. 17	1345	370	23	1472
Nut-lock	J. A. Fulwiler	290,028	Dec. 11	816	230	25	1037
Nut-lock	F. Getz	275,188	Apr. 3	395	109	23	1295
Nut-lock	J. E. Gibson	290,638	Dec. 18	1606	441	25	1183
Nut-lock	J. Gilgour	277,706	May 15	1463	394	23	1889
Nut-lock	S. Gissing	285,122	Sept. 18	1189	333	24	1122
Nut-lock	J. B. and H. Greenhalgh	281,055	July 10	882	245	24	163
Nut-lock	S. D. Groves	274,188	Mar. 20	1210	333	23	1058
Nut-lock	I. Q. Holmes	284,013	Aug. 28	1893	530	24	866
Nut-lock	W. M. Irvine and J. J. Waddill	277,735	May 15	1494	405	23	1895
Nut-lock	H. Libby	276,252	Apr. 24	1770	493	23	1554
Nut-lock	A. B. Lipsey	278,248	May 22	2125	585	23	2011
Nut-lock	G. P. Loomis	281,196	July 10	1063	293	24	195
Nut-lock	J. M. Mack	272,565	Feb. 20	1245	347	23	672
Nut-lock	W. J. McTigue	282,348	July 31	2555	699	24	465
Nut-lock	M. W. Mcagher and J. C. Andersen	278,032	May 22	1856	507	23	1905
Nut-lock	C. W. Meason	273,871	Mar. 13	821	222	23	982
Nut-lock	B. G. Miller	277,041	Oct. 23	1598	440	25	308
Nut-lock	G. I. P. Mlinarich	277,769	May 15	1542	419	23	1904
Nut-lock	J. Moore	272,971	Feb. 27	1762	493	23	760
Nut-lock	M. Moran	279,000	June 5	460	129	23	2203
Nut-lock	M. J. Nervey	290,790	Dec. 25	1803	499	25	1226
Nut-lock	T. M. O'Malley	290,916	Dec. 25	1961	542	25	1233
Nut-lock	E. Odell	283,505	Aug. 21	1258	353	24	739
Nut-lock	G. Paist	290,999	Dec. 25	2084	574	25	1272
Nut-lock	J. S. Pardee and A. Morley	283,506	Aug. 21	1259	353	24	739
Nut-lock	J. Parr	282,114	July 31	2235	619	24	415
Nut-lock	J. F. Parod	276,872	May 1	435	116	23	1703
Nut-lock	J. M. Perry	277,336	May 8	1026	275	23	1809
Nut-lock	I. P. Pillsbury	274,025	Mar. 13	997	273	23	1013
Nut-lock	C. H. Preston	279,182	June 12	718	196	23	2256
Nut-lock	E. P. Price	270,119	Jan. 2	334	98	23	68
Nut-lock	J. H. Ransom, Jr.	275,705	Apr. 10	1088	297	23	1420
Nut-lock	A. Reeso	287,390	Oct. 23	2034	552	25	388
Nut-lock	W. H. Repass	270,124	Jan. 2	342	100	23	70
Nut-lock	F. Robbins	282,927	Aug. 7	533	151	24	595
Nut-lock	E. E. Ross	286,849	Oct. 16	1347	369	25	259
Nut-lock	D. S. Schureman and W. McCulloch	282,572	Aug. 7	119	35	24	521
Nut-lock	H. Schwarzwald	288,263	Nov. 13	592	162	25	619
Nut-lock	S. Shaw	290,712	Dec. 25	1711	471	25	1209
Nut-lock	J. H. Sheehan	282,383	July 31	2595	713	24	473
Nut-lock	J. W. Steele	286,498	Oct. 9	894	241	25	173
Nut-lock	W. P. Tracy	280,690	July 3	422	119	24	75
Nut-lock	M. Tnley	282,688	Aug. 7	258	74	24	544
Nut-lock	J. J. Waddill	271,955	Feb. 6	447	122	23	519
Nut-lock	T. Weaver	275,001	Apr. 3	147	41, 42	23	1251
Nut-lock	J. Wilkes	279,299	June 12	852	236	23	2278
Nut-lock for rail-joints	J. L. Clingman	273,029	Feb. 27	1834	513	23	783
Nut-locks, &c. Machine for making	H. W. Armstrong	274,251	Mar. 20	1295	357	23	1072
Nut-locking device	J. S. Peironnet	283,275	Aug. 14	964	269	24	679
Nut-separator	J. H. Dolman	271,815	Feb. 6	279	77	23	490
Nut-tapping machine	L. Bartlett	283,745	Aug. 28	1545	437	24	805
Nut-tapping machine	G. H. Webb	284,695	Sept. 11	661	186	21	1022
Nut-tapping machine. Automatic	H. A. Harvey	272,877	Feb. 27	1653	462, 463	23	752
Nut. Top-prop	S. Moore	277,596	May 15	1338	360	23	1866
Nut. Top-prop	A. Searls	272,589	Feb. 20	1268	353	23	676
Nut. Top-prop	H. Smith	272,594	Feb. 20	1275	355	23	678
Nut trimming and chamfering mechanism	G. H. Webb	285,447	Sept. 25	1579	444	24	1196
Nuts. Bleaching edible	F. M. Ironmonger	275,217	Apr. 3	432	.....	23	1300
Nuts. Machine for punching and forming	W. H. Paige	272,083	Feb. 13	621	168	23	559
Nuts on bolts. Machine for putting	W. E. and D. E. Doolittle	280,298	June 26	2070	582, 583	23	2501
Nuts. Process of and apparatus for cleaning, tinting, and polishing pecan and other	R. C. Koerber	287,690	Oct. 30	2435	655	25	473
Oar	M. F. Davis	282,856	Aug. 7	457	130	24	581
Oar and oar-lock	S. S. Hazland	281,873	July 24	1939	530	24	357
Oar for ice-boats	W. J. Honley and S. T. Axtell	288,801	Nov. 20	1275	349	25	744
Oar-lock	E. B. Beach	277,662	May 15	1414	382	23	1881
Oar-lock. Outtrigger	C. B. Elliott	269,924	Jan. 2	121	36	23	25
Oatmeal-machine	W. C. Dickey	289,516	Dec. 4	182	50	25	918
Odometer	J. Gillespie	290,767	Dec. 25	1780	492	25	1222
Odometer	J. B. Thomas	273,638	Mar. 6	509	137	23	921
Odorless excavating apparatus	L. Boyer and J. B. Henry	277,209	May 8	877	233	23	1782
Offal. Apparatus for treating	C. Schiller	287,967	Nov. 6	224	64	25	546
Offal-drier	J. F. Johnston	285,135	Sept. 18	1210	339, 340	24	1125
Offal-drier	T. G. Walker	285,187	Sept. 18	1271	357	24	1136
Oil and other substances from seeds, &c. Process of and apparatus for extracting	F. X. Byerley	275,989	Apr. 17	1449	399	23	1491
Oil. Apparatus for steaming petroleum	A. M. McCrery	283,005	Aug. 14	635	179	24	619
Oil as a substitute for linseed-oil. Manufacture of	P. G. Oster	277,331	May 8	1021	23	23	1808
Oil. Bleaching	H. McManus	290,784	Dec. 25	1799	497	25	1225
Oil-burner	R. H. Dimock and J. A. Robinson	286,914	Oct. 16	1430	393	25	272
Oil-burner	J. J. Miller	281,107	July 10	939	263	24	173
Oil-burner	C. Tondren	278,374	May 29	2320	635	23	2054
Oil-cake former and spring-mat	W. F. Shaffer	275,278	Apr. 3	504	139	23	1312
Oil-cake-trimming machine	J. T. Harbine	276,811	May 1	359	95	23	1659
Oil, &c., can	F. A. Assmann	273,794	Mar. 13	720	195	23	966
Oil-can	M. Burton	271,032	Jan. 23	1489	429	23	305

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Oil-can .....	J. A. Campbell .....	274,718	Mar. 27	1899	530	23	1185
Oil-can .....	J. A. Campbell .....	287,232	Oct. 23	1843	504	25	353
Oil-can .....	T. C. Chalk .....	286,568	Oct. 16	1015	275	25	201
Oil-can .....	M. L. Cobb .....	272,030	Feb. 13	555	150	23	548
Oil-can .....	E. R. Deverall .....	272,535	Feb. 20	1199	334	23	664
Oil-can .....	J. W. Jackson .....	281,189	July 10	1033	291	24	193
Oil-can .....	J. F. Lockwood .....	277,040	May 8	665	173	23	1746
Oil, &c., can .....	D. W. Norris .....	276,066	Apr. 17	1539	423 424	23	1506
Oil-can .....	G. C. Oram .....	274,815	Mar. 27	2015	561	23	1205
Oil-can .....	C. H. Pond .....	278,179	May 22	2034	550	23	1096
Oil-can .....	C. H. Tallman .....	285,705	Sept. 25	1882	536	24	1253.
Oil-can .....	J. C. Thicksins .....	274,054	Mar. 13	1029	282	23	1018
Oil-can faucet .....	P. Ely .....	273,831	Mar. 13	767	208	23	973
Oil-can filler and faucet .....	C. E. Webster .....	285,712	Sept. 25	1898	539	24	1256
Oil-can for oiling machinery .....	J. H. Brown .....	290,206	Dec. 18	1031	290	25	1085
Oil-can holder .....	A. J. Higgins .....	282,986	Aug. 14	602	170	24	614
Oil-can holder .....	J. L. Peake .....	284,661	Sept. 11	611	172	24	1013
Oil-can nozzle .....	F. Sr. and W. Hummel .....	277,287	May 8	965	259	23	1799
Oil-can spout .....	J. Kaye .....	270,810	Jan. 16	1219	351	23	253
Oil-cans. Pump attachment for .....	M. Burton .....	275,883	Apr. 17	1329	366	23	1469
Oil-cloth, &c. Machine for ornamenting and cutting .....	A. F. Buchanan .....	271,782	Feb. 6	238	66	23	482
Oil-cloth. Manufacture of .....	A. F. Buchanan .....	276,765	May 1	309	80	23	1679
Oil-cloth, &c. Utilizing waste .....	J. H. Greene .....	276,029	Apr. 17	1498	.....	23	1499
Oil. Coloring kerosene .....	H. R. Brnk .....	284,811	Sept. 11	806	.....	24	1047
Oil-cup .....	W. S. Cooper .....	277,683	May 15	1438	387	23	1885
Oil-cup .....	J. W. Penner .....	272,379	Feb. 13	993	277	23	623
Oil-cup .....	H. F. Hodges .....	286,438	Oct. 9	828	224	25	161
Oil-cup .....	E. P. Monroe .....	283,914	Aug. 23	1743	402	24	830
Oil-cup .....	G. S. Nickum .....	288,102	Nov. 6	387	100	25	575
Oil-cup .....	J. J. Renchard .....	278,742	June 5	84	24	23	2138
Oil-cup .....	R. J. Thomas .....	287,979	Nov. 6	238	68	25	549
Oil-cup. Automatic .....	O. E. Turner and F. L. Chamberlin .....	290,499	Dec. 18	1492	394	25	1153
Oil-cup. Regulating sight-feed .....	W. P. Phillips .....	276,069	Apr. 17	1543	424	23	1507
Oil-ejecting machine .....	J. G. Conlon and S. R. Dyer .....	280,461	Dec. 25	1894	523	25	1242
Oil. Extracting and mixing linseed .....	E. Kolls and A. J. Adams .....	280,893	July 3	186	.....	24	34
Oil-feeder .....	D. S. Roberts .....	272,980	Feb. 27	1774	496	23	771
Oil from cods' livers. Apparatus for extracting .....	A. Kendrick and E. L. Jerauld .....	275,828	Apr. 17	1258	346	23	1456
Oil from cotton-seed. Extracting .....	S. and A. Scheibler .....	281,566	July 17	1529	.....	24	280
Oil from crude petroleum. Obtaining lubricating .....	M. E. Arendt and A. L. Weil .....	278,844	June 5	233	68	23	2163
Oil from fish liver and blubber. Process of and apparatus for extracting .....	F. Payzant .....	288,106	Nov. 6	392	111	25	575
Oil from oleaginous seeds, &c. Apparatus for extracting .....	S. B. Dover .....	270,291	Jan. 9	550	162	23	117
Oil from oleaginous seed. Manufacture of .....	R. B. Brown .....	285,220	Sept. 18	1306	367	24	1142
Oil from resinous wood. Method of and apparatus for the manufacture of .....	L. Pradon .....	276,981	May 1	582	133	23	1726
Oil from seed and manufacture of oil-cakes therefrom. Expressing .....	W. Bushell and W. T. Haydon .....	279,330	June 12	898	251	23	2285
Oil from seeds, &c. Apparatus for use in the extraction of .....	A. P. Massey .....	290,083	Dec. 11	881	250	25	1049
Oil from seeds, &c. Percolator for extracting .....	H. T. Yaryan .....	280,550	July 3	256	69	24	46
Oil. Glass-bodied vessel for .....	W. S. Lammaster .....	280,048	June 26	1778	499	23	2448
Oil. Harness .....	A. D. Martin .....	278,808	June 5	176	.....	23	2152
Oil. Lubricating .....	C. R. Laman .....	282,648	Aug. 7	208	.....	21	536
Oil. Manufacture of linseed .....	H. A. Davidson .....	279,860	June 19	1537	429	23	2400
Oil. Manufacturing linseed .....	C. D. Gordon .....	275,642	Apr. 10	1019	.....	23	1408
Oil-mat .....	G. Leder .....	274,128	Mar. 20	1140	314	23	1044
Oil-mill box and fittings .....	J. A. Hunt .....	277,840	May 15	1621	441	23	1918
Oil or liquid can .....	R. B. McConnell .....	270,685	Jan. 16	1066	306	23	224
Oil. Paint .....	S. W. Hempsted .....	288,433	Nov. 13	816	.....	25	658
Oil-press box and pan .....	G. W. Hatfield .....	272,134	Feb. 13	689	188	23	571
Oil-press hair mat .....	E. Movel .....	280,393	July 3	66	18	24	14
Oil-press mat .....	F. C. Mann and H. Schmuckner .....	276,846	May 1	399	106	23	1696
Oil-press mat .....	A. E. Osborn .....	285,300	Sept. 18	1395	394	24	1160
Oil-press mat. Hydraulic .....	J. D. Milburn and R. G. Latting, Jr. .....	279,414	June 12	1012	281	23	2303
Oil-press mats. Manufacture of .....	C. Eskrett and W. H. Searle .....	280,460	July 3	158	43	24	29
Oil-presses. Division-mat for .....	J. C. Tiffany .....	275,961	Apr. 17	1412	389 390	23	1485
Oil. Process of and apparatus for reducing the gravity of petroleum .....	D. Rogers .....	284,332	Sept. 4	214	59, 60	24	940
Oil-safe .....	W. D. Chapman .....	285,967	Oct. 2	237	67	25	45
Oil-saving contrivance .....	W. M. Mixer .....	284,752	Sept. 11	732	205	24	1035
Oil-stone .....	E. N. South .....	278,190	May 22	2048	563	23	1998
Oil-tank .....	W. C. Scofield .....	286,231	Oct. 9	548	150	25	111
Oil-tank cover .....	J. P. Reinecke .....	289,557	Dec. 4	233	66	25	927
Oil-tank protector .....	J. L. Finn .....	290,558	Dec. 18	1503	415	25	1166
Oil-tank. Safety .....	J. J. Finnigan .....	290,559	Dec. 18	1505	415	25	1167
Oil-tank. Safety .....	S. Lander .....	290,438	Dec. 18	1342	371	25	1138
Oils and fats. Purifying fatty .....	H. Schlinek .....	278,187	May 22	2046	.....	23	1998
Oils. Decolorizing and deodorizing heavy mineral .....	H. Ujhely .....	289,788	Dec. 4	515	.....	25	975
Oils. Decolorizing vegetable .....	I. A. Bang and C. A. Sanguinetti .....	287,216	Oct. 23	1822	.....	25	349
Oils from organic substances. Manufacturing .....	D. M. Bufo. (Reissue) .....	10,338	June 5	638	173	23	2231
Oils from vegetable and animal matter. Extraction of .....	J. W. Evans .....	281,040	July 10	865	240	24	160
Oils from vegetables, &c. Manufacture of .....	C. F. Stollmeyer .....	271,664	Feb. 6	94	.....	23	456
Oils, &c. Process of and apparatus for chilling paraffine .....	T. D. Fairfield .....	290,016	Dec. 11	804	226	25	1035
Oils. Process of and mechanism for extracting .....	J. W. Evans .....	285,598	Sept. 25	1757	498	24	1230
Oils. Purification of mineral .....	A. André, Fils .....	284,589	Sept. 11	527	149	24	999
Oils. Refining fat .....	J. Davis .....	273,036	Feb. 27	1844	.....	23	784
Oils. Testing .....	J. O. Schubert .....	270,489	Jan. 9	800	233	23	166
Oils. Vialing essential .....	C. C. Hudson .....	272,960	Feb. 27	1750	489	23	767
Oiler .....	C. C. Erlenborn .....	277,555	May 15	1291	347	23	1859
Oiler. Centrifugal .....	G. B. Ross .....	288,667	Nov. 20	1107	304	25	715



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw'g.	Vol.	Page.
Oiler. Crank-pin .....	A. B. Smith .....	284,767	Sept. 11	755	210	24	1038
Oiler for car-wheels .....	H. A. Barrows and R. F. Cummings .....	286,762	Oct. 16	1236	334	25	239
Oiler for carriage-axles .....	S. and E. M. Comstock .....	284,386	Sept. 4	280	78	24	951
Oiler for machinery .....	F. A. Gardner .....	280,029	June 26	1754	493	23	2444
Oiler. Hand- .....	C. Weldy and G. Witman .....	274,683	Mar. 27	1861	518	23	1178
Oiling and softening hemp and other vegetable fibers. Machine for .....	J. Good .....	280,814	July 10	595	166	24	111
Oiling cylinders of steam-engines .....	J. G. Donnerwerth .....	288,037	Nov. 6	311	88	25	561
Oiling engine-slides. Device for .....	C. C. Smith .....	284,768	Sept. 11	756	210	24	1038
Oiling pump for steam-engines .....	W. Heston .....	271,238	Jan. 30	1741	{ 503 504 }	{ 23 23 }	{ 355 355 }
Ointment .....	G. W. Hall .....	279,940	June 26	1643	.....	23	2425
Ointment .....	M. G. Holder .....	272,138	Feb. 13	694	.....	23	572
Ointment .....	S. B. Leonardy .....	271,341	Jan. 30	1872	.....	23	377
Oleaginous and soluble matter from other bodies. Extracting .....	G. N. Phelps .....	288,259	Nov. 13	584	163	25	618
Oleaginous matter from animal and vegetable substances. Extracting .....	J. D. Jones .....	271,850	Feb. 6	332	91	23	499
Oleaginous matter from animal and vegetable substances. Extracting .....	J. D. Jones .....	287,382	Oct. 23	2025	550	25	386
Oleomargarine. Machine for mixing and working .....	J. H. McDonald .....	270,454	Jan. 9	761	223	23	158
Opera-chair .....	E. G. Durant .....	271,320	Jan. 30	1847	536	23	373
Opera-chair .....	E. G. Durant and T. Kane .....	274,742	Mar. 27	1924	536	23	1190
Opera-chair .....	W. H. H. Knight .....	276,830	May 1	383	102	23	1693
Operating table .....	A. W. Brinkerhoff .....	283,199	Aug. 14	869	{ 242 243 }	{ 24 24 }	{ 661 661 }
Optometer .....	L. A. Berteling .....	275,348	Apr. 10	632	169	23	1342
Optometer .....	F. and R. Kabus .....	271,472	Jan. 30	2052	591	23	410
Optometer .....	A. A. Trowbridge .....	276,732	May 1	264	67	23	1669
Orange-clipper .....	M. S. Drake .....	278,108	May 22	1941	532	23	1980
Order-holder .....	E. C. Page and J. B. McCleery .....	273,301	Mar. 6	75	21	23	847
Ordinance .....	G. A. Cassagnes .....	279,636	June 19	1277	354	23	2335
Ordinance .....	J. Vavasseur .....	277,634	May 15	1382	373	23	1875
Ordinance. Apparatus for controlling the recoil of. Breech-loading .....	J. Vavasseur .....	285,688	Aug. 21	1466	413	24	779
Ordinance. Breech-loading .....	A. Dickerman .....	270,289	Jan. 9	548	161	23	117
Ordinance. Breech-loading .....	W. H. Melhuish .....	280,207	June 26	1949	548	23	2480
Ordinance. Breech-loading .....	T. Nordenfeldt .....	282,008	July 24	2698	575	24	383
Ordinance. Breech-loading .....	J. H. Stewart .....	286,649	Oct. 16	1094	295	25	215
Ordinance. Breech-loading .....	J. Vavasseur .....	275,550	Apr. 10	896	{ 242 243 }	{ 23 23 }	{ 1387 1387 }
Ordinance by electricity. Mechanism for firing .....	A. Bouilly .....	289,966	Dec. 11	738	208	25	1023
Ordinance. Compound .....	J. Reese .....	272,900	Feb. 27	1684	{ 471 472 }	{ 23 23 }	{ 757 757 }
Ordinance. Gas-check for breech-loading .....	L. Freyre .....	270,299	Jan. 9	559	164	23	119
Ore and mineral separator .....	R. H. Richards and F. G. Coggin .....	271,657	Feb. 6	87	24	23	455
Ore and rock crusher .....	M. B. Dodge .....	273,477	Mar. 6	307	83	23	886
Ore concentrating and amalgamating machine .....	D. H. Anderson .....	272,614	Feb. 20	1301	{ 362 363 }	{ 23 23 }	{ 682 682 }
Ore-concentrating apparatus .....	C. B. Hitchcock .....	279,164	June 12	701	191	23	2252
Ore-concentrating table .....	R. N. Clark and N. H. Cone .....	285,970	Oct. 2	240	67, 68	25	46
Ore-concentrator .....	J. M. Adams and W. F. Carter .....	272,509	Feb. 20	1168	327	23	639
Ore-concentrator .....	W. F. Carter and J. M. Adams .....	283,110	Sept. 18	1177	{ 329 330 }	{ 24 24 }	{ 1119 1119 }
Ore-concentrator .....	A. D. Clarke .....	276,775	May 1	318	83	23	1681
Ore-concentrator .....	A. D. Clarke .....	285,232	Sept. 18	1318	372	24	1145
Ore-concentrator .....	E. L. Doyle and G. S. Burr .....	290,008	Dec. 11	794	233	25	1033
Ore-concentrator .....	P. W. Duffield .....	275,809	Apr. 17	1239	341	23	1453
Ore-concentrator .....	A. A. Kent .....	280,934	July 10	743	207	24	137
Ore-concentrator .....	C. Kleinschmidt .....	270,956	Jan. 23	1405	404	23	291
Ore-concentrator .....	H. P. Mabry .....	287,840	Nov. 6	60	18	25	518
Ore-concentrator .....	J. Miller .....	289,018	Nov. 27	1534	424	25	799
Ore-concentrator .....	C. C. Rueger .....	287,173	Oct. 23	1763	484	25	340
Ore-concentrator .....	P. A. Simmons and C. J. Henry .....	289,152	Nov. 27	1701	{ 472 473 }	{ 25 25 }	{ 828 828 }
Ore-concentrator .....	W. E. Stirk .....	286,342	Oct. 9	715	{ 191 192 }	{ 25 25 }	{ 140 140 }
Ore-concentrator .....	W. S. Ward .....	276,738	May 1	272	69	23	1671
Ore-concentrator and amalgamator .....	F. M. Johnson .....	287,546	Oct. 30	2233	406	25	435
Ore-concentrator. Dry- .....	W. B. Farwell .....	274,581	Mar. 27	1743	484	23	1156
Ore-concentrator. Dry- .....	W. B. Farwell .....	278,325	May 29	2254	617	23	2041
Ore-concentrator. Dry- .....	J. Hubert .....	276,181	Apr. 24	1685	466	23	1539
Ore-concentrator. Dry- .....	J. G. Vollmer .....	287,396	Oct. 23	2043	556	25	389
Ore-crusher .....	F. H. McDowell .....	286,723	Oct. 16	1191	321	25	231
Ore-crusher .....	W. S. Sharpneck .....	279,983	June 26	1696	474	23	2433
Ore-crusher .....	F. and W. W. Wheeler .....	285,538	Sept. 25	1682	474	24	1216
Ore-crusher and pulverizer .....	H. Kinkad .....	277,578	May 15	1319	354	23	1864
Ore-crusher and pulverizer .....	R. McCully .....	274,956	Apr. 3	95	26, 27	23	1241
Ore-crusher and pulverizer .....	R. McCully .....	277,763	May 15	1532	{ 416 417 }	{ 23 23 }	{ 1903 1903 }
Ore-crusher feed attachment .....	T. A. Blake .....	277,666	May 15	1419	383	23	1881
Ore-crushing machine .....	W. Clark .....	277,243	May 8	901	240	23	1786
Ore-crushing machine .....	F. Morey .....	274,215	Mar. 20	1252	345	23	1064
Ore-desulphurizing furnace .....	A. T. Schuessler .....	276,636	May 1	114	30	23	1646
Ore-feeder .....	W. E. Wild .....	283,180	Aug. 14	842	{ 235 236 }	{ 24 24 }	{ 656 656 }
Ore-furnace .....	F. J. Hoyt .....	272,959	Feb. 27	1749	489	23	767
Ore grinder and amalgamator. Combined .....	P. Eddy .....	287,256	Oct. 23	1870	{ 511 512 }	{ 25 25 }	{ 358 358 }
Ore grinding and pulverizing machine .....	W. H. Hewland .....	281,511	July 17	1467	403	24	271
Ore preparatory to smelting. Purifying iron- .....	C. Cherry, Sr. .....	290,215	Dec. 18	1045	294	25	1087
Ore-pulverizer .....	J. B. Sweetland .....	271,285	Jan. 30	1803	523	23	365
Ore-pulverizer and concentrator. Dry- .....	A. Wingard .....	289,791	Dec. 4	517	143	25	976
Ore-pulverizing machine .....	H. E. Parson .....	282,218	July 31	2388	658	24	437
Ore-pulverizing mill .....	W. I. Tustin .....	288,745	Nov. 20	1210	331	25	732

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'E.	Vol.	Page.
Ore reducing and separating machine .....	C. E. Moore .....	281,782	July 24	1826	498	24	337
Ore-reducing furnace .....	V. Colliau .....	284,384	Sept. 4	276	77	24	951
Ore-reducing furnace .....	G. A. Lawrence and E. J. Frost .....	287,045	Nov. 6	197	57	25	541
Ore roasting and amalgamating apparatus .....	S. G. Rollins .....	290,802	Dec. 25	1826	504	23	1230
Ore-roasting furnace .....	W. Black and T. Larkin .....	278,850	June 5	256	74	23	2166
Ore-roasting furnace .....	J. M. Thompson .....	281,945	July 24	2024	554	24	372
Ore-roasting furnace .....	R. L. Thompson .....	282,603	Aug. 7	393	111	24	569
Ore-roasting furnace .....	T. Walker and J. F. Carter .....	280,102	June 26	1837	517	23	2460
Ore-separating machine .....	O. L. Farnham .....	284,401	Sept. 4	295	83	24	954
Ore-separating machines. Magnetic apron-cylinder for .....	E. B. Hastings .....	290,182	Dec. 11	993	280	25	1070
Ore-separator .....	C. St. Charles .....	283,296	Aug. 14	987	275	24	684
Ore-separator .....	J. A. Coombes .....	288,550	Nov. 13	957	263	25	682
Ore-separator .....	A. P. Granger .....	269,848	Jan. 2	35	12	23	9
Ore-separator .....	B. Hershey .....	289,261	Nov. 27	1828	505	25	852
Ore-separator .....	B. Hershey and C. A. Hitchcock .....	276,534	Apr. 24	2133	594	23	1615
Ore-separator .....	H. P. Minot .....	273,583	Mar. 6	445	120	23	911
Ore-separator .....	C. W. Stickney .....	270,259	Jan. 9	512	150	23	110
Ore separator and amalgamator .....	H. P. Tobey and G. B. Thayer .....	287,195	Oct. 23	1791	491	25	345
Ore separator. Dry .....	M. B. Dodge .....	279,640	June 19	1280	355	23	2356
Ore separator. Dry .....	J. C. McCurdy .....	278,160	May 22	2010	553	23	1996
Ore separator. Dry .....	P. W. Reardon .....	276,710	May 1	228	58	23	1664
Ore-separator. Electric .....	H. Greve .....	282,073	July 31	2189	601	24	405
Ore-separator. Magnetic .....	J. Rae .....	273,309	Mar. 6	84	25	23	848
Ore separator. Wet .....	M. B. Dodge .....	279,641	June 19	1282	356	23	2356
Ore-sizing apparatus .....	I. F. Monell .....	270,825	Jan. 16	1234	356	23	256
Ore-washer .....	J. G. Roberts .....	285,307	Sept. 18	1402	396	24	1161
Ore-washer rake .....	W. R. Jenkins, Jr. .....	271,856	Feb. 6	329	91	23	408
Ores. Apparatus for detecting mineral .....	F. H. Brown .....	274,882	Mar. 27	2101	583	23	1218
Ores. Apparatus for treating .....	E. W. Stouffer .....	275,729	Apr. 10	1119	306	23	1425
Ores for furnaces. Preparing powdered or granulated .....	J. J. Fronheiser .....	287,117	Oct. 23	1694	25	327	
Ores for smelting. Apparatus for roasting and preparing .....	C. Cherry, Sr. .....	290,214	Dec. 18	1042	293	25	1087
Ores, &c. Machine for pulverizing .....	A. L. Fish .....	287,653	Oct. 30	2387	644	25	463
Ores. Method of and apparatus for desulphurizing .....	W. F. Browne .....	284,178	Sept. 4	26	6	24	909
Ores. Method of and apparatus for reducing and disintegrating .....	E. Warne .....	289,587	Dec. 4	269	76	25	935
Ores of the precious metals. Machinery for separating .....	T. P. Denton .....	273,703	Mar. 13	595	160	23	944
Ores. Obtaining precious metals from refractory .....	G. T. Lewis .....	286,025	Oct. 2	301	84	25	56
Ores preparatory to smelting. Desulphurizing and purifying .....	C. Cherry, Sr. .....	290,213	Dec. 18	1040	293	25	1087
Ores. Process of and apparatus for desulphurizing .....	W. F. Browne .....	284,177	Sept. 4	23	6	24	908
Ores. Process of grinding and apparatus for amalgamating .....	C. H. Dow and W. H. Chandler .....	282,863	Aug. 7	466	132	24	583
Ores, &c. Pulverizing machinery for .....	W. M. Fuller .....	278,232	May 22	2107	580	23	2008
Ores. Reducing .....	J. P. Gill .....	284,126	Aug. 28	2032	24	890	
Organ action. Reed .....	H. K. White .....	286,516	Oct. 9	918	248	25	177
Organ-bell attachment .....	A. S. Nichols .....	281,121	July 10	961	269	24	177
Organ blow-pedal .....	J. C. Vetter .....	277,435	May 8	1137	306	23	1828
Organ-case .....	J. R. Lomas .....	280,197	June 26	1938	545	23	2478
Organ. Pipe .....	T. H. Knoblin .....	273,369	Mar. 6	173	47	23	864
Organ. Pipe .....	W. H. Young .....	272,181	Feb. 13	739	204	23	580
Organ. Reed .....	E. A. Foster .....	289,638	Dec. 4	330	92	25	946
Organ. Reed .....	W. E. Leighton .....	276,837	May 1	391	104	23	1695
Organ. Reed .....	L. B. Norton .....	270,974	Jan. 23	1426	411	23	294
Organ. Reed .....	H. K. White .....	274,686	Mar. 27	1865	520	23	1179
Organ-reed .....	W. Munroe .....	274,642	Mar. 27	1812	503	23	1169
Organ stop-action. Reed .....	B. French .....	279,372	June 12	960	267	23	2295
Organ swell. Reed .....	C. H. Davis .....	278,515	May 29	2490	680	23	2084
Organs. Pneumatic action for .....	W. F. Cooper .....	271,606	Feb. 6	27	7	23	445
Ornamentation of surfaces .....	W. S. and W. H. Henay .....	278,958	June 5	424	116	23	2196
Ornamentation of walls, paper, textile fabrics, glass-ware, &c. .....	C. Juncker .....	277,572	May 15	1310	23	1862	
Ornamenting surfaces of walls, ceilings, paper-hangings, &c. .....	G. Giersberg and R. Wirth .....	283,595	Aug. 21	1358	379	24	758
Ornamenting-tool .....	F. W. Davenport .....	282,613	Aug. 7	165	50	24	529
Ornaments, letters, figures, or characters upon a foundation material. Manufacture of .....	F. Koskul .....	289,917	Dec. 11	684	191	25	1013
Oscillating chair .....	M. V. B. Evesson .....	281,477	July 17	1427	391	24	263
Oscillating chair .....	M. V. B. Evesson .....	283,988	Aug. 28	1838	518	24	857
Oscillating motor .....	A. and A. Iske .....	271,639	Feb. 6	63	19	23	452
Oscillating steam-engine .....	G. Gregory .....	285,998	Oct. 2	269	75	25	51
Ottoman .....	W. S. Wright .....	272,825	Feb. 20	1563	439	23	730
Ontrigger-boat .....	T. Fearon .....	271,441	Jan. 30	2006	579	23	402
Oven .....	C. P. De Bondini .....	281,620	July 17	1605	439	24	292
Oven. Bake .....	W. Marvin .....	286,142	Oct. 2	444	120	25	82
Oven. Baker's .....	A. Crumble .....	271,806	Feb. 6	265	73	23	487
Oven. Baking .....	A. Reid .....	287,962	Nov. 6	220	62	25	545
Oven for cooking, baking, or drying .....	G. S. Blodgett .....	288,201	Nov. 13	510	142	25	605
Oven-grate. Adjustable .....	G. W. Verrill .....	274,533	Mar. 27	1684	468	23	1146
Oven-light. Baker's .....	A. Klemt .....	271,714	Feb. 6	152	42	23	466
Oven. Portable .....	S. J. McDowell .....	275,784	Apr. 10	1196	328	23	1438
Overalls .....	W. Carter .....	280,574	July 3	282	78	24	51
Overalls .....	C. O. Cole .....	278,313	May 29	2235	613	23	2038
Overalls .....	G. Dawson .....	278,106	May 22	1939	532	23	1979
Overalls .....	S. Laskey .....	272,065	Feb. 13	599	162	23	556
Overalls .....	R. T. McDonald .....	280,056	June 26	1785	501	23	2450
Overalls .....	J. Wahl .....	275,441	Apr. 10	761	203	23	1364



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. E.	Vol.	Page.
Overalls and drawers .....	I. Bush .....	280,444	July 3	134	36	24	25
Overcoat .....	P. J. Oberst. (Reissne) .....	10,384	Sept. 18	1482	417	24	1174
Overflow from backwater. Preventing .....	M. Pabst .....	271,110	Jan. 23	1583	455	23	320
Overshoe .....	C. S. Baldwin .....	286,761	Oct. 16	1236	334	25	239
Overshoe .....	P. D. Beard .....	273,803	Mar. 13	730	198	23	968
Overshoe .....	H. L. Roosevelt .....	277,614	May 15	1358	366	23	1870
Overshoe-fastening .....	B. P. Kimball .....	272,887	Feb. 27	1672	467	23	755
Overshoe. Rubber .....	C. F. Gillet .....	280,603	July 3	319	89	24	57
Overshoe-strap .....	T. F. Byrnes .....	282,954	Aug. 14	569	161	24	608
Overstitching-machine .....	J. E. Richard .....	280,765	July 3	526	147 148	24	93
Oversock .....	R. Greener .....	290,640	Dec. 18	1607	442	25	1183
Ox-shoe .....	W. Pearce .....	284,888	Sept. 11	890	251	24	1063
Oxidizable liquids. Process of and apparatus for purifying .....	H. T. Varyan .....	280,549	July 3	255	68	24	46
Oxidizing-furnace .....	W. E. Harris .....	276,175	Apr. 24	1679	464	23	1538
Oxyquinoline. Preparing .....	O. Fischer .....	270,045	Jan. 2	257		23	52
Oyster-dredge .....	E. Paterson .....	279,792	June 19	1451	466	23	2386
Oyster-dredge .....	J. N. Woodruff .....	284,156	Aug. 28	2070	575	24	896
Ozone apparatus .....	H. D. Hall .....	282,190	July 31	2357	649	24	430
Ozone-generator .....	S. E. Gay .....	287,760	Oct. 30	2532	682	25	490
Package and box cover fastener .....	W. A. Moore .....	279,417	June 12	1016	282	23	2304
Package-carrier .....	T. M. Turner .....	270,917	Jan. 23	1349	389	23	282
Package-elevator .....	F. I. Pearce .....	285,663	Sept. 25	1832	523	24	1244
Package for butter, &c. ....	R. R. Street .....	276,199	Apr. 24	1708	472	23	1543
Package for coffee and other materials .....	J. T. Cooke .....	273,819	Mar. 13	754	205	23	971
Package-holder .....	T. E. Baden .....	290,514	Dec. 18	1447	400	25	1157
Package. Shipping .....	O. P. Furman .....	274,754	Mar. 27	1942	540	23	1192
Package-tie .....	W. D. Smith .....	274,044	Mar. 13	1016	278	23	1016
Packages of small merchandise. Machine for forming wrappers for .....	W. B. Howe .....	270,669	Jan. 16	1044	299	23	220
Packing and lubricating device. Vapor-engine .....	I. R. Blumenberg .....	290,965	Dec. 25	2039	561	25	1265
Packing and storing box .....	A. J. Herring .....	287,435	Oct. 30	2094	569	25	406
Packing. Automatic metallic .....	H. P. Weale .....	275,299	Apr. 3	532	145	23	1316
Packing-box .....	H. A. Ruhlmann .....	277,788	May 15	1559	494	23	1907
Packing-box. Folding commercial .....	H. Johnson .....	284,211	Sept. 4	69	19	24	916
Packing-box. Reshipping .....	W. M. Baker .....	272,513	Feb. 20	1172	327 328	23	659
Packing-box. Sheet-metal .....	L. D. Dozier .....	279,726	June 19	1381	385	23	2373
Packing-case .....	T. Cockcroft .....	276,356	Apr. 24	1912	531	23	1577
Packing case, box, &c. ....	W. C. Barker .....	279,689	June 19	1341	373	23	2366
Packing-case. Folding .....	W. B. Van Hutton .....	274,418	Mar. 20	1508	415	23	1109
Packing-case for holding bananas during transportation .....	W. H. Goss .....	276,027	Apr. 17	1496	411	23	1498
Packing. Composition for self-lubricating .....	R. Morrison .....	285,648	Sept. 25	1815	517	24	1241
Packing device. Steam .....	W. Fidler .....	276,379	Apr. 24	1941	537	23	1582
Packing emery-wheels, &c., for burning. Apparatus for .....	S. Pulson and M. L. Snow .....	287,469	Oct. 30	2134	580	25	415
Packing for hot journals on cars, &c. Compound .....	M. L. Woodbury .....	280,277	June 26	2042		23	2496
Packing for hydraulic cylinders .....	J. H. Linton .....	289,776	Dec. 4	501	139	25	973
Packing for ice-machines .....	W. A. Reid .....	275,269	Apr. 3	492	136	23	1310
Packing for piston-rods .....	J. A. Osgood .....	274,365	Mar. 20	1444	396	23	1098
Packing for piston-rods. Metal .....	S. Armstrong .....	274,165	Mar. 20	1186	327	23	1053
Packing for piston-rods. Metallic .....	N. C. Bassett .....	271,300	Jan. 30	1820	528	23	369
Packing for piston-rods. Metallic .....	C. W. Mills .....	284,042	Aug. 28	1923	538	24	871
Packing for pistons and plungers .....	W. D. Hooker .....	280,038	June 26	1765	496	23	2446
Packing for pistons. Metallic .....	J. Brandon .....	283,068	Aug. 14	708	199	24	633
Packing for steam-joints .....	D. N. Melvin .....	277,048	May 8	675	176	23	1747
Packing for valve-stems, &c. ....	L. Grannan .....	275,193	Apr. 3	399	110	23	1295
Packing glass gage-tubes. Device for .....	W. H. Bray .....	276,154	Apr. 24	1654	456	23	1534
Packing. Journal .....	E. Medden .....	276,060	Apr. 17	1534	421	23	1505
Packing. Metallic .....	J. A. Osgood .....	274,816	Mar. 27	2016	561	23	1205
Packing. Metallic rod .....	C. D. Stevens .....	271,748	Feb. 6	196	55	23	474
Packing. Metallic wire .....	S. Armstrong .....	287,751	Oct. 30	2519	679	25	488
Packing. Pipe-joint .....	C. T. Bride .....	274,434	Mar. 20	1528	420	23	1113
Packing. Piston .....	L. O. Hall .....	287,669	Oct. 30	2407	649	25	468
Packing. Piston .....	D. W. Jewell .....	271,076	Jan. 23	1547	446	23	315
Packing. Piston .....	R. McKenna .....	277,764	May 15	1535	417	23	1903
Packing. Piston .....	W. W. St. John .....	275,955	Apr. 17	1405	387	23	1483
Packing. Piston .....	S. D. Tucker .....	271,003	Jan. 23	1457	420	23	299
Packing. Piston-rod .....	H. C. Hunt .....	283,711	Aug. 21	1497	422	24	784
Packing. Piston-rod .....	J. L. Reed .....	270,483	Jan. 9	794	232	23	165
Packing. Piston-rod .....	M. D. L. Swank and J. T. Thornley .....	285,441	Sept. 25	1573	442	24	1195
Packing-receptacles. Cover-fastening for .....	S. I. Fraser .....	272,873	Feb. 27	1647	461	23	751
Packing-ring for piston-rods .....	R. L. King .....	285,139	Sept. 18	1215	341	24	1126
Packing-ring for pumps .....	W. E. Karns .....	278,557	May 29	2539	692	23	2092
Packing. Rod .....	J. C. Farmer and R. A. Calder .....	285,244	Sept. 18	1334	376	24	1148
Packing. Steam .....	C. H. Newman .....	277,151	May 8	812	214	23	1771
Packing. Steam and other .....	W. P. Woodruff .....	271,390	Jan. 30	1939	561	23	390
Packing steam-joints .....	R. A. Bulkeley .....	287,416	Oct. 30	2071	563	25	402
Packing. Stuffing-box .....	J. Player .....	284,756	Sept. 11	741	206	24	1036
Packings. Apparatus for cutting .....	F. W. Jenkins .....	288,339	Nov. 13	687	189 190	25	635
Pad:							
See Absorptive pad. Horse foot-pad.							
Buffing-pad. Insect-extermimating pad.							
Collar-pad. Picture-frame protective							
Crupper-pad. pad.							
Furniture-pad. Stair-pad.							
Harness-pad. Tobacco-moistening pad.							
Harness chafe-pad. Truss-pad.							
Pad or pillow for the use of travelers .....	G. E. Mitchell .....	270,242	Jan. 9	493	145	23	107
Pad-tree and harness-saddle .....	C. C. Schwaner .....	271,927	Feb. 6	419	114	23	514
Paddle. Feathering .....	G. A. Keene .....	274,945	Apr. 3	80	22	23	1239

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Paddle-wheel .....	C. P. Thresher .....	275,291	Apr. 3	522	143	23	1315
Paddle-wheel .....	E. L. Williams .....	278,477	May 29	2443	666 667	23	2076
Paddle-wheel. Feathering .....	D. J. Blasier .....	276,662	May 1	152	39	23	1652
Paddle-wheel. Feathering .....	L. C. Fogg .....	279,558	June 10	1189	329	23	2340
Paddle-wheel. Feathering .....	J. Lane .....	274,345	Mar. 20	1419	389	23	1094
Paddle-wheel. Feathering .....	C. Mogow .....	269,948	Jan. 2	151	44	23	31
Padlock .....	F. Egge .....	278,229	May 22	2103	579	23	2008
Padlock .....	J. W. Eldridge .....	277,469	May 15	1185	318	23	1843
Padlock .....	E. T. Fram. (Reissue) .....	10,272	Jan. 16	1298	374	23	268
Padlock .....	T. B. Priddy .....	280,327	June 26	2107	591	23	2507
Padlock .....	C. H. Smith .....	272,593	Feb. 20	1274	355	23	677
Padlock .....	P. Yoe and J. Kirby, Jr. ....	275,970	Apr. 17	1422	392	23	1487
Padlock. Indicator .....	A. Jackson .....	287,028	Oct. 23	1581	436	25	305
Padlock. Permutation .....	W. S. Chedister .....	286,903	Oct. 16	1415	389	25	270
Padlock. Permutation .....	M. A. Ekl, V. Skala, A. Hoyda, and M. Cizek. ....	288,559	Nov. 13	969	266	25	685
Padlock. Permutation .....	G. H. Newell .....	287,309	Oct. 23	1938	530	25	371
Paging-machine .....	J. McAdams .....	277,310	May 8	996	267	23	1804
Pail and other vessels. Chamber- .....	F. Hevl. (Reissue) .....	10,369	Aug. 21	1531	432	24	791
Pail. Dinner .....	C. E. Banks and J. W. Chestnut. ....	284,592	Sept. 11	530	150	24	1000
Pail. Dinner .....	W. P. Marshall .....	272,387	Feb. 13	1005	281	23	625
Pail. Dinner .....	A. G. Points .....	281,132	July 10	978	273	24	179
Pail. Dinner .....	F. M. Starbuck and R. M. Taylor ..	277,371	May 8	1063	286	23	1815
Pail-ear .....	W. G. Moore .....	285,298	Sept. 18	1394	394	24	1159
Pail ear. Tur .....	D. Block .....	285,105	Sept. 18	1169	327	24	1118
Pail. Lantern dinner .....	C. J. Slafter .....	270,610	Jan. 16	970	280	23	206
Pail. Milk .....	R. A. Campbell .....	274,268	Mar. 20	1316	263	23	1076
Pail. Non-heat-conducting .....	T. C. Chalk .....	274,461	Mar. 27	1574	431	23	1128
Pail, tub, keg, barrel, &c .....	W. M. Fowler .....	277,560	May 15	1266	348	23	1860
Pails. Pouring-spout for milk .....	H. Leonard .....	272,714	Feb. 20	1423	399	23	704
Paint .....	C. Miller .....	274,807	Mar. 27	2004	.....	23	1203
Paint .....	A. L. Munson .....	285,151	Sept. 18	1230	.....	24	1128
Paint .....	A. Sorg and F. D. Phillips .....	289,868	Dec. 11	621	.....	25	1002
Paint .....	C. Toppa .....	272,102	Feb. 13	652	.....	23	564
Paint-can .....	E. Norton .....	287,047	Oct. 23	1604	441	25	309
Paint compound .....	A. G. Penchen .....	281,131	July 10	978	.....	24	179
Paint compound or mixture for roofs, &c ..	A. G. Penchen .....	280,856	July 10	643	.....	24	120
Paint. Detergent or compound for removing ..	A. Munder .....	271,901	Feb. 6	381	.....	23	508
Paint-distributor .....	L. Walkup .....	285,325	Sept. 18	1493	402	24	1164
Paint-distributor .....	J. P. Whipple .....	280,696	July 3	430	192	24	77
Paint-distributor .....	J. P. Whipple .....	289,048	Nov. 27	1580	436	25	806
Paint. Fire and water proof .....	W. S. Chandler .....	288,621	Nov. 20	1049	.....	25	706
Paint. Fire and water proof .....	D. H. Smith .....	288,269	Nov. 13	601	.....	25	620
Paint for metallic surfaces. Composition .....	H. R. Clothier, J. Grogan, and J. McMullen. ....	286,117	Oct. 2	415	.....	25	76
Paint for roofing and other purposes .....	F. Jones .....	278,664	May 29	2669	.....	23	2115
Paint. Liquid .....	R. H. Smith .....	286,858	Oct. 16	1356	.....	25	261
Paint or coloring material to artists' academy-boards. ....	E. H. Friedrichs .....	287,530	Oct. 30	2210	600	25	430
Apparatus for the application of .....	N. McCallum .....	283,265	Aug. 14	953	.....	24	677
Paint or dye. Composition to be used as a ..	M. Blake .....	286,255	Oct. 9	584	.....	25	117
Paint. Roofing .....	M. Mathes .....	270,450	Jan. 9	757	.....	23	156
Paint. Silicated .....	E. Hays .....	274,599	Mar. 27	1768	.....	23	1161
Paint. Water-proof .....	F. W. Armstrong .....	286,167	Oct. 9	474	.....	25	99
Paints. Composition for restoring .....	J. A. Henry .....	275,381	Apr. 10	681	.....	23	1351
Paints, oils, and varnishes. Solvent for .....	B. Miller .....	276,854	May 1	411	109	23	1698
Painter's adjustable horse or jack. Carriage- ..	W. A. Kilbe .....	279,767	June 19	1422	398	23	2381
Painter's stripping device .....	W. Thomas .....	284,684	Sept. 11	646	182	24	1019
Painting fence-pickets by dipping. Apparatus for ..	A. Keim .....	287,942	Nov. 6	192	56	25	541
Painting. Mineral .....	W. E. Brown and H. J. Durgin ..	287,347	Apr. 24	1904	528	23	1576
Painting wire fences. Machine for .....	J. O. Poor .....	287,052	Oct. 23	1612	444	25	311
Pamphlet-holder .....							
Pan:							
See Bake-pan. ....	Locomotive ash-pan. ....						
Baking-pan. ....	Milk-pan. ....						
Bed-pan. ....	Roasting and baking pan. ....						
Dish-pan. ....	Scale-pan. ....						
Dust-pan. ....	Sheet-metal pan. ....						
Evaporating-pan. ....	Vacuum-pan. ....						
Frying-pan. ....							
Pan or stove-cover lifter .....	T. S. Haskell .....	279,153	June 12	691	189	23	2251
Pannier and bustle .....	J. Scheuchhof .....	273,165	Feb. 27	2002	563	23	812
Pantaloon garment .....	C. C. Pearson .....	281,790	July 24	1839	503	24	339
Pantaloon-protector .....	C. J. McDermott .....	271,891	Feb. 6	367	101	23	505
Pantaloon-stretcher .....	T. Luce .....	279,262	June 12	807	223	23	2271
Pantaloon .....	H. Harris .....	286,600	Oct. 16	1042	281	25	205
Pantaloon, &c. Stretcher for .....	T. H. Harris .....	286,812	Oct. 16	1296	352	25	250
Pants. Attachment for .....	I. R. Curtis .....	289,894	Dec. 11	655	183	25	1008
Pants-protector .....	G. Watkinson .....	281,213	July 10	1084	298	24	198
Paper .....	J. B. Crane .....	283,701	Aug. 21	1480	417	24	782
Paper and cards. Ornamenting .....	P. Hake .....	285,482	Sept. 25	1617	454	24	1204
Paper and envelope package .....	S. J. Spurgeon .....	279,283	June 12	829	230	23	2275
Paper and paper bags. Stand for holding wrapping- ..	J. M. Fulton .....	289,825	Dec. 11	564	158	25	992
Paper articles. Manufacture of .....	W. McMahon .....	277,593	May 15	1333	358	23	1866
Paper articles. Manufacture of .....	W. McMahon .....	277,594	May 15	1335	358	23	1866
Paper bag .....	G. O. Blowers .....	286,896	Oct. 16	1406	386	25	268
Paper bag .....	J. P. Onderdonk .....	277,153	May 8	814	214	23	1772
Paper bag .....	J. P. Onderdonk .....	279,586	June 19	1221	338	23	2345
Paper bag .....	J. P. Onderdonk .....	279,587	June 19	1222	339	23	2345
Paper bag .....	J. P. Onderdonk .....	279,588	June 19	1223	339	23	2346
Paper bag .....	J. P. Onderdonk .....	279,589	June 19	1223	339	23	2346
Paper bag .....	J. P. Onderdonk .....	279,590	June 19	1223	339	23	2346
Paper bag .....	D. Shirley .....	273,902	Mar. 13	853	231	23	988
Paper bag and twine holder .....	A. W. Cash .....	279,333	June 12	903	252	23	2286



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Paper-bag and twine holder.....	A. M. Reeves.....	288,116	Nov. 6	404	114	25	578
Paper-bag and twine holder. Combined.....	A. Brown.....	288,204	Nov. 13	513	142	25	606
Paper-bag filler. Automatic.....	T. H. Hill.....	277,133	May 8	793	208	23	1768
Paper-bag holder.....	W. H. Ashton.....	288,967	Nov. 27	1478	409 410	25	789
Paper-bag holder.....	G. W. Cook.....	273,963	Mar. 13	924	254	23	1000
Paper-bag holder.....	O. P. Kenyon.....	272,263	Feb. 13	844	235	23	599
Paper-bag machine.....	C. F. Amman.....	276,744	May 1	278	70, 71	23	1672
Paper-bag machine.....	T. Coates and J. J. Bissicks.....	282,166	July 31	2321	637 638 639 640 641	24	425
Paper-bag machine.....	H. A. House.....	283,890	Aug. 28	1715	483 484	24	834
Paper-bag machine.....	C. B. Stilwell.....	279,505	June 12	1117	309 310	23	2320
Paper bags. Device for fastening.....	A. W. Angier.....	286,758	Oct. 16	1232	333	25	238
Paper bags. Machine for making.....	A. Adams.....	279,114	June 12	641	175	23	2243
Paper bags. Machine for making.....	C. A. Chandler.....	285,392	Sept. 25	1512	425 426 427	24	1185
Paper bags. Making.....	G. O. Blowers.....	287,753	Oct. 30	2522	680	25	488
Paper bags. Making square.....	E. B. Stocking.....	279,109	June 5	625	170 171	23	2229
Paper bags. Merchant's stand for.....	J. E. Williamson.....	286,099	Oct. 2	395	108	25	72
Paper barrels. Machine for the manufacture of.....	S. F. Seiberling.....	285,847	Oct. 2	83	24, 25	25	17
Paper. Blotting.....	E. B. Farris.....	283,474	Aug. 21	1217	342	24	731
Paper-board for japanning and enameling purposes. Preparing and hardening.....	G. A. Lovell.....	270,820	Jan. 16	1230		23	255
Paper-board. Machine for cutting.....	J. T. Robinson.....	273,394	Mar. 6	203	55	23	868
Paper boards. Manufacture of.....	S. H. Hamilton. (Reissue).....	10,386	Sept. 25	1995	564	24	1270
Paper boards. Manufacture of.....	S. H. Hamilton. (Reissue).....	10,387	Sept. 25	1996	565	24	1270
Paper box..... Manufacture of.....	J. C. Bauer.....	278,851	June 5	245	70	23	2165
Paper box.....	A. Brehmer.....	285,456	Sept. 25	1590	446 447	24	1198
Paper box.....	R. R. Colburn.....	283,209	Aug. 14	880	245	24	664
Paper box.....	C. De Quilfeldt.....	271,975	Feb. 6	473	129	23	523
Paper box.....	G. J. Edwards.....	281,354	July 17	1271	353	21	237
Paper box.....	J. Felbel.....	278,526	May 29	2503	684	23	2086
Paper box.....	D. J. Ferry.....	290,018	Dec. 11	806	227	25	1035
Paper box.....	D. Heston.....	279,755	June 19	1411	394	23	2379
Paper box.....	D. Heston.....	279,756	June 19	1412	394	23	2379
Paper box.....	D. Heston and D. J. Brown.....	279,757	June 19	1413	395	23	2379
Paper box.....	W. R. Miller.....	282,657	Aug. 7	220	64	24	538
Paper box.....	A. L. Munson.....	279,972	June 26	1678	471	23	2431
Paper box.....	H. S. Munson.....	288,254	Nov. 13	576	160	25	617
Paper box.....	H. S. Munson.....	288,255	Nov. 13	578	160	25	617
Paper box.....	W. H. H. Rogers.....	272,327	Feb. 13	917	256	23	611
Paper box.....	H. D. Stinson.....	289,161	Nov. 27	1710	476	25	830
Paper box.....	J. W. Tatnall.....	285,706	Sept. 25	1883	536	24	1254
Paper box.....	R. Van Baar.....	278,837	June 5	224	66	23	2161
Paper box.....	M. L. Wilcox.....	289,790	Dec. 4	516	143	25	976
Paper box and lid.....	A. G. Wilson.....	286,360	Oct. 9	735	197	25	144
Paper-box covering and trimming machine.....	H. Inman. (Reissue).....	10,286	Feb. 13	1020	285	23	628
Paper-box machinery.....	C. E. Bolton and M. Rankin.....	284,599	Sept. 11	538	152	24	1002
Paper boxes. Machine for making.....	B. T. Steber.....	279,285	June 12	830	230	23	2275
Paper calendar-roll.....	H. J. Frink.....	285,476	Sept. 25	1611	452	24	1203
Paper-calendering machine.....	A. S. Alden.....	282,031	July 31	2131	585	24	395
Paper card-case.....	C. De Quilfeldt.....	276,962	May 1	562	146	23	1722
Paper. Coating or waterproofing.....	C. A. Maxfield.....	278,443	May 29	2405		23	2069
Paper-cutting machine.....	C. C. Child.....	274,273	Mar. 20	1321	364 365	23	1077
Paper-cutting machine.....	E. P. Dennell.....	290,004	Dec. 11	790	222	25	1032
Paper-cutting machine.....	W. F. Hill.....	272,438	Feb. 20	1075	303	23	643
Paper-cutting machine.....	H. Johnson.....	273,285	Mar. 6	46	14	23	842
Paper-cutting machine. Roll.....	G. Munro.....	284,753	Sept. 11	733	205	24	1035
Paper-cutting mechanism.....	G. Miles.....	289,923	Dec. 11	689	193	25	1014
Paper-dampening machine.....	J. J. Clause.....	286,591	Oct. 16	1017	276	25	201
Paper. Dampening and cutting.....	W. Scott.....	272,588	Feb. 20	1267	353	23	676
Paper, &c. Electrical apparatus for controlling.....	J. W. Osborne.....	287,957	Nov. 6	209	60, 61	25	544
Paper, envelopes, &c. Ornamenting writing.....	P. Hake and G. A. Raisbeck.....	270,586	Jan. 16	935	271	23	201
Paper fabric or maling.....	J. Bray.....	280,226	June 26	2052		23	2498
Paper-fastener.....	A. Lotz.....	290,336	Dec. 18	1199	336	25	1114
Paper-fastener.....	G. W. McGill.....	286,143	Oct. 2	444	121	25	83
Paper-feeding machine.....	F. H. Lauten.....	283,906	Aug. 28	1733	489 490	24	837
Paper-feeding machine. Sheet.....	R. J. Stuart.....	282,014	July 24	2107	578	24	385
Paper, felt, &c. Apparatus for treating or saturating.....	J. Jowitt.....	285,490	Sept. 25	1625	456 457	24	1205
Paper felt, wadding, or lining. Apparatus for making.....	C. Fisher and E. R. Sollday.....	286,287	Oct. 9	647	172	25	128
Paper felting. Manufacture of.....	F. J. Mather.....	278,350	May 29	2291		23	2048
Paper-folding and similar machines. Packing device for.....	J. H. Stonemetz and W. G. Bennett.....	277,806	May 15	1579	431	23	1911
Paper-folding machine.....	L. C. Crowell. (Reissue).....	10,300	Apr. 3	608	163 164 165	23	1328
Paper-folding machine.....	T. C. Dexter.....	279,083	June 5	578	158	23	2222
Paper-folding machines. Sheet carrying and adjusting device for.....	T. C. Dexter.....	287,421	Oct. 30	2077	564	25	403
Paper for bank-notes, checks, &c. Manufacture of yellow-fibered.....	E. Musil.....	282,106	July 31	2231		24	412
Paper-for cards and circulars.....	O. W. Butler and T. W. Kelley.....	273,023	Feb. 27	1826	511	23	781

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &	Vol.	Page.
Paper for carpet-linings, &c.	S. Pember and S. Bird	285,839	Oct. 2	68	21	25	14
Paper for copying purposes. Preparing	M. W. Brown	283,322	Aug. 14	1018		24	690
Paper-gumming machine.	J. L. Rife	284,236	Sept. 4	102	23	24	921
Paper-hanger's roller.	H. Sweetser	290,813	Dec. 25	1840	509	25	1232
Paper-hanging machine and rack	H. Staib	276,728	May 1	259	66	23	1668
Paper-hangings. Ornamenting	J. B. Knoepflin	271,201	Jan. 23	1697	490	23	338
Paper-holder	B. F. Eaton	285,398	Sept. 25	1521	428	24	1187
Paper-holder	R. White	271,177	Jan. 23	1670	481	23	334
Paper holder. Closet	B. Schoof	282,785	Aug. 7	372	105	24	565
Paper holding and cutting device	W. C. Westerfield	284,105	Aug. 28	2001	557	24	884
Paper-holding device.	S. Wheeler	289,735	Dec. 4	459	129	25	966
Paper lantern	J. E. Grumbach	277,712	May 15	1471	397	23	1891
Paper-lining machine	J. C. Bauer	276,335	Apr. 24	1892	525	23	1573
Paper-machine	T. P. Barry	285,954	Oct. 2	224	63	25	43
Paper-machine	C. Bötter	280,123	June 26	1857	523 524	23	2464
Paper-machine	T. A. and J. Boyne, Jr	287,500	Oct. 30	2176	591	25	422
Paper-machine	S. Pember and S. Bird	285,838	Oct. 2	66	21	25	14
Paper. Machine for preparing wood for pulping in the manufacture of	W. Jones	284,433	Sept. 4	334	93	24	960
Paper, &c. Machine for testing	R. Smith	274,146	Mar. 20	1158	319 320	23	1048
Paper-machine spool-clutch	G. Garceau	274,483	Mar. 27	1632	450	23	1135
Paper-machines. Automatic guide for.	J. Albey	270,718	Jan. 16	1108	317	23	232
Paper-machines. Method of and apparatus for exhausting the air and extracting the water from the suction-boxes of	J. J. Manning	282,096	July 31	2217	610	24	409
Paper-machines. Method of and apparatus for exhausting the air and extracting the water from the suction-boxes of	J. J. Manning	282,097	July 31	2219	610	24	410
Paper-machines. Stuff-regulator for.	C. Young	276,127	Apr. 17	1619	446	23	1520
Paper, &c. Machinery for folding.	W. C. Cross	275,154	Apr. 3	356	98	23	1288
Paper-making apparatus	M. Sembritzki	288,125	Nov. 6	413	117	25	580
Paper. Making luminous	W. Trotter, Jr.	274,415	Mar. 20	1502		23	1109
Paper. Making luminous	W. Trotter, Jr.	277,383	May 8	1075		23	1818
Paper-making machine	H. F. Case	286,587	Oct. 16	1013	274	25	201
Paper-making machines. Exhausting the air, gases, and water from suction-boxes for	H. A. Barber	280,555	July 3	260	70	24	47
Paper-making machines. Measuring device for	H. Barth	288,295	Nov. 13	624	171 172	25	625
Paper-making machines. Suction-box for.	I. Bratton	280,564	July 3	273	75	24	49
Paper-making machinery	G. E. Marshall	275,056	Apr. 3	327	62	23	1265
Paper-making machinery. Vacuum-box used in.	H. Marsden and H. Schofield	289,678	Dec. 4	374	107	25	953
Paper-making. Rag-engine for	W. Whitley	282,818	Aug. 7	409	115	24	572
Paper, &c. Manufacture of.	R. Blitz	289,212	Nov. 27	1776		25	842
Paper. Manufacture of impression.	W. Smith	273,772	Mar. 13	696	187	23	961
Paper, &c. Manufacture of luminous	W. C. Horne	290,772	Dec. 25	1786		25	1223
Paper. Manufacture of wrapping.	S. Wheeler	272,369	Feb. 13	970	271	23	620
Paper-moistening machine	J. H. Stonemetz	275,957	Apr. 17	1407	388	23	1484
Paper of imperfections. Making	J. T. Ryan	281,400	July 17	1325		24	246
Paper of imperfections. Making	J. T. Ryan	283,026	Aug. 14	662		24	625
Paper or pasteboard. Manufacture of.	C. S. Cummings and C. A. Shank	279,350	June 12	926		23	2290
Paper ornaments. Producing	J. Fried	286,693	Oct. 16	1155	311	25	225
Paper pail or box	I. W. Hollett	279,244	June 12	784	212	23	2267
Paper-perforating machine.	R. T. Smith. (Reissue)	10,311	Apr. 10	1213	332 333	23	1441
Paper pocket-book	C. De Quillfeldt	276,961	May 1	561	146	23	1722
Paper pocket-book	C. De Quillfeldt.	289,515	Dec. 4	181	50	25	918
Paper, &c. Profile.	J. M. Goodwin	270,657	Jan. 16	1028		23	217
Paper-pulp. Apparatus applicable to the manufacture of	J. W. Dixon	276,162	Apr. 24	1666	460	23	1536
Paper-pulp. Apparatus for the reduction of.	J. W. Dixon	276,163	Apr. 24	1667	460	23	1536
Paper-pulp. Beating and refining engine for	J. J. Manning	282,098	July 31	2221	610	24	410
Paper-pulp. Boiler for digesting wood for.	G. E. Marshall	286,031	Oct. 2	311	88	25	58
Paper-pulp-engine roll	C. S. Barton	273,801	Mar. 13	728	197	23	967
Paper-pulp engines. Roll-bar for	O. Morse	286,216	Oct. 9	532	146	25	108
Paper-pulp from sugar-cane, &c. Production of.	E. C. Le Bourgeois	278,977	June 5	441		23	2199
Paper-pulp. Machine for reducing wood to	J. Prickett	277,060	May 8	691	180	23	1750
Paper-pulp machines. Block-presser for wood.	N. H. Brokaw	271,409	Jan. 30	1965	568	23	395
Paper-pulp machines. Block-presser for wood.	N. H. Brokaw. (Reissue)	10,429	Dec. 25	2103	580	25	1275
Paper-pulp. Manufacture of	G. Archhold	274,250	Mar. 20	1294		23	1072
Paper-pulp. Manufacture of	G. Archhold. (Reissue)	10,328	May 22	2217		23	2027
Paper-pulp, &c. Mold for manufacturing stoppers and bungs from	C. Hemje and T. C. Brecht	279,869	June 19	1548	432 433	23	2402
Paper-pulp screen.	P. H. Cragin	277,239	May 8	910	244	23	1788
Paper-roll cutter or edge-trimmer	R. Ardrey	273,244	Mar. 6	2	1	23	835
Paper. Roofing or sheathing	A. Sackett.	278,278	May 22	2167	597	23	2018
Paper-sack, twine, and tea-paper case. Combined	J. C. Norris.	270,687	Jan. 16	1069	306	23	224
Paper separating and folding apparatus	W. A. Wilson, G. Duncan, and G. Lauder.	276,369	Apr. 24	1929	535	23	1580
Paper-stock. Method of and apparatus for treating rags for	C. F. Taylor	287,482	Oct. 30	2154	585	25	418
Paper-stock. Process of and apparatus for treating rags for	C. F. Taylor	286,503	Oct. 9	901	243 244	25	174
Paper-stock. Treating	H. Carmichael. (Reissue)	10,289	Feb. 6	529		23	531
Paper, textile fabrics, &c. Machine for polishing.	R. Westphal	274,685	Mar. 27	1863	519	23	1178
Paper vessel	A. R. Tiffany.	279,992	June 26	1700	477	23	2435
Paper vessel. Handled.	S. M. Bixby	280,010	June 26	1726	483 484	23	2440
Paper. Waxing	J. T. Bedford	273,013	Feb. 27	1812	508	23	779
Paper. Waxing	J. B. Duke	286,403	Oct. 9	786	212	25	153
Paper-waxing apparatus	J. B. Duke	286,402	Oct. 9	785	212	25	153
Paper-weight	E. F. Pfeuger	279,795	June 19	1454	407	23	2386
Paper-weight, calendar, and pen-rack. Combined	J. R. King.	288,065	Nov. 6	343	96	25	566



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Paper-wetting machine	J. W. Morrison	289,688	Dec. 4	392	112	25	956
Paper wheel	F. M. Mahan	290,081	Dec. 11	879	249	25	1049
Paper-winding machine	L. Dejonge, Jr.	281,034	July 10	858	239	24	159
Paper, wood pulp, &c. Machinery or apparatus to be used in the manufacture of	F. Wrigley and J. Robertson	276,989	May 1	591	155	23	1727
Paraffine, &c. Method of and apparatus for freezing	E. Kells	271,080	Jan. 23	1554	447	23	315
Paranitrobenzylidene chloride. Production of.	E. Fischer	278,926	June 5	387	.....	23	2189
Parasol and fan. Combined	M. A. Montejo	286,626	Oct. 16	1066	287	25	210
Parcel-carrier	J. R. H. Hinton	287,129	Oct. 23	1707	467	25	330
Parcel-carrier	M. Lindsay	272,067	Feb. 13	601	163	23	556
Parcel-carrier	M. Lindsay	277,494	May 15	1216	{ 326 327 }	23	1848
Parcel-carrier	H. H. Tobias	286,654	Oct. 16	1098	296	25	215
Parcel-carrier and elevated track for same	J. Dennis	278,226	May 22	2097	{ 577 578 }	23	2007
Parcel-carrier and track	G. P. Walker	278,298	May 22	2206	605	23	2025
Parcel-carriers in stores. Speed-governor for	G. R. Elliott	284,954	Sept. 11	975	274	24	1078
Parcel-holder for elevated ways in stores	G. R. Elliott	279,727	June 19	1382	386	23	2373
Parcel-transmitter for stores	D. M. Skinner	287,182	Oct. 23	1776	487	25	342
Parer. Apple	W. H. Boutell	286,380	Oct. 9	756	{ 203 204 }	25	147
Parer. Apple	A. B. Carter	273,255	Mar. 6	16	5	23	837
Parer. Apple	A. B. Carter	288,974	Nov. 27	1486	412	25	791
Parer. Apple	A. Rippien	270,845	Jan. 16	1258	362	23	261
Parer. Apple	A. Rippien	281,559	July 17	1521	417	24	279
Parer. Apple	L. H. Scott	278,460	May 29	2426	661	23	2072
Parer. Apple	L. H. Scott	285,687	Sept. 25	1858	{ 530 531 }	24	1249
Parer. Apple	R. P. Scott	283,031	Aug. 14	666	187	24	626
Parer. Apple	J. L. Wilcox	287,601	Oct. 30	2321	628	25	450
Parer. Apple	F. R. Williams	284,935	Sept. 11	947	267	24	1073
Parer, corer, and slicer. Apple	W. M. Griscom	270,585	Jan. 16	934	270	23	200
Parer, corer, and slicer. Apple	R. P. Scott	283,030	Aug. 14	1665	187	24	625
Parer, corer, and slicer. Apple	C. S. and R. P. Scott	288,956	Nov. 20	1460	404	25	779
Parer, corer, and slicer. Apple	D. H. Whittemore	273,418	Mar. 6	229	62	23	873
Paring-machines. Rotary cutter for	H. Cottrell	284,823	Sept. 11	819	228	24	1049
Paris-green distributor	W. Elliott	280,157	June 26	1895	533	23	2470
Passenger-recorder. Photographic	C. W. Weiss	283,174	Aug. 14	833	233	24	654
Passenger-register	J. W. Fowler and D. F. Lewis	280,925	July 10	724	203	24	134
Passenger-register	L. A. Touchet	286,349	Oct. 9	722	{ 193 194 }	25	141
Paste. Adhesive	G. Schanze and J. B. Weigman	274,979	Apr. 3	123	.....	23	1247
Paste substances into conical form. Machine for bringing	G. W. Thomas	276,096	Apr. 17	1579	{ 435 436 }	23	1513
Pasting paper boxes, &c. Machine for	G. W. Glazier	280,604	July 3	319	89, 90	24	57
Pasteboard boxes. Manufacture of	L. D. Caillat	270,740	Jan. 16	1136	326	23	237
Pastry-board	D. C. Heller	271,706	Feb. 6	142	40	23	465
Pattern for cutting dress-patterns	M. S. Schafer	287,731	Oct. 30	2491	{ 670 671 }	25	483
Pattern for garments. Adjustable	A. L. B. Griswold	281,056	July 10	883	246	24	163
Pattern-tracer	L. J. Purdy	284,573	Sept. 4	506	142	24	989
Patterns on goods. Device for clamping	G. A. Close	288,410	Nov. 13	791	{ 214 215 }	25	653
Pavement	F. W. Bartlett	288,970	Nov. 27	1481	411	25	790
Pavement and floor	E. B. Martindale	286,321	Oct. 9	692	184	25	136
Pavement. Cement and concrete	J. W. McKnight	271,582	Jan. 30	2181	627	23	432
Pavement-foundation	R. T. Bryant and D. Tostevin	279,701	June 19	1353	377	23	2368
Pavement. Stone	F. W. Bartlett	283,369	Aug. 21	1096	308	24	709
Pavement. Stone	A. McKinley	278,031	May 22	1855	506	23	1964
Pavement. Street	V. A. Gates and M. Levi	285,746	Sept. 25	1949	551	24	1263
Pavement. Street	J. Stommel	283,299	Aug. 14	991	277	24	684
Pavement. Wood	B. W. Bell	281,233	July 17	1118	308	24	211
Pavements. Laying	W. McLean	289,295	Nov. 27	1870	519	25	861
Pavements. Paving material for street	E. C. Boyce	274,096	Mar. 13	1087	299	23	1028
Paving and building blocks. Machine for making	C. Diebold	287,011	Oct. 23	1556	429	25	300
Paving-block	W. T. Cutler	283,329	Aug. 14	1033	.....	24	692
Paving-block	J. T. Thomas	285,444	Sept. 25	1576	443	24	1196
Paving-block. Impervious	E. B. Martindale	289,289	Nov. 27	1863	517	25	859
Paving composition	J. G. Ketcham	277,743	May 15	1502	.....	23	1896
Paving composition	J. G. Ketcham. (Reissue)	10,414	Nov. 27	1974	.....	25	880
Paving-tool	P. S. Maloney	288,825	Nov. 20	1303	357	25	749
Pawl-and-ratchet mechanism	J. Braun	281,662	July 24	1662	433	24	308
Pea-huller	W. T. Crutchfield	273,968	Mar. 13	933	256	23	1001
Pea-separator	C. H. J. Roberts	282,373	July 31	2582	709	24	470
Pea-shelling machine	A. Swingle	288,743	Nov. 20	1208	330	25	732
Peas and beans. Machine for shelling green	G. Paci	289,699	Dec. 4	420	{ 117 118 }	25	959
Peas. Machine for hulling and cleaning	J. R. Barker	273,010	Feb. 27	1809	{ 506 507 }	23	778
Peanut cleaner and polisher	C. W. Nicholson	290,914	Dec. 25	1958	541	25	1253
Peat for fuel, &c. Apparatus for preparing and treating	J. B. Hyde	287,679	Oct. 30	2417	652	25	470
Peat. Machine for treating	J. B. Hyde	279,390	June 12	984	274	23	2299
Pedicycle	W. Robinson	278,185	May 22	2044	562	23	1997
Peg-cutter	A. Hanck	275,648	Apr. 10	1026	277	23	1409
Peg-float	W. H. Miller	275,687	Apr. 10	1070	292	23	1417
Pegging-machine	A. Eppler, Jr.	269,840	Jan. 2	26	8	23	7
Pen and holder. Writing	J. G. Hester	278,239	May 22	2115	583	23	2010
Pen and pencil. Combined	R. M. Collard	270,746	Jan. 16	1144	327	23	238
Pen and pencil holder	T. W. F. Smitten	274,836	Mar. 27	2036	567	23	1209
Pen and pencil rack	F. F. Dumke	271,817	Feb. 6	2-3	77	23	491
Pen. Fountain	J. Carr	288,010	Nov. 6	283	80	25	556
Pen. Fountain	S. W. Higgins	271,455	Jan. 30	2023	584	23	405

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Di'g.	Vol.	Page.
Pen. Fountain.....	F. Holland.....	276,692	May 1	203	52	23	1659
Pen. Fountain.....	L. S. Lewis.....	272,066	Feb. 13	600	162	23	556
Pen. Fountain.....	J. B. Mitchell.....	284,318	Sept. 4	196	55	24	938
Pen. Fountain.....	J. S. Purdy.....	279,104	June 5	616	168	23	2228
Pen. Fountain.....	J. H. Shields.....	287,060	Oct. 23	1621	446	25	313
Pen. Fountain.....	J. E. Tegardine.....	278,201	May 22	2068	570	23	2002
Pen. Fountain.....	H. A. Walke.....	274,679	Mar. 27	1857	517	23	1177
Pen. Fountain.....	P. E. Wirt.....	288,230	Nov. 13	619	170	25	624
Pen fountain attachment.....	T. and L. A. Hawkes.....	275,825	Apr. 17	1255	345	23	1456
Pen-holder.....	R. S. Cutting and H. A. Spencer.....	285,578	Sept. 25	1723	489	24	1225
Pen-holder.....	E. Fischer.....	278,697	June 5	27	8	23	2129
Pen-holder.....	D. Hepp.....	276,399	Apr. 24	1969	545	23	1587
Pen-holder.....	J. G. Hester.....	276,535	Apr. 24	2136	594	23	1616
Pen-holder.....	J. Reckendorfer.....	286,066	Oct. 2	353	99	25	65
Pen-holder.....	P. Schrag.....	273,615	Mar. 6	480	129	23	916
Pen holder and cleaner. Combined.....	C. Goodwin.....	283,389	Aug. 21	1115	315	24	713
Pen-holder. Fountain.....	C. T. Shafer.....	279,025	June 5	505	137	23	2209
Pen-holder. Fountain.....	W. Vale.....	290,890	Dec. 25	1848	511 512	25	1234
Pen-holder. Quill.....	T. O'Donnell.....	271,107	Jan. 23	1581	455	23	320
Pen. Mechanical.....	I. Henestroza.....	270,061	Jan. 2	276	80, 81	23	56
Pen or pencil holder.....	W. Lane.....	281,525	July 17	1483	407	24	273
Pen-rack.....	R. Charles.....	277,003	May 8	615	161	23	1737
Pen-rack.....	S. Ustick.....	282,936	Aug. 7	543	153	24	597
Pen. Stylographic.....	J. McKenzie.....	281,903	July 24	1980	542	24	363
Pen. Stylographic.....	E. B. Niumo.....	284,569	Sept. 4	500	140	24	988
Pen. Stylographic.....	F. J. Seybold.....	272,161	Feb. 13	716	197	23	575
Pen. Stylographic fountain.....	J. Holland.....	275,912	Apr. 17	1359	374	23	1475
Pen. Stylographic fountain.....	M. H. Kerner.....	280,630	July 3	349	97	24	62
Pen. Stylographic fountain.....	M. H. Kerner and C. L. Downes.....	276,425	Apr. 24	1999	554	23	1592
Pen. Stylographic fountain.....	E. W. Morton.....	277,149	May 8	810	213	23	1771
Pen. Stylographic fountain.....	L. D. Heller.....	281,876	July 24	1943	531	24	357
Pen-support and hand-rest.....	G. R. Hughes and T. Carwardine.....	281,998	July 24	2086	572	24	382
Pens. Apparatus for supply of ink to.....	W. C. Demain.....	274,732	Mar. 27	1911	534	23	1187
Pens. Machine for cutting and forming ruling.....	J. Hoffman.....	270,567	Jan. 9	910	262	23	187
Pencil.....	R. Lockwood.....	270,959	Jan. 23	1408	405	23	291
Pencil-case.....	R. M. Collard.....	287,907	Nov. 6	146	43	25	533
Pencil-case.....	W. S. Hicks and H. Isley.....	280,313	June 26	2088	587	23	2504
Pencil-case.....	J. Holland.....	279,388	June 12	983	273	23	2299
Pencil-case.....	J. H. Knapp.....	271,872	Feb. 6	345	95	23	501
Pencil case. Lead.....	W. E. Gard.....	276,800	May 1	347	93	23	1687
Pencil-clasp.....	J. F. Foster.....	273,268	Mar. 6	29	9	23	839
Pencil-clasp.....	S. Wales.....	289,476	Dec. 4	126	36	25	909
Pencil-fastener.....	J. F. Webster.....	276,512	Apr. 24	2105	585	23	1611
Pencil-holder.....	A. T. Cwerdinski.....	289,392	Dec. 4	24	8	25	891
Pencil-holder.....	B. Eybel.....	271,439	Jan. 30	2003	578	23	402
Pencil-holder.....	C. H. Hilliard and W. C. Green.....	273,277	Mar. 6	39	12	23	841
Pencil-holder.....	L. O. Hull.....	287,400	Oct. 23	2048	557	25	390
Pencil-holder.....	E. Tyrrell.....	290,291	Dec. 18	1139	320	25	1103
Pencil. Lead.....	G. L. Jaeger.....	272,700	Feb. 20	1406	394	23	701
Pencil or crayon holder.....	J. S. Birch.....	276,659	May 1	148	38	23	1651
Pencil or crayon holder.....	B. A. Fiske.....	272,948	Feb. 27	1740	486	23	765
Pencil or crayon holder.....	F. Hardtmuth.....	276,812	May 1	360	96	23	1689
Pencil or crayon holder.....	E. S. Johnson.....	290,988	Dec. 25	2069	569	25	1270
Pencil-pointer.....	W. N. Bartholomew.....	288,156	Nov. 6	414	125	25	585
Pencil-sharpener.....	W. K. Foster.....	290,564	Dec. 18	1517	417	25	1169
Pencil sharpener. Slate.....	W. P. Kirkland.....	285,757	Sept. 25	1959	535	24	1265
Pencil sharpener. Slate.....	G. C. Price and G. W. F. Cook.....	284,326	Sept. 4	298	58	24	930
Pencil-sharpening machine.....	B. Williams.....	282,623	Aug. 7	416	117	24	574
Pencils. Manufacture of lead.....	P. E. Gonon.....	277,707	May 15	1463	395	23	1889
Pendulum.....	J. H. Knapp.....	286,545	Oct. 9	954	257	25	184
Pendulum.....	C. S. Lewis.....	290,186	Dec. 11	998	281	25	1071
Pendulum. Compensating.....	O. G. Retsloff.....	272,978	Feb. 27	1772	496	23	771
Pendulum. Compensating.....	A. S. Crane.....	288,027	Nov. 6	301	85	25	658
Pendulum. Compensating.....	F. A. Mills and T. A. Mossop.....	279,176	June 12	712	194	23	2255
Pendulum. Compensation.....	D. Slive.....	279,828	June 19	1497	418	23	2393
Pendulum. Compensation.....	A. T. Williams. (Reissue).....	10,425	Dec. 11	1013	285	25	1074
Pendulum-escapement.....	C. O. White.....	284,788	Sept. 11	781	218	24	1042
Pepper and salt box and napkin-ring. Combined.....	F. Ratcliff.....	279,806	June 19	1467	411	23	2388
Pepper cruet and mill.....	G. D. Barr.....	274,255	Mar. 20	1302	358	23	1073
Pepsin. Manufacture of.....	C. L. Jensen.....	286,138	Oct. 2	439		25	82
Perambulator.....	T. F. Simmons.....	281,933	July 24	2012	551	24	370
Perambulators. Canopy-top for.....	H. Eichling and A. S. Fitch.....	281,675	July 24	1679	457	24	311
Perch and parasite-trap. Combined.....	J. Bagot.....	273,434	Mar. 6	251	68	23	877
Percolator.....	E. W. Carter and D. R. Smith.....	288,547	Nov. 13	953	262	25	681
Percolator. Druggist's.....	E. L. Sloenn.....	278,284	May 22	2173	598	23	2019
Perforating-machine.....	A. Partridge.....	290,102	Dec. 11	899	256	25	1053
Perforator.....	T. M. Foote.....	270,213	Jan. 9	461	134 135	23	101
Perfumery-stand.....	A. Wanner.....	289,586	Dec. 4	268	75	25	935
Permutation-lock.....	W. S. Chedister.....	273,466	Mar. 6	292	80	23	883
Permutation-lock.....	C. E. Lee.....	275,673	Apr. 10	1053	329	23	1414
Permutation-lock.....	O. E. Pillard.....	270,114	Jan. 2	329	97	23	67
Permutation-lock.....	R. Sarlls and V. C. Holland.....	276,081	Apr. 17	1557	429	23	1509
Permutation-lock.....	R. Sarlls and V. C. Holland.....	276,477	Apr. 24	2062	572	23	1603
Permutation-lock.....	J. W. Schoonmaker.....	272,982	Feb. 27	1776	497	23	771
Permutation-lock.....	R. Schuetz.....	288,871	Nov. 20	1356	372	25	759
Permutation-lock.....	L. P. Whitney and T. K. Keith.....	279,298	June 12	851	236	23	2278
Pessary.....	C. Rahm.....	273,603	Mar. 6	463	126	23	914
Pessary.....	W. W. Turver.....	288,140	Nov. 6	428	120	25	582
Pessary. Stem.....	G. W. Lutz.....	277,424	May 8	1124	302	23	1826
Pestle-handle.....	G. Maris.....	278,575	May 29	2558	693	23	2096
Petroleum. Apparatus for vaporizing and burning.....	G. W. McAllister.....	272,287	Feb. 13	870	243	23	603
Petroleum. Apparatus for vaporizing and burning.....	D. M. Graham.....	276,578	May 1	46	14	23	1635



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Petroleum-jelly. Process of and apparatus for preparing	E. D. Kendall	284,437	Sept. 4	338	94	24	960
Photograph	C. C. Reynolds	287,166	Oct. 24	1752	{ 480 481 }	25	338
Phosphates of iron and alumina. Treating	A. H. Keeford and T. B. Stillman	281,635	July 17	1619		24	295
Phosphates. Preparation and production of mineral.	J. J. Knight	276,113	Apr. 17	1638		23	1523
Phosphatic slags for manure, &c. Treating	G. Roconr	284,674	Sept. 11	634		24	1017
Phosphorus and iron of forge-cinder. Utilizing the.	J. Reese	278,737	June 5	78		23	2137
Phosphorus and steel scrap in the basic process. Utilizing	J. Reese	285,431	Sept. 25	1561		24	1194
Photo-micrographic camera	P. Prado	274,515	Mar. 27	1664	462	23	1142
Photograph-embossing device	F. B. Clench	269,830	Jan. 2	15	5	23	5
Photograph-frame. Extension	W. E. Goodenough	270,785	Jan. 16	1190	343	23	247
Photographers' backgrounds, &c. Apparatus for changing and storing	W. E. Lindop	281,532	July 17	1491	{ 409 410 }	24	275
Photographer's camera-plate holder	F. G. and A. C. Sargent	289,629	Nov. 27	1555	429	25	802
Photographer's chair	W. S. Liscomb	282,737	Aug. 7	321	92	24	556
Photographer's eye-rest and screen. Combined	T. De Codezo	270,401	Jan. 9	695	205	23	145
Photographers. Machine for packing dry-plates for	P. H. Wheeler	282,939	Aug. 7	548	155	24	598
Photographer's retouching-point. Electric	J. T. Burke	285,008	Sept. 18	1052	{ 294 295 }	24	1098
Photographic camera	S. V. Allen	274,079	Mar. 13	1068	294	23	1025
Photographic camera	M. Flammang	278,788	June 5	152	45	23	2148
Photographic camera	M. Flammang	283,589	Aug. 21	1351	378	24	757
Photographic camera	B. W. Kilburn	286,447	Oct. 9	837	227	25	163
Photographic camera	G. S. North	276,455	Apr. 24	2036	565	23	1599
Photographic camera	W. Schmid	270,133	Jan. 2	358	104	23	73
Photographic camera	W. Thomas	272,173	Feb. 13	728	201	23	578
Photographic camera	W. H. Walker	276,311	Apr. 24	1845	514	23	1566
Photographic camera-box	E. B. Barker	272,622	Feb. 20	1310	{ 365 366 }	23	684
Photographic camera-box	E. B. Barker	283,952	Aug. 28	1797	508	24	850
Photographic camera. Folding	G. F. E. Pearsall	275,073	Apr. 3	252	70	23	1269
Photographic-camera shutter	D. M. Little	284,645	Sept. 11	592	167	24	1010
Photographic-camera stand	M. Flammang	282,182	July 31	2348	647	24	429
Photographic cameras. Plate-holder for	J. Barnett	271,402	Jan. 30	1956	505	23	393
Photographic cameras. Plate-holder for	M. Flammang	271,826	Feb. 6	291	80	23	492
Photographic cameras. Plate-holder for	M. Flammang	289,166	June 26	1903	536	23	2472
Photographic cameras. Plate-holder for	W. H. Lewis	272,717	Feb. 20	1425	399	23	704
Photographic cameras. Pneumatic shutter for	H. B. Perry	287,858	Nov. 6	80	24	25	521
Photographic developing pan or tray	W. I. Adams	289,951	Dec. 11	718	293	25	1019
Photographic dry-plate holder	G. F. E. Pearsall	287,857	Nov. 6	78	24	25	521
Photographic dry-plates. Box for	E. Klaubner	290,587	Dec. 18	1539	423	25	1172
Photographic exposing apparatus	R. Schletterhoss	284,073	Aug. 28	1962	547	24	877
Photographic negatives. Machine for retouching	J. Densmore	290,217	Dec. 18	1048	{ 294 295 }	25	1088
Photographic pictures. Finishing	N. L. Stone	286,343	Oct. 9	716	192	25	140
Photographic-plate holder	E. L. Bergstresser	281,660	July 24	1659	452	24	307
Photographic-plate holder	F. W. Jackson	277,737	May 15	1495	406	23	1895
Photographic-plate holder	M. W. Newcomb	282,756	Aug. 7	341	97	24	560
Photographic plates. Apparatus for washing	H. C. Price	276,875	May 1	438	117	23	1703
Photographic plates. Case for transporting	H. T. Anthony	283,455	Aug. 21	1195	336	24	728
Photographic printing	R. B. West	273,206	Feb. 27	2050		23	821
Photographic shield	E. B. Barker	273,008	Feb. 27	1807	506	23	777
Photographing changing or moving objects. Method of and apparatus for	E. J. Mnybridge	279,878	June 19	1557	{ 435 436 }	23	2404
Photographs. Coloring	J. W. Hyman	273,995	Mar. 13	963		23	1007
Photographs. Coloring	C. L. Wright	290,655	Dec. 18	1623		25	1187
Photographs. Process of and apparatus for coloring	J. Chaîne, A. Durand, and F. S. De Chaligny	271,789	Feb. 6	248	69	23	484
Phylloxera. Destruction of	B. Casanova	271,036	Jan. 23	1492		23	305
Physician's portable case	S. J. Steiner	284,083	Aug. 28	1976	550	24	820
Piano	D. McCarthy and G. R. Davis	276,258	Apr. 24	1778	495	23	1555
Piano-action	I. Bullard	290,527	Dec. 18	1465	405	25	1160
Piano-action	R. E. Letton	290,692	Dec. 25	1677	462	25	1292
Piano-action	G. F. T. Steinway	270,914	Jan. 23	1346	388	23	282
Piano-actions. Pivot-joint for	F. L. Becker	285,785	Oct. 2	7	3	25	4
Piano attachment	L. Alexander	277,824	May 15	1598	437	23	1914
Piano case. Upright	P. Gmeblin	286,425	Oct. 9	811	220	25	158
Piano cover. Upright	T. F. Kraemer	270,443	Jan. 9	750	220	23	155
Piano-forte	W. Fischer	275,759	Apr. 10	1165	319	23	1433
Piano-forte action	J. Mallinson	270,322	Jan. 9	589	{ 173 174 }	23	125
Piano-keys, &c. Composition for covering	W. F. Rikeman	271,120	Jan. 23	1595	459	23	322
Piano-keys. Machine for smoothing	J. Kitz	272,140	Feb. 13	695	190	23	572
Piano music-rack	L. Soule	277,951	May 22	1752	478	23	1946
Piano-panel protector	E. J. Pasmore and C. Y. McClure	289,130	Nov. 27	1676	465	25	824
Piano-pedal attachment	E. H. Plowe	283,019	Aug. 14	655	185	24	624
Piano-pedal stool	W. Winter	290,163	Dec. 11	971	274	25	1066
Piano sounding-board	J. Diehl	280,362	July 3	29	8	24	7
Piano sounding-board	R. A. Murray	290,096	Dec. 11	889	232	25	1050
Piano-strings. Spinning-lathe for winding	F. Ramacioti	280,512	July 3	215	56, 57	24	39
Pianos. Stringing	A. J. Gillespie	275,818	Apr. 17	1247	343	23	1455
Pianos. Stringing	H. C. Richards	280,953	July 10	765	212	24	140
Pianos. Stringing	J. P. Richardson	281,794	July 24	1842	504	24	339
Pianos. Stringing	C. F. Southack	279,454	June 12	1057	292	23	2311
Pianos. Stringing	L. C. Therrien	288,279	Nov. 13	609	167	25	622
Pick	W. Cook	271,797	Feb. 6	255	71	23	485
Pick	J. C. Cramer	272,661	Feb. 20	1361	382	23	693
Pick	W. C. Ferguson, G. D. Grismore, and W. M. Wetherill	285,804	Oct. 2	26	9	25	7
Pick	W. A. Wright	277,183	May 8	850	225	23	1777
Pick	W. A. Wright	286,986	Oct. 16	1522	419	25	288
Pick. Miner's	S. Herron	286,815	Oct. 16	1301	354	25	251

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Pick. Miner's.....	H. F. Seybert.....	271,929	Feb. 6	421	115	23	514
Picker: See Cotton-picker. Shoddy-picker. Fruit-picker.							
Picker.....	M. Brazeau.....	272,118	Feb. 13	670	183	23	568
Picker or opener for fibrous materials.....	C. L. Gaddard.....	288,327	Nov. 13	673	185	25	632
Picket-pointing machine.....	W. G. Hatcher.....	285,033	Sept. 18	1088	304	24	1104
Pickle-jar fork attachment.....	C. De Quillfeldt.....	277,467	May 15	1184	318	23	1843
Picture-bracket.....	C. Megow.....	280,057	June 26	1786	501	23	2450
Picture-exhibitor.....	J. L. and F. W. Bassett, and A. E. Hutchins.	280,556	July 3	202	71	24	47
Picture-exhibitor.....	H. S. Sanderson and E. B. Simmons.	279,504	June 12	1116	308	23	2320
Picture-exhibitor.....	M. Schleissner.....	281,143	July 10	992	277	24	182
Picture-exhibitor. Revolving.....	A. Nelson.....	281,914	July 24	1990	545	24	365
Picture-frame.....	E. G. Miller.....	273,378	Mar. 6	185	50	23	865
Picture-frame.....	P. Parrett.....	276,624	May 1	97	26	23	1644
Picture-frame corner.....	T. D. Worrall.....	269,907	Jan. 2	100	30	23	21
Picture-frame hanger.....	C. F. Sleeper.....	285,517	Sept. 25	1659	466	24	1212
Picture-frame holder.....	A. J. Weaver.....	282,427	July 31	2653	728	24	483
Picture-frame molding.....	J. Moore.....	284,316	Sept. 4	195	55	24	937
Picture-frame protective pad.....	G. S. Hazard.....	280,818	July 10	600	168	24	112
Picture-frames. Constructing.....	T. C. Vail.....	286,872	Oct. 16	1373	376	25	263
Picture-hanger.....	S. B. Ellithorp.....	287,113	Oct. 23	1691	463	25	327
Picture-hanger.....	A. Kluge.....	271,715	Feb. 6	153	42	23	467
Picture-mat-cutting machine.....	E. L. Gaylord.....	286,422	Oct. 9	808	219	25	157
Picture-mount.....	S. A. Jackson.....	288,060	Nov. 6	338	94	25	565
Picture mounts and frames. Manufacturing.....	C. A. Wright.....	278,316	Apr. 3	553	151	23	1320
Picture. Sectional.....	A. Operti.....	279,976	June 26	1682	472	23	2432
Picture. Sliced.....	W. Stranders.....	280,878	July 10	668	188	24	125
Pictures. Device for copying and enlarging.....	L. A. Hagan.....	275,822	Apr. 17	1253	344	23	1455
Pie-plate.....	W. Parsons.....	274,219	Mar. 20	1256	346	23	1065
Pier or ferry rack.....	H. Case.....	288,308	Nov. 13	641	176	25	628
Pigment. Manufacture of a white.....	C. F. Claus.....	272,375	Feb. 13	977	.....	23	622
Pigment. White.....	J. B. Freeman.....	286,918	Oct. 16	1435	.....	25	273
Pile-driver.....	R. J. Cram.....	284,282	Sept. 4	155	43	24	930
Pile-driver.....	J. Roy.....	278,603	May 29	2589	707	23	2101
Pile-driver.....	J. P. Seawell.....	280,407	July 3	83	22	24	17
Pile-driver. Hydraulic.....	J. W. Surprenant and J. E. Ferguson.	283,300	Aug. 14	991	277	24	685
Pile-driver. Steam.....	T. M. Skinner.....	273,904	Mar. 13	856	232	23	988
Pile. Iron.....	E. Gray and B. R. Abbott.....	272,426	Feb. 20	1063	299	23	640
Pile. Iron and steel.....	W. G. Howell.....	271,637	Feb. 6	66	18	23	452
Pill-machine.....	J. Brooks.....	290,524	Dec. 18	1560	{ 403 404 }	25	1158
Pile of combined iron and steel.....	W. G. Howell.....	281,366	July 17	1285	356	24	239
Piles. Preserving and protecting.....	D. H. Valentine.....	282,807	Aug. 7	397	112	24	570
Pill-coating machine.....	G. F. Chappell.....	281,973	July 24	2061	565	24	377
Pills. Machine for coating.....	C. C. Wells.....	273,328	Mar. 6	114	33	23	853
Pills. Self-feeding machine for coating.....	G. F. Chappell.....	272,207	Feb. 13	772	214	23	585
Pills with gelatine. Machine for coating.....	W. C. Franciscus.....	276,385	Apr. 24	1952	540	23	1584
Pills with gelatine. Machine for coating.....	G. W. Platt.....	278,456	May 29	2422	660	23	2072
Pillow.....	J. E. Everiss.....	273,974	Mar. 13	939	258	23	1002
Pillow-block.....	J. B. Pitchford.....	283,657	Aug. 21	1424	399	24	771
Pillow, bolster, or mattress.....	A. Weigell.....	276,650	May 1	131	35	23	1649
Pillow. Dress.....	G. W. Thompson.....	274,673	Mar. 27	1849	515	23	1176
Pillow-sham holder.....	J. A. Fordon.....	282,185	July 31	2350	647	24	429
Pillow-sham holder.....	W. G. Foster.....	276,574	May 1	39	11	23	1634
Pillow-sham holder.....	M. Harris.....	278,705	June 5	38	11	23	2131
Pillow-sham holder.....	J. H. Miller.....	278,581	May 29	2562	699	23	2096
Pillow-sham holder.....	S. R. S. Ufford.....	288,515	Nov. 13	920	252	25	675
Pillow-sham holder and mosquito-bar.....	W. E. Davis.....	270,578	Jan. 16	926	268	23	198
Pillow-sham support.....	E. J. Rawlings.....	269,880	Jan. 2	66	20	23	15
Pillow-sham supporter and lifter.....	W. F. Parker.....	279,978	June 26	1624	473	23	2432
Pillow. Spring.....	R. Kershner.....	283,616	Aug. 21	1379	385	24	762
Pillow. Water or air.....	W. E. Fitch.....	283,767	Aug. 23	1574	445	24	811
Pin: See Blanket-pin. Printing-press gage-pin. Button-pin. Rolling-pin. Clasp pivot-pin. Safety-pin. Clothes-pin. Spring-pin. Curtain-pin. Steam-engine crank-pin. Hair-pin. Tuning-pin.							
Pin.....	B. A. Ballou.....	287,086	Oct. 23	1654	454	25	319
Pin and stud.....	G. W. McGill.....	285,641	Sept. 25	1808	515	24	1240
Pincushion.....	F. Ratcliff.....	279,607	June 19	1468	412	23	2389
Pin for neck-wear shields.....	J. T. Lynch.....	275,234	Apr. 3	451	125	23	1303
Pin-package.....	V. Fountain.....	271,628	Feb. 6	294	80	23	403
Pin safety-catch.....	G. W. Washburn.....	288,897	Nov. 20	1388	383	25	765
Pins for brooches. Die for forming the heads of.....	S. Moore.....	290,912	Dec. 25	1956	540	25	1252
Pinchers.....	E. and J. Brothers.....	278,680	June 5	6	2	23	2126
Pinchers for setting box-corners.....	C. H. Olson.....	278,262	May 22	2151	591	23	2015
Pinking-machine.....	D. W. Osborne and E. Broseman.	288,847	Nov. 20	1329	361	25	754
Pipe: See Sheet-metal pipe. Telegraph-cable pipe. Smoking-pipe. Tobacco-pipe. Soil and waste pipe. Water, gas, and drain pipe. Stand-pipe. Water-tank feed-pipe. Stove-pipe.							
Pipe and conduit for conveying liquids, &c.....	S. M. Allen.....	284,794	Sept. 11	788	220	24	1043
Pipe and hose coupling.....	J. A. Perrottet.....	285,157	Sept. 18	1236	348	24	1129
Pipe-bending machine.....	J. M. Everts.....	275,029	Apr. 3	198	53	23	1259
Pipe-clamp.....	H. M. Dixon.....	288,035	Nov. 6	310	87	25	560
Pipe-cleaver.....	J. Clark.....	283,205	Aug. 14	876	244	24	663
Pipe connection. Ball and expansion.....	W. G. Abol.....	290,196	Dec. 18	1018	287	25	1083
Pipe-coupling.....	F. Baumann.....	272,191	Feb. 13	750	207	23	582



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Pipe-coupling	M. M. Camp	283,072	Aug. 14	712	200	24	634
Pipe-coupling	A. H. Emery	279,087	June 5	584	159	23	2923
Pipe-coupling	T. P. Hardy	282,312	July 31	2500	687	24	456
Pipe-coupling	E. S. Leaycraft	279,575	June 19	1208	334	23	2343
Pipe-coupling	R. McConnell	290,446	Dec. 18	1350	373	25	1139
Pipe-coupling	G. Russell and R. W. Gordon	284,146	Aug. 23	2060	571	24	894
Pipe-coupling	J. Walter	284,096	Aug. 28	1991	555	24	883
Pipe-coupling	L. Zistel	284,350	Sept. 4	234	65	24	944
Pipe-coupling, Air	C. L. Hobbs	278,961	June 5	427	117	23	2196
Pipe-fitting and threading machine	F. Doherty	284,285	Sept. 4	157	43	24	931
Pipe-coupling, Reducing	T. P. Hardy	290,045	Dec. 11	838	237	25	1041
Pipe-cutter	E. F. Barnes	282,435	July 31	2669	731	24	486
Pipe-cutter	E. F. Barnes	287,899	Nov. 6	139	41	25	532
Pipe-cutter	I. Kinney	271,250	Jan. 30	1752	507	23	357
Pipe-cutter	J. Miller	274,631	Mar. 27	1798	500	23	1167
Pipe-cutter	C. C. Walworth	279,207	June 12	742	204	23	2260
Pipe cutter and tongs	J. W. Calef	272,526	Feb. 20	1185	331	23	662
Pipe cutting and threading machine	J. B. Douglas	273,348	Mar. 6	141	39, 40	23	857
Pipe-cutting machine	J. L. Truax	282,473	July 31	2708	{ 745 746 }	24	492
Pipe-elbow, Sheet-metal	A. F. Peters	272,764	Feb. 20	1487	418	23	715
Pipe fitting and threading machine	A. L. Rose	284,904	Sept. 11	909	256	24	1067
Pipe-flanges, Machine for drilling	Z. E. Coffin	272,857	Feb. 27	1626	455	23	747
Pipe-flanges, Machine for turning	Z. E. Coffin	283,376	Aug. 21	1102	{ 310 311 }	24	711
Pipe-flanging machine	R. C. Nugent	286,569	Oct. 9	986	{ 265 266 }	25	189
Pipe into sections, Apparatus for cutting sewer	R. W. Lylo	272,727	Feb. 20	1440	404	23	707
Pipe-joint	A. H. Emery	279,086	June 5	583	159	23	2923
Pipe-joint	J. Kline	278,800	June 5	168	49	23	2151
Pipe-joint, Earthenware	J. S. Tibbals	285,179	Sept. 18	1262	354	24	1134
Pipe-joint ferrule	J. F. Sullivan	278,061	May 22	1885	516	23	1970
Pipe-joint, Flexible	M. Walker	275,098	Apr. 3	288	79	23	1276
Pipe-joints, Device for filling	T. Watkins	274,868	Mar. 27	2093	578	23	1215
Pipe, Machine for shaping and riveting spiral	J. B. Root	283,923	Aug. 28	1755	{ 495 496 }	24	841
Pipe-making, Forming molds and cores in	F. Shickle	289,035	Nov. 27	1561	431	25	803
Pipe, Manufacture of	W. Ireton	273,738	Mar. 13	643	171	23	952
Pipe-mold	F. Shickle	289,034	Nov. 27	1561	431	25	803
Pipe, Mold for making cement	N. W. Stowell	270,704	Jan. 16	1092	312	23	228
Pipe, Molding apparatus for the manufacture of	W. Ireton and S. E. Whitelock	278,663	May 29	2667	730	23	2114
Pipe-molding machine	F. Shickle	289,036	Nov. 27	1563	432	25	804
Pipe-nipple holder	I. M. Jones	289,419	Dec. 4	56	16	25	896
Pipe or hose coupling	W. F. Cassidy	285,732	Sept. 25	1927	546	24	1260
Pipe or nut wrench	D. P. Foster	282,298	July 31	2487	683	24	454
Pipe-threading machine	J. E. Sanders	286,333	Oct. 9	705	{ 187 188 }	25	138
Pipe-wrench	S. A. Bostwick	271,595	Feb. 6	12	3	23	442
Pipe-wrench	F. Cajal	270,741	Jan. 16	1137	326	23	237
Pipe-wrench	A. W. Case	280,793	July 10	574	160	24	108
Pipe-wrench	G. W. Cook	283,378	Aug. 21	1106	312	24	711
Pipe-wrench	J. P. Haigh	272,955	Feb. 27	1746	488	23	766
Pipe-wrench	E. H. Robbins	282,372	July 31	2581	708	24	470
Pipe-wrench	F. A. Simonds	282,126	July 31	2276	625	24	418
Pipe-wrench	J. L. Taylor	287,193	Oct. 23	1789	491	25	344
Pipe-wrench	J. J. Tower	280,099	June 26	1835	516	23	2459
Pipe-wrench	C. D. Volkmann	289,188	Nov. 27	1747	486	25	836
Pipe-wrench	H. B. Williams	275,106	Apr. 3	297	82	23	1277
Pipes, Conduit for street	E. Wenigmann	285,328	Sept. 18	1427	403	24	1165
Pipes, Laying underground	T. Hibbard	289,000	Nov. 27	1515	419	25	796
Pipes, Machine for lining water or other	G. W. Pearsons	274,138	Mar. 20	1149	317	23	1046
Pipes, Manufacture of coiled metallic	A. D. Brock	276,763	May 1	306	79	23	1678
Pipes of concrete, Apparatus for forming under-ground	W. M. Campbell	272,410	Feb. 20	1043	292	23	637
Piping	M. H. Merriam	270,965	Jan. 23	1414	407	21	292
Piping	S. S. Spear	285,850	Oct. 2	87	26	25	18
Piping, Notching device for	M. H. Merriam	270,967	Jan. 23	1416	407	23	293
Piston	S. Maltby	277,305	May 8	988	{ 265 266 }	23	1802
Piston	W. Rowan	273,161	Feb. 27	1998	562	23	811
Piston-engine, Oscillating	O. H. Venner	280,974	July 10	789	219	24	145
Piston engine, Rocking	G. R. Winkler	277,648	May 15	1398	{ 376 377 }	23	1878
Piston for steam and other engines	A. MacLaine	288,092	Nov. 6	363	101	25	569
Piston-head spring	G. W. Williams	291,009	Dec. 25	2095	577	25	1274
Piston-rods from cross-heads, Device for removing	J. E. Worswick	282,828	Aug. 7	421	119	24	575
Pitch-fork attachment	F. H. Marshall	273,568	Mar. 6	429	115	23	908
Pitcher, Ice	H. Ballard	274,263	Mar. 20	1311	362	23	1075
Pitcher, Sirup	W. C. Caldwell	280,012	June 26	1728	484	23	2440
Pitcher-stand	W. H. Fitz Gerald	282,875	Aug. 7	481	135	24	585
Pitchers, Rest for ice	J. Brauer	280,520	Dec. 18	1456	402	25	1158
Pitman	E. Huber and F. Strobel	286,008	Oct. 2	281	79	25	53
Pitman, Ball	G. F. Messinger	278,812	June 5	181	53	23	2153
Pitman-box	D. F. Oliver	289,779	Dec. 4	503	139	25	974
Pitman-connection for mowers, &c	W. Ganse	286,603	Oct. 16	1034	240	25	204
Pitman-coupling	A. and J. Wolf	275,560	Apr. 10	908	246	23	1389
Pitmen off dead-centers, Spring for keeping	C. A. Van Allen	287,485	Oct. 30	2158	586	25	419
Pits or shafts, Apparatus employed in sinking	I. Quintet and A. Denis	284,895	Sept. 11	897	253	24	1064
Pivot-joint, Adjustable	H. N. Low	283,907	Aug. 23	1735	490	24	837
Plaiting and scalloping device, Combined	J. S. Sackett	279,820	June 19	1483	416	23	2391
Plaiting device	E. L. Smith	290,129	Dec. 11	936	265	25	1060
Plaiting-machine	W. Duchemin	288,929	Nov. 20	1425	{ 392 393 }	25	773
Plaiting-machine	B. Frese	275,760	Apr. 10	1166	320	23	1433

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Plaiting-machine.....	W. R. Hallett.....	285,030	Sept. 18	1084	303	24	1104
Plaiting-machine.....	M. W. Jenks.....	270,563	Jan. 9	911	263	23	187
Plaiting-machine.....	M. A. Maybee.....	273,296	Mar. 6	68	20	23	846
Plane.....	F. L. Bailey.....	286,894	Oct. 16	1404	385	25	268
Plane.....	H. B. Beach.....	287,612	Oct. 30	2341	632	25	454
Plane.....	S. R. and A. E. Rust.....	287,584	Oct. 30	2397	621	25	446
Plane. Bench.....	L. Bailey.....	285,546	Sept. 25	1694	478	24	1219
Plane. Bench.....	D. A. Bridges.....	271,509	Jan. 30	2167	624	23	430
Plane. Bench.....	J. Campbell.....	271,219	Jan. 30	1721	498	23	351
Plane. Bench.....	J. Campbell. (Reissue).....	10,394	Oct. 23	2049	557	25	390
Plane. Bench.....	D. M. Fielding.....	277,556	May 15	1292	347	23	1860
Plane. Bench.....	A. T. Goldsborough.....	284,732	Sept. 11	709	198	24	1030
Plane. Bench.....	F. A. Mershon.....	277,767	May 15	1540	418	23	1963
Plane. Bench.....	S. R. and A. E. Rust.....	279,885	June 19	1564	438	23	2405
Plane. Bench.....	J. Siegley.....	269,967	Jan. 2	173	50	23	36
Plane. Bench.....	J. Siegley.....	269,968	Jan. 2	173	50	23	36
Plane. Bench.....	W. Steers.....	284,919	Sept. 11	930	262	24	1070
Plane. Bench.....	L. C. Strong.....	275,538	Apr. 10	879	238	23	1384
Plane. Bench.....	L. C. Strong.....	275,539	Apr. 10	881	238	23	1384
Plane. Cavity.....	J. England.....	270,769	Jan. 16	1169	334	23	243
Plane. Joiner's.....	H. B. Beach.....	289,332	Nov. 27	1920	533	25	871
Plane. Joiner's.....	W. B. Fenn.....	287,371	Oct. 23	2013	547	25	384
Plane. Joiner's.....	S. R. and A. E. Rust.....	288,666	Nov. 20	1350	370	25	758
Plane. Match.....	P. Hickey.....	280,175	June 26	1912	537	23	2473
Plane. One-hand.....	L. G. Gilson.....	288,226	Nov. 13	538	149	25	611
Plane. Rabbet.....	J. M. Bennett.....	284,941	Sept. 11	959	269	21	1075
Plane. Rabbet.....	O. Hegglund.....	274,600	Mar. 27	1769	490	23	1161
Plane. Recess.....	H. L. Tupper.....	272,801	Feb. 20	1534	431	23	724
Plane. Stop chamfer.....	J. Leo.....	272,274	Feb. 13	857	239	23	601
Planer. Iron.....	G. E. Brettell. (Reissue).....	10,410	Nov. 27	1969	547	25	878
Planer. Metal.....	H. Bilgram.....	289,607	Dec. 4	293	82	25	939
Planer. Metal.....	J. S. Detrick.....	278,518	May 29	2493	681	23	2085
Planers. Driving device for metal.....	L. T. Pyott.....	273,150	Feb. 27	1984	558	23	809
Planers. Tool-stock for iron.....	W. Gleason.....	280,812	July 10	592	165	24	111
Planescope.....	W. W. Rupert.....	279,439	June 12	1042	289	23	2369
Planing and sawing machine.....	T. J. Glausier.....	287,619	Oct. 23	1571	433	25	303
Planing-machine.....	J. M. Cook and J. S. Perkins.....	274,886	Mar. 27	2103	585	23	1319
Planing-machine.....	H. J. Cordesman, Jr., and J. R. Thomas.....	275,597	Apr. 10	948	237	23	1396
Planing-machine.....	A. P. Creque.....	274,565	Mar. 27	1722	478	23	1153
Planing-machine.....	R. B. Jones.....	278,338	May 29	2276	622	23	2045
Planing-machine cutter.....	L. O. Orton.....	286,630	Oct. 16	1071	288	25	210
Planing-machine feed-roller.....	A. V. Cross.....	280,720	July 3	457	131	24	82
Planing machine. Metal.....	A. B. Bean.....	272,192	Feb. 13	750	207	23	582
Planing machine. Metal.....	F. B. Miles.....	273,873	Mar. 13	823	223	23	983
Planing machine. Metal.....	F. B. Miles.....	275,242	Apr. 3	459	128	23	1305
Planing-machine presser-bar.....	G. E. Newall.....	273,587	Mar. 6	451	121	23	912
Planing-machine sawing attachment.....	J. Witner.....	288,147	Nov. 6	436	123	25	584
Planing-machine table.....	L. O. Orton.....	288,729	Nov. 20	1193	325	25	729
Planing the beveled ends of moldings. Machine for.....	E. L. Gaylord.....	286,421	Oct. 9	807	218	25	156
Planing wheel-fellies. Machine for.....	W. H. Doane and G. W. Bugbee.....	285,587	Sept. 25	1741	492	24	1227
Planing and pavement.....	S. T. Williams.....	276,545	Apr. 24	2147	597	23	1618
Planometer or measuring parallel ruler.....	A. Wachs.....	287,200	Oct. 23	1800	493	25	345
Plant and tree guard.....	J. T. Wallace.....	283,837	Aug. 28	1655	467	24	824
Plant-protector.....	A. G. and L. H. Macomb.....	288,251	Nov. 13	571	159	25	616
Plant-protector.....	A. Thalheimer.....	273,911	Mar. 13	865	235	23	990
Plants. Apparatus for sulphuring.....	J. B. Trazy.....	290,145	Dec. 11	983	269	25	1063
Plants. Support for climbing.....	A. Harroun.....	278,706	June 5	39	11	23	2131
Planter.....	R. S. Carr.....	279,221	June 12	757	209	23	2262
Planter and check-rower. Combined self-dropping corn.....	J. W. Bapple.....	283,459	Aug. 21	1200	337	24	729
Planter and cultivator. Combined.....	J. B. Newsom.....	283,272	Aug. 14	962	268	24	679
Planter and cultivator. Combined corn.....	G. W. Giffard.....	285,889	Oct. 2	139	39, 40	25	27
Planter and cultivator. Combined cotton.....	B. Morris.....	271,101	Jan. 23	1574	453	23	319
Planter and cultivator. Combined cotton and corn.....	E. D. Carter.....	284,609	Sept. 11	551	156	24	1003
Planter and cultivator. Combined seed.....	J. J. Birdsong.....	272,632	Feb. 20	1324	371	23	667
Planter and cultivator. Corn.....	J. C. Weiss.....	270,524	Jan. 9	857	249	23	177
Planter and cultivator. Cotton.....	J. H. Hicks.....	275,651	Apr. 10	1029	272	23	1410
Planter and cultivator. Seed.....	R. J. Harrison.....	276,034	Apr. 17	1502	414	23	1199
Planter and drill combined. Corn.....	J. Folmer.....	289,342	Nov. 27	1930	536	25	872
Planter and fertilizer. Combined corn.....	G. H. Saltsman.....	277,513	May 15	1234	332	23	1821
Planter and fertilizer-distributor. Combined.....	J. W. Cook.....	290,538	Dec. 18	1477	408	25	1162
Planter and fertilizer-distributor. Combined cotton, corn, and pea.....	J. B. Nelson.....	289,694	Dec. 4	414	116	25	958
Planter and fertilizer-distributor. Combined hand corn.....	M. B. Fuller.....	270,581	Jan. 16	928	268	23	199
Planter and fertilizer-distributor. Combined seed.....	J. W. Jones.....	275,919	Apr. 17	1366	376	23	1476
Planter and fertilizer-distributor. Combined seed.....	M. H. Lincoln.....	277,038	May 8	663	172	23	1745
Planter and fertilizer-distributor. Combined seed.....	J. W. McKenzie and J. F. Powell.....	286,047	Oct. 2	331	92	25	61
Planter and fertilizer-distributor. Combined seed.....	R. S. Wright.....	270,535	Jan. 9	869	253	23	180
Planter and fertilizer-distributor. Cotton-seed.....	A. G. Perry.....	290,920	Dec. 25	1966	543	25	1254
Planter and fertilizer-distributor. Hand seed.....	R. A. Johnson.....	287,132	Oct. 23	1710	468	25	330
Planter and fertilizer-distributor. Seed.....	W. Bradford.....	276,759	May 1	301	77	23	1677
Planter and fertilizer-distributor. Seed.....	W. F. Edwards.....	284,826	Sept. 11	821	229	24	1050
Planter and fertilizer-distributor. Seed.....	R. Platman.....	288,483	Nov. 13	884	240	25	669
Planter and fertilizer-distributor. Seed.....	C. Young.....	287,210	Oct. 23	1813	497	25	348



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Planter and grain-drill. Combined corn.....	H. Diller .....	290,670	Dec. 25	1646	{ 453	25	1197
Planter and guano-distributor. Combined cotton.....	J. A. Elliott .....	287,014	Oct. 23	1561	{ 454		
Planter and marker. Combined corn.....	H. M. Keith .....	283,253	Aug. 14	937	{ 261	24	674
Planter and marker. Corn .....	M. M. Clough .....	290,320	Dec. 18	1178	{ 262		
Planter and marker. Corn .....	H. C. Pratt .....	274,027	Mar. 13	999	274	23	1013
Planter attachment. Corn .....	W. T. McGhee .....	290,447	Dec. 18	1351	373	25	1140
Planter. Automatic check-row .....	W. H. Johnson .....	272,702	Feb. 20	1408	395	23	701
Planter. Automatic check-row corn .....	C. G. Everet .....	272,222	Feb. 13	791	220	23	589
Planter. Bean .....	A. A. Searns .....	278,372	May 29	2318	634	23	2053
Planter check-line reel. Corn.....	G. D. Haworth .....	277,030	May 8	653	170	23	1743
Planter. Check-row .....	J. F. Craig .....	289,967	Dec. 11	765	215	25	1028
Planter. Check-row .....	E. Houck, A. W. Greenlee, and A. S. Houck .....	273,534	Mar. 6	377	100	23	899
Planter. Check-row .....	M. E. Johnson .....	288,444	Nov. 13	830	225	25	600
Planter. Check-row .....	H. L. Long .....	270,232	Jan. 9	483	{ 142	23	104
Planter. Check-row .....	L. J. Odell .....	289,696	Dec. 4	416	{ 143		
Planter check-row attachment. Corn.....	H. D. Jones .....	274,612	Mar. 27	1780	{ 117	23	1163
Planter check-row attachment. Corn.....	J. Kaylor .....	274,123	Mar. 20	1134	{ 495		
Planter check-row attachment. Corn.....	J. Kaylor and J. Fisher .....	282,532	Aug. 7	63	312	23	1043
Planter check-row attachment. Corn.....	E. M. McVicker .....	285,293	Sept. 18	1386	20	24	512
Planter check-row attachment. Corn.....	A. Runstetter and J. A. Marlay .....	282,012	July 24	2103	303	24	1158
Planter check-row attachment. Seed.....	C. P. Parker .....	281,919	July 24	1996	576	24	384
Planter check-row attachment. Corn.....	V. Weber .....	288,528	Nov. 13	934	547	24	366
Planter. Check-row corn .....	W. W. Church .....	289,619	Dec. 4	305	255	25	678
Planter. Check-row corn .....	J. H. Allyn .....	271,676	Feb. 6	108	65	25	941
Planter. Check-row corn .....	J. J. Franklin .....	270,049	Jan. 2	259	29	23	458
Planter. Check-row corn .....	J. K. Voorhees .....	271,167	Jan. 23	1654	75	23	53
Planter check-row lines. Anchor for corn.....	A. Barnes .....	272,402	Feb. 20	1031	479	23	332
Planter check-rower .....	G. S. Briggs .....	288,158	Nov. 6	448	285	23	635
Planter check-rower and drill. Corn.....	B. F. Christ .....	272,855	Feb. 27	1623	{ 125	25	586
Planter check-rower attachment. Corn.....	A. F. Dice .....	281,469	July 17	1415	{ 126		
Planter check-rower attachment. Corn.....	W. J. Hutchins .....	269,940	Jan. 2	140	454	23	747
Planter check-rower attachment. Seed.....	L. Eberhart .....	272,538	Feb. 20	1201	388	24	262
Planter check-rower. Corn.....	M. Barnes .....	279,119	June 12	647	21	23	29
Planter check-rower. Corn.....	L. D. Benner .....	274,259	Mar. 20	1207	335	23	665
Planter check-rower. Corn.....	L. D. Benner .....	279,692	June 19	1344	177	23	2244
Planter check-rower. Corn.....	J. Bradley .....	280,714	July 3	449	360	23	1074
Planter check-rower. Corn.....	G. W. Brown .....	278,500	May 29	2474	374	23	2366
Planter check-rower. Corn.....	G. W. Brown and J. C. Tunnichliff .....	278,653	May 29	2656	129	24	80
Planter check-rower. Corn.....	E. Y. Burgan .....	278,090	May 22	1920	675	23	2081
Planter check-rower. Corn.....	M. Callan, Jr .....	274,266	Mar. 20	1314	727	23	2112
Planter check-rower. Corn.....	W. R. Campbell and W. J. Chambers .....	278,576	June 5	277	527	23	1976
Planter check-rower. Corn.....	A. W. Cash .....	271,788	Feb. 6	246	362	23	1076
Planter check-rower. Corn.....	J. F. Ebert .....	273,827	Mar. 13	763	80	24	2170
Planter check-rower. Corn.....	J. F. Ebert .....	282,508	Aug. 7	38	69	23	483
Planter check-rower. Corn.....	G. W. Platt and J. Overacker .....	289,906	Dec. 11	671	207	23	973
Planter check-rower. Corn.....	F. B. Kendall .....	279,766	June 19	1422	11	24	507
Planter check-rower. Corn.....	F. Litterer and L. McKinniss .....	278,441	May 29	2402	187	25	1011
Planter check-rower. Corn.....	C. S. Locke .....	280,641	July 3	365	397	23	2381
Planter check-rower. Corn.....	L. McKinniss and F. Litterer .....	287,454	Oct. 30	2118	25	23	2068
Planter check-rower. Seed.....	F. C. Randall .....	272,476	Feb. 20	1125	101	24	64
Planter check-rower. Corn.....	J. M. Roberts .....	283,847	Aug. 28	1635	575	25	411
Planter. Combined corn and cotton-seed .....	J. J. Holand .....	274,195	Mar. 20	1218	316	23	651
Planter. Combined corn, cotton, and seed .....	O. F. Jarvis .....	283,347	Aug. 14	1056	460	24	820
Planter. Corn .....	J. W. Adecock .....	272,111	Feb. 13	663	335	23	1059
Planter. Corn .....	R. H. Avery .....	276,745	May 1	279	247	24	698
Planter. Corn .....	L. L. Battle .....	288,399	Nov. 13	780	181	23	566
Planter. Corn .....	J. E. Bering .....	272,404	Feb. 20	1035	71	23	1672
Planter. Corn .....	J. E. Bering. (Reissne) .....	10,320	May 1	565	210	25	651
Planter. Corn .....	L. Bilan .....	270,728	Jan. 16	1120	290	23	636
Planter. Corn .....	G. W. Brown .....	278,497	May 29	2469	156	23	1728
Planter. Corn .....	G. W. Brown .....	278,498	May 29	2471	321	23	234
Planter. Corn .....	G. W. Brown .....	278,499	May 29	2472	{ 673	23	2080
Planter. Corn .....	R. M. Clark .....	289,222	Nov. 27	1785	{ 674		
Planter. Corn .....	W. B. and J. S. Curtis .....	283,213	Aug. 14	885	{ 494	25	844
Planter. Corn .....	D. S. Davis .....	281,981	July 24	2068	{ 495		
Planter. Corn .....	O. P. Dunlop .....	283,330	Aug. 14	1035	247	24	665
Planter. Corn .....	W. M. Eccles .....	290,552	Dec. 18	1405	567	24	379
Planter. Corn .....	G. F. Edison .....	282,288	July 31	2464	20	24	692
Planter. Corn .....	A. C. Evans .....	281,756	July 24	1789	413	25	1165
Planter. Corn .....	A. Fox .....	274,928	Apr. 3	56	679	24	451
Planter. Corn .....	W. G. Gray .....	287,121	Oct. 23	1693	{ 487	24	330
Planter. Corn .....	D. Heckman .....	290,681	Dec. 25	1661	{ 488		
Planter. Corn .....	W. H. Johnson .....	284,858	Sept. 11	859	{ 489	25	1200
Planter. Corn .....	G. Krouhik and L. Bilan .....	287,384	Oct. 23	2023	{ 458		
Planter. Corn .....	W. P. Lanham .....	289,070	Dec. 11	863	{ 459	25	1200
Planter. Corn .....	L. H. Letz .....	283,621	Aug. 21	1383	{ 458		
Planter. Corn .....	J. Linnrott .....	277,495	May 15	1217	241	25	387
Planter. Corn .....	S. V. Main .....	274,351	Mar. 20	1424	245	25	1046
Planter. Corn .....	J. McDaniel .....	272,291	Feb. 13	873	244	23	604
Planter. Corn .....	A. N. Norris .....	276,869	May 1	433	115	23	1702
Planter. Corn .....	B. Nunamacker .....	289,927	Dec. 11	692	194	25	1014
Planter. Corn .....	F. J. Perkins .....	278,455	May 29	2420	660	23	2071

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Planter. Corn.....	B. Phelps.....	284,662	Sept. 11	612	172	24	1013
Planter. Corn.....	B. Phelps.....	284,663	Sept. 11	614	173	24	1014
Planter. Corn.....	B. Phelps.....	284,664	Sept. 11	615	173	24	1014
Planter. Corn.....	C. P. Phelps.....	283,812	Aug. 28	1629	458	24	819
Planter. Corn.....	T. A. Rasmusen.....	286,486	Oct. 9	878	238	25	170
Planter. Corn.....	J. Ressegieu.....	274,382	Mar. 20	1462	400	23	1102
Planter. Corn.....	P. Redenbour.....	286,557	Oct. 9	971	261	25	186
Planter. Corn.....	M. and A. Runstetler.....	281,204	July 10	1074	295 296	24	196
Planter. Corn.....	L. Scofield.....	276,719	May 1	244	61, 62	23	1666
Planter. Corn.....	L. Scofield.....	279,822	June 19	1486	416	23	2391
Planter. Corn.....	J. Selby.....	274,981	Apr. 3	125	35	23	1247
Planter. Corn.....	J. D. Smith.....	285,768	Sept. 25	1977	560	24	1268
Planter. Corn.....	G. P. Turner.....	270,350	Jan. 9	624	184	23	131
Planter. Corn.....	J. S. Ward.....	274,065	Mar. 13	1046	288 289 193	23	1021
Planter. Corn or bean.....	M. C. Wiebers.....	283,051	Aug. 14	689	192	24	629
Planter. Cotton.....	T. M. Barna.....	270,369	Jan. 9	654	192	23	137
Planter. Cotton.....	E. D. Carter.....	278,682	June 5	7	2	23	2126
Planter. Cotton.....	K. Hall.....	275,380	Apr. 10	679	180	23	1350
Planter. Cotton.....	W. A. Horrall.....	286,700	Oct. 16	1162	313	25	226
Planter. Cotton.....	W. M. Lindsay.....	288,077	Nov. 6	356	99	25	568
Planter. Cotton.....	J. Minchener.....	283,135	Aug. 14	786	220	24	646
Planter. Cotton.....	R. M. Pattillo.....	284,474	Sept. 4	379	105	24	968
Planter. Cotton.....	T. N. Seay.....	281,145	July 10	995	278	24	182
Planter. Cotton.....	F. E. Tarver.....	283,682	Aug. 21	1460	411	24	778
Planter. Cotton-seed.....	L. M. Alexander.....	276,742	May 1	276	70	23	1672
Planter. Cotton-seed.....	G. C. Ward.....	273,647	Mar. 6	522	140	23	923
Planter cut-off. Hand.....	S. P. Babcock.....	276,995	May 8	608	159	23	1736
Planter. Duplex hand seed.....	E. A. Spaulding.....	273,628	Mar. 6	497	133	23	919
Planter. Gang corn.....	L. A. Lusk.....	271,722	Feb. 6	161	45	23	468
Planter. Hand.....	D. A. Flummerfelt.....	273,977	Mar. 13	942	259	23	1003
Planter. Hand.....	A. Lynn.....	283,499	Aug. 21	1252	351	24	738
Planter. Hand corn.....	W. Gray.....	290,574	Dec. 18	1527	420	25	1171
Planter. Hand corn.....	W. Hawks.....	275,486	Apr. 10	817	221	23	1374
Planter. Hand corn.....	S. M. Macomber.....	277,757	May 15	1526	414	23	1901
Planter. Hand corn.....	M. Records.....	287,162	Oct. 23	1747	478	25	337
Planter. Hand seed.....	G. B. Clark.....	287,626	Oct. 30	2355	635	25	456
Planter. Potato.....	W. W. Ashby.....	283,059	Aug. 14	699	196	24	631
Planter. Potato.....	L. A. Aspinwall.....	276,994	May 8	606	159	23	1736
Planter. Potato.....	H. D. Herrington.....	288,237	Nov. 13	556	154 155	25	613
Planter. Potato.....	T. Lowe.....	273,560	Mar. 6	415	111	23	905
Planter. Potato.....	R. Wunsche.....	283,317	Aug. 14	1011	283	24	688
Planter. Potato and seed.....	W. H. Little.....	289,672	Dec. 4	371	106 107	25	952
Planter. Seed.....	A. A. Atwood.....	290,385	Dec. 18	1259	353	25	1125
Planter. Seed.....	W. C. Bibb, Sr.....	285,558	Sept. 25	1706	481	24	1221
Planter. Seed.....	G. W. Brown. (Reissue).....	10,294	Mar. 13	1091	301	23	1029
Planter. Seed.....	P. Devening.....	284,397	Sept. 4	292	82	24	953
Planter. Seed.....	N. Evinger.....	281,677	July 24	1681	458	24	311
Planter. Seed.....	J. F. Gehrke.....	276,388	Apr. 24	1956	541 542	23	1585
Planter. Seed.....	J. E. Goodwin.....	282,715	Aug. 7	299	85	24	552
Planter. Seed.....	G. D. Haworth.....	270,219	Jan. 9	469	137	23	102
Planter. Seed.....	G. D. Haworth.....	277,031	May 8	654	170	23	1744
Planter. Seed.....	G. D. Haworth.....	283,780	Aug. 28	1592	450	24	813
Planter. Seed.....	G. D. Haworth.....	283,781	Aug. 28	1594	450 451	24	814
Planter. Seed.....	G. D. Haworth.....	283,782	Aug. 28	1595	451	24	814
Planter. Seed.....	T. J. Jackson.....	290,887	Dec. 25	1929	533	25	1248
Planter. Seed.....	C. Lee.....	276,433	Apr. 24	2007	556	23	1594
Planter. Seed.....	A. M. Lovett.....	278,156	May 22	2004	551	23	1990
Planter. Seed.....	J. E. Lowder.....	273,748	Mar. 13	654	174	23	954
Planter. Seed.....	J. M. Lowrey.....	288,080	Nov. 6	360	100	25	569
Planter. Seed.....	L. Luppen.....	271,345	Jan. 30	1877	544	23	378
Planter. Seed.....	C. Mitchell.....	276,266	Apr. 24	1788	497	23	1557
Planter. Seed.....	T. B. Niles.....	285,652	Sept. 25	1819	518	24	1242
Planter. Seed.....	J. Reynolds.....	286,068	Oct. 2	356	99	25	65
Planter. Seed.....	E. Spiller.....	279,037	June 5	521	142	23	2212
Planter. Seed.....	E. W. Vest.....	285,184	Sept. 18	1267	356	24	1135
Planter. Seed.....	W. R. White.....	283,178	Aug. 14	837	234	24	655
Planter. Seed.....	D. Wise.....	277,397	May 8	1090	293	23	1820
Planter. Seed.....	A. B. Wood.....	285,336	Sept. 18	1433	405	24	1166
Planter. Seed and corn.....	W. H. Montgomery.....	281,386	July 17	1305	361	24	244
Planter. Self-drop corn.....	H. B. Wheeler.....	272,392	Feb. 13	1013	283	23	626
Planter. Sulky check-row corn.....	E. J. Hagan.....	279,241	June 12	779	215	23	2266
Planter. Tobacco.....	S. S. Neblett.....	271,507	Jan. 30	2094	602	23	417
Planter. Tree.....	L. Gairaud.....	283,594	Aug. 21	1357	379	24	758
Planters. Dropping attachment for corn.....	J. A. De Vries.....	290,322	Dec. 18	1181	331	25	1110
Planters. Fertilizing attachment for corn.....	A. C. Evans.....	280,367	July 3	33	9, 10	24	8
Planters. Potato-planting attachment for corn.....	J. A. Hoskins.....	290,233	Dec. 18	1066	298	25	1091
Planters. Spring-metal cut-off for hand.....	S. P. Babcock.....	276,996	May 8	608	160	23	1736
Planters. Trip-wire for check-row corn.....	R. E. Cavinoss and G. McCormick.....	271,419	Jan. 30	1975	570	23	397
Planting attachment. Automatic corn.....	E. Bollette.....	285,560	Sept. 25	1708	482	24	1221
Planting-machine.....	E. J. Tilley.....	269,898	Jan. 2	89	26, 27	23	19
Planting-machine. Cane.....	C. C. Coleman.....	279,709	June 19	1361	379	23	2370
Planting-machine. Seed.....	J. W. Brigham.....	290,389	Dec. 18	1265	355	25	1126
Plaque.....	H. Craighead.....	286,118	Oct. 2	415	113	25	76
Plaques. Manufacture of ornamental.....	J. Jacobson.....	285,038	Sept. 18	1093	305	24	1105
Plastering.....	H. Bissell.....	288,290	Nov. 13	510	141	25	605
Plastering compound.....	J. F. Thompson.....	286,165	Oct. 2	469	.....	25	88
Plastering-surfaces. Metallic.....	J. Stanley.....	290,133	Dec. 11	940	266	25	1060



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Plastic and elastic composition for forming elastic rolls, pads, &c.	G. J. Lesser .....	276,607	May 1	80	.....	23	1641
Plastic and yielding compound. Method of and apparatus for forming thin sheets of a	J. B. Edson .....	283,224	Aug. 14	895	250	24	667
Plastic cement mixture .....	R. H. Martin .....	276,697	May 1	208	.....	23	1660
Plastic composition for tailors' cutting-boards, &c.	M. Hughes .....	286,442	Oct. 9	832	.....	25	162
Plastic material .....	C. S. Lockwood .....	283,793	Aug. 28	1608	.....	24	816
Plastic material .....	C. S. Lockwood .....	283,794	Aug. 28	1609	.....	24	817
Plastic material .....	C. S. Lockwood .....	283,797	Aug. 28	1611	.....	24	817
Plastic material. Ornamenting or applying designs to articles made of	C. S. Lockwood .....	283,795	Aug. 28	1610	.....	24	817
Plastic materials. Compound die for .....	F. A. Nickerson .....	285,058	Sept. 18	1113	311	24	1109
Plastic materials. Die for the manufacture of articles from	F. A. Nickerson .....	285,059	Sept. 18	1114	311	24	1109
Plastic materials. Metal die for .....	F. A. Nickerson .....	285,057	Sept. 18	1112	310	24	1109
Plastic or yielding substances. Cutting up .....	J. G. Baker .....	271,399	Jan. 30	1952	565	23	392
Plastic or yielding substances. Mechanism for cutting up	J. G. Baker .....	271,398	Jan. 30	1949	564	23	392
Plastic paste .....	A. Mencci and T. Deudi .....	279,492	June 12	1102	.....	23	2318
Plate. Pie .....	J. A. Seaman .....	284,244	Sept. 4	113	30	24	923
Platform:							
See Dumping-platform. Window-platform.							
Platform-elevator .....	G. Ruddell .....	278,050	May 22	1875	513	23	1968
Platform-spring .....	J. H. Grogan .....	271,703	Feb. 6	139	39	23	464
Platform-spring .....	J. P. Johnson .....	280,532	July 10	616	173	24	115
Platform-spring connection .....	C. Comstock .....	274,277	Mar. 20	1328	366	23	1078
Plating. Nickel .....	L. F. Dunn .....	278,784	June 5	148	.....	23	2148
Plating. Nickel .....	L. F. Dunn .....	289,337	Nov. 27	1925	.....	25	871
Pliers .....	C. F. Winslow .....	289,052	Nov. 27	1586	438	25	807
Pliers and punch. Combined cutting.	J. Thomson .....	283,833	Aug. 28	1651	465	24	823
Pliers. Cutting .....	T. D. Hotchkiss .....	280,825	July 10	606	169	24	113
Pliers. Cutting .....	J. H. Jencks .....	276,417	Apr. 24	1989	551	23	1590
Pliers for cutting and capping fuse, &c	S. Poole .....	247,159	Oct. 23	1745	478	25	337
Pliers. Watch-maker's .....	C. G. Schellenberger .....	273,612	Mar. 6	478	128	23	916
Plow .....	T. Allenan .....	279,308	June 12	860	238	23	2280
Plow .....	C. Anderson .....	277,185	May 8	851	226	23	1777
Plow .....	C. Anderson and J. Oliver .....	275,744	Apr. 10	1139	312	23	1429
Plow .....	C. Anderson and J. Oliver .....	275,745	Apr. 10	1141	313	23	1429
Plow .....	C. Anderson and J. Oliver .....	275,972	Apr. 17	1425	393	23	1487
Plow .....	C. Anderson and J. Oliver .....	280,777	July 10	556	155	24	105
Plow .....	G. C. Avery .....	290,959	Dec. 25	2021	558	25	1262
Plow .....	M. L. Battle .....	282,694	Aug. 7	264	76	24	545
Plow .....	J. Blaylock .....	280,122	June 26	1857	523	23	2464
Plow .....	L. I. Bodenhamer .....	277,205	May 8	873	232	23	1781
Plow .....	J. Buchanau .....	277,987	May 22	1802	492	23	1955
Plow .....	F. Chevalier .....	288,776	Nov. 20	1243	341	25	739
Plow .....	A. G. Christman .....	275,354	Apr. 10	637	170	23	1343
Plow .....	J. Clausen .....	285,463	Sept. 25	1598	449	24	1200
Plow .....	F. R. Cooper and J. Lemmon. (Re-issue.)	10,411	Nov. 27	1970	548	25	878
Plow .....	G. N. Dexter, Jr. ....	290,669	Dec. 25	1645	453	25	1197
Plow .....	F. L. Ezell .....	272,223	Feb. 13	792	220	23	589
Plow .....	W. M. Flathers .....	287,814	Nov. 6	99	10	25	512
Plow .....	J. L. Gilbert .....	290,032	Dec. 11	822	232	25	1038
Plow .....	S. T. Green and L. M. Heald .....	283,236	Aug. 14	913	254	24	670
Plow .....	E. Haner .....	281,499	July 17	1452	398	24	268
Plow .....	C. Hanson .....	271,644	Feb. 6	313	86	23	496
Plow .....	W. K. Harrell .....	274,491	Mar. 27	1630	452	23	1137
Plow .....	J. W. and S. Harris .....	290,641	Dec. 18	1608	442	25	1184
Plow .....	W. C. Hawkins .....	273,987	Mar. 13	951	262	23	1065
Plow .....	G. F. Kennedy .....	279,252	June 12	793	219	23	2269
Plow .....	W. A. Lee .....	290,836	Dec. 25	1940	535	25	1249
Plow .....	T. I. Ludwig .....	282,999	Aug. 14	626	177	24	618
Plow .....	D. N. Luse and J. W. Bell .....	287,143	Oct. 23	1725	472	25	333
Plow .....	E. D. Meagher .....	271,893	Feb. 6	369	102	23	506
Plow .....	E. D. Meagher .....	275,683	Apr. 10	1066	290	23	1416
Plow .....	E. D. Meagher .....	277,314	May 8	1000	268	23	1804
Plow .....	E. D. Meagher .....	277,315	May 8	1001	269	23	1805
Plow .....	A. Mckenney .....	277,047	May 8	673	176	23	1747
Plow .....	F. C. Merrill .....	289,848	Dec. 11	600	167	25	999
Plow .....	D. K. Miller .....	287,148	Oct. 23	1730	473	25	334
Plow .....	J. T. Overton .....	290,230	June 26	1953	557	23	2485
Plow .....	J. J. and E. R. Piatt .....	286,730	Oct. 16	1201	324	25	233
Plow .....	F. T. Pinter .....	288,734	Nov. 20	1198	328	25	729
Plow .....	C. Profrock .....	283,659	Aug. 21	1426	399	24	771
Plow .....	H. Raaths .....	287,720	Oct. 30	2475	667	25	480
Plow .....	J. Ring .....	277,786	May 15	1557	424	23	1907
Plow .....	M. M. Ritch .....	270,846	Jan. 16	1259	362	23	261
Plow .....	J. O. Rollins .....	273,316	Mar. 6	96	28	23	850
Plow .....	H. O. Roop .....	288,666	Nov. 20	1106	303	25	715
Plow .....	G. Simpson .....	280,680	July 3	409	114	24	73
Plow .....	W. W. Speer .....	290,714	Dec. 25	1713	472	25	1210
Plow .....	J. Trump .....	283,687	Aug. 21	1466	413	24	779
Plow .....	A. C. West .....	288,531	Nov. 13	937	256	25	678
Plow .....	R. W. Whitehurst .....	275,304	Apr. 3	536	147	23	1317
Plow .....	E. Wiard .....	279,469	June 12	1071	297	23	2313
Plow and cultivator attachment .....	J. Harman .....	280,615	July 3	331	93	24	59
Plow and cultivator. Combined .....	T. Meikle .....	269,871	Jan. 2	57	18	23	14
Plow and cultivator combined .....	J. T. Prior .....	286,485	Oct. 9	877	237	25	170
Plow and cultivator frame .....	F. A. Hill .....	283,394	Aug. 21	1120	317	24	715
Plow and pulverizer. Combined .....	C. E. Sackett .....	279,818	June 19	1481	415	23	2391

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'E.	Vol.	Page.
Plow attachment.	J. McDougall	280,493	July 3	197	52	24	36
Plow attachment. Sulky.	G. Weliver	275,444	Apr. 10	764	203	23	1365
Plow attachment.	S. B. Williams	288,904	Nov. 20	1395	385	25	767
Plow beam. Shovel.	L. Gray	283,390	Aug. 21	1115	315	24	714
Plow-bolt.	N. Sanders	281,564	July 17	1327	419	24	280
Plow. Convertible	W. H. Dettler	276,674	May 1	177	45, 46	23	1654
Plow. Convertible	W. H. Dettler	276,675	May 1	179	46, 47	23	1655
Plow. Cultivating.	J. Kester	272,962	Feb. 27	1752	489	23	767
Plow. Cultivator.	I. Hancock	270,426	Jan. 9	731	214	23	152
Plow. Cultivator.	W. Markley and E. Ingraham	290,593	Dec. 18	1544	425	25	1174
Plow cutter and fender attachment	D. A. Hudelson	274,333	Mar. 20	1403	385	23	1090
Plow. Ditching.	D. Fulton	275,375	Apr. 10	666	178	23	1348
Plow. Ditching.	J. D. Hobbs	278,549	May 29	2531	690	23	2091
Plow. Ditching.	J. T. Miller	284,465	Sept. 4	371	103	24	967
Plow. Double mold-board.	C. C. Coleman	284,820	Sept. 11	816	227	24	1049
Plow. Double-shovel.	G. C. Avery	285,723	Sept. 25	1912	542	24	1258
Plow. Double-shovel.	C. Kenner	270,812	Jan. 16	1220	352	23	254
Plow-fender.	J. J. McCarter	289,432	Dec. 4	71	20, 21	25	899
Plow-fender.	M. Schubert	278,188	May 22	2046	562	23	1998
Plow for submarine work. Curved rotating	A. W. Von Schmidt	277,177	May 8	843	223	23	1776
Plow frame. Gang.	E. S. Benham	289,376	Dec. 4	6	2	25	888
Plow-gage.	T. Holt	285,264	Sept. 18	1356	382	24	1153
Plow. Gang.	O. N. Felts	283,585	Aug. 21	1348	{ 376 377 }	24	756
Plow. Gang.	J. M. Fix	285,885	Oct. 2	135	38	25	27
Plow. Gang.	T. L. Grigsby	287,536	Oct. 30	2219	602	25	431
Plow. Gang.	W. Kimmel	279,768	June 19	1423	398	23	2381
Plow. Gang.	G. Lissenden	273,292	Mar. 6	61	18, 19	23	845
Plow. Gang.	H. S. Palmer	288,362	Nov. 13	719	196	25	640
Plow. Gang and sulky	P. Moore	278,725	June 5	64	20	23	2135
Plow. Gang and sulky	T. B. Nutting	287,851	June 6	71	22	25	520
Plow guide-wheel	G. W. Carr	270,742	Jan. 16	1138	326	23	238
Plow-handles. Machine for bending.	A. Kehler	288,576	Nov. 13	991	273	25	689
Plow. Hillside.	W. E. Connelly	275,594	Apr. 10	945	257	23	1396
Plow. Hillside.	W. Strait	290,610	Dec. 18	1571	432	25	1178
Plow-jointer	G. S. Roberts	287,778	Oct. 30	2558	688	25	425
Plow-jointer	D. Woodward	281,817	July 24	1873	512	24	345
Plow-landside	B. C. Bradley	283,067	Aug. 14	707	199	24	633
Plow-landside	G. B. St. John	278,623	May 29	2618	714	23	2106
Plow-landside.	W. B. Wherry	283,729	Aug. 21	1519	428	24	789
Plow mold-board. Side-hill.	P. Gregory	285,481	Sept. 25	1616	453	24	1204
Plow. Moving	P. P. Jacotot	280,479	July 3	182	48	24	33
Plow or colter. Skim.	B. C. Bradley	270,628	Jan. 16	989	286	23	210
Plow or harrow. Riding-roller	E. H. Brownell	288,542	Nov. 13	949	260	25	680
Plow, planter, and cultivator. Combined hand.	G. Glidden	273,229	Feb. 27	2053	585	23	826
Plow-point.	W. F. Baldwin	271,593	Feb. 6	10	3	23	442
Plow-point.	A. Ball	289,797	Dec. 11	530	148	25	985
Plow-point and colter	H. F. Lyle	272,983	Feb. 13	866	242	23	663
Plow-point. Chilled	G. Wiard	277,816	May 15	1587	434	23	1912
Plow-points. Machine for grinding	M. Tension	275,792	Apr. 10	1205	330	23	1440
Plow. Reversible	F. W. Foerster	283,387	Aug. 21	1113	{ 314 315 }	24	713
Plow riding attachment.	J. H. McBride	284,036	Aug. 28	1917	537	24	870
Plow. Road.	A. C. Seymour	289,454	Dec. 4	95	27	25	903
Plow. Rotary	G. A. Betancourt	272,631	Feb. 20	1323	371	23	687
Plow. Rotary	S. S. Gardner	285,809	Oct. 2	33	11, 12	25	9
Plow. Rotary	J. Lane	278,711	June 5	46	14, 15	23	2132
Plow, seeder, and cultivator. Sulky	P. Lincoln	287,034	Oct. 23	1589	{ 437 438 }	25	307
Plow. Shovel.	W. Eddy	289,238	Nov. 27	1802	499	25	847
Plow. Spade-wheel	H. Skillings	271,142	Jan. 23	1618	{ 465 466 }	23	326
Plow-standard	A. Morris	289,437	Dec. 4	78	22	25	900
Plow standard and support. Combined	B. C. Bradley	270,630	Jan. 16	993	287	23	211
Plow. Steam.	G. Greig	279,937	June 26	1639	460	23	2424
Plow. Steam.	F. Pidgeon	289,554	Dec. 4	928	64	25	926
Plow. Steam.	G. W. Ross	281,140	July 10	989	276	24	181
Plow. Sulky.	A. Ball	289,798	Dec. 11	531	148	25	985
Plow. Sulky.	L. Bell	286,678	Oct. 16	1132	305	25	221
Plow. Sulky.	R. C. Buckley	278,089	May 22	1919	527	23	1976
Plow. Sulky.	C. B. Douglas	273,971	Mar. 13	936	{ 257 258 }	23	1002
Plow. Sulky.	E. C. Eaton	270,033	Jan. 2	243	71	23	50
Plow. Sulky.	J. E. Ervin	285,022	Sept. 18	1072	299	24	1102
Plow. Sulky.	A. Fisherbuck	283,877	Aug. 28	1701	480	24	832
Plow. Sulky.	G. H. Fowler	277,258	May 8	932	250	23	1792
Plow. Sulky.	S. H. Garst	273,508	Mar. 6	335	91	23	891
Plow. Sulky.	J. F. Gehrke	288,993	Nov. 27	1507	417	25	795
Plow. Sulky.	C. A. Hagne	283,102	Aug. 14	752	212	24	640
Plow. Sulky.	W. H. Harrod	288,998	Nov. 27	1513	418	25	795
Plow. Sulky.	W. C. Henderson	286,433	Oct. 9	821	223	25	160
Plow. Sulky.	R. S. Higgins	285,749	Sept. 25	1952	552	24	1264
Plow. Sulky.	J. I. Hoke	286,540	Oct. 9	948	225	25	183
Plow. Sulky.	J. J. Hussey	284,558	Sept. 4	483	136	24	986
Plow. Sulky.	C. A. Kellogg	288,341	Nov. 13	690	190	25	635
Plow. Sulky.	J. Lane	277,749	May 15	1513	{ 410 411 }	23	1899
Plow. Sulky.	W. Martin	273,696	Mar. 6	584	{ 155 156 }	23	934
Plow. Sulky.	B. F. McCray	282,207	July 31	2376	654	24	434
Plow. Sulky.	E. Powell	290,107	Dec. 11	907	257	25	1054
Plow. Sulky.	J. Riekey	276,193	Apr. 24	1701	470	23	1542
Plow. Sulky.	J. L. Runk	282,929	Aug. 7	535	151	24	585
Plow. Sulky.	S. K. Seelye	288,873	Nov. 20	1360	373	25	760



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Plow. Sulky.....	P. K. Stockton .....	275,956	Apr. 17	1406	388	23	1483
Plow. Sulky.....	W. Strait.....	275,090	Apr. 3	276	76	23	1273
Plow. Sulky.....	G. Wiard.....	278,643	May 29	2648	724	23	2110
Plow. Sulky.....	H. Wiard and W. R. Bullock .....	286,517	Oct. 9	918	248	25	177
Plow-sulky.....	E. B. Daniels and E. A. De Witt .....	280,015	June 26	1732	486	23	2441
Plow-sulky.....	F. F. Smith and J. W. Lockwood .....	272,092	Feb. 13	631	172	23	561
Plow. Tile-laying.....	H. King.....	288,344	Nov. 13	695	191	25	636
Plow. Wheel.....	R. M. Clark.....	289,223	Nov. 27	1787	495	25	844
Plow. Wheel.....	D. R. Dodge.....	278,519	May 29	2495	681	23	2085
Plow. Wheel.....	G. W. Hunt.....	285,412	Sept. 25	1536	433	24	1190
Plow. Wheel.....	H. Sattler.....	285,766	Sept. 25	1969	558	24	1267
Plow-wheel.....	E. E. Swan.....	273,779	Mar. 13	706	190	23	963
Plow wheel. Sulky.....	R. L. Millspaugh.....	286,468	Oct. 9	858	233	25	166
Plows. Corn-planting attachment for.....	P. Doughterty.....	290,006	Dec. 11	792	223	25	1033
Plows. Cotton-scraper attachment for.....	T. Folps.....	270,654	Jan. 16	1026	295	23	217
Plows. Weed and grass turning attachment for.....	O. H. and C. W. Judd .....	283,116	Aug. 14	768	216	24	644
Plowing-machine. Steam.....	J. D. Malone and J. F. Hamel .....	277,761	May 15	1530	415	23	1902
Plug. Spring-jack.....	J. C. Warner.....	273,648	Mar. 6	523	140	23	923
Plumb-bob.....	G. C. Avery.....	279,316	June 12	872	243	23	2282
Plumb, square, and level. Combined.....	W. H. Dehney.....	280,358	July 3	23	6, 7	24	6
Plumber's charcoal-furnace.....	L. Bowsky.....	281,009	July 10	825	230	24	153
Plumbers' books. Manufacture of.....	C. W. Dean.....	279,228	June 12	765	211	23	2264
Plumber's portable furnace.....	C. H. Schrack.....	280,245	June 26	2003	563	23	2429
Plumber's trap.....	R. Clarke.....	285,574	Sept. 25	1725	487	21	1224
Plumber's trap.....	P. Connolly.....	277,888	May 22	1682	459	23	1935
Plumber's trap.....	P. Connolly. (Reissue).....	10,333	May 29	2682	734	23	2117
Plumber's trap.....	F. N. Du Bois.....	287,510	Oct. 30	2187	504	25	424
Pneumatic apparatus for the separation of minerals, &c.....	J. B. Hart.....	271,450	Jan. 30	2019	582	23	405
Pneumatic compressor.....	B. R. Root.....	283,925	Aug. 28	1758	496	24	842
Pneumatic elevator.....	J. Lewis.....	287,033	Oct. 23	1587	437	25	306
Pneumatic indicator and speaking-tube.....	J. Capron.....	277,110	May 8	757	199	23	1761
Pneumatic lubricator.....	W. W. Rosenfield.....	285,162	Sept. 18	1240	348	24	1130
Pneumatic tubes. Delivery-switch for.....	E. S. Leaycraft.....	279,574	June 19	1207	333	23	2342
Pocket.....	R. Nicol, Jr.....	278,587	May 29	2567	701	23	2097
Pocket-book.....	M. W. Mahar.....	275,780	Apr. 10	1191	326	23	1437
Pocket-book holder.....	M. W. Mahar.....	281,638	July 17	1623	433	24	295
Pocket-books. Spring-ball fastener for.....	J. Menahan.....	290,906	Dec. 25	1951	538	25	1251
Pocket-books. Spring hinge-joint fastening for.....	J. Menahan.....	271,094	Jan. 23	1567	451	23	317
Pocket-case and cigar-clipper. Combined.....	A. P. Yates.....	283,055	Aug. 14	694	195	24	630
Pocket-case. Combination.....	A. L. Talcott.....	286,650	Oct. 16	1095	295	25	215
Pocket for garments. Safety.....	J. Kahn.....	283,609	Aug. 21	1371	363	24	760
Pocket-knife.....	G. W. Du Bois.....	280,150	June 26	1888	531	23	2469
Pocket-knife.....	G. W. Korn.....	273,858	Mar. 13	806	218	23	980
Pocket-knife.....	L. H. Peters.....	279,794	June 19	1453	407	23	2386
Pocket-knife and cigar-cutter. Combined.....	A. P. Brown.....	274,714	Mar. 27	1895	528	23	1184
Pocket-knife and rule. Combined.....	E. S. Glover.....	273,981	Mar. 13	946	260	23	1004
Pocket-knife for cutting tobacco.....	O. S. Harmon.....	276,813	May 1	362	96	23	1690
Pocket. Safety.....	J. Geary.....	274,092	Mar. 13	1084	298	23	1028
Pocket. Safety.....	J. M. Hunter.....	274,122	Mar. 20	1132	312	23	1043
Pocket. Safety.....	L. H. Law.....	288,458	Nov. 13	851	230	25	663
Poison for squirrels, gophers, &c.....	A. R. Booth.....	271,024	Jan. 23	1481	.....	23	303
Pointer for blackboards and maps.....	C. M. Tarr.....	283,041	Aug. 14	677	190	24	627
Poke. Animal.....	S. N. Howard.....	285,268	Sept. 18	1360	383	24	1153
Poke. Animal.....	J. E. Hunter.....	281,881	July 24	1949	532	24	358
Poke. Animal.....	D. C. Rice.....	270,843	Jan. 16	1256	361	23	260
Poke. Animal.....	P. Swan.....	287,190	Oct. 23	1785	490	25	344
Poke. Animal.....	B. S. Thomas.....	275,732	Apr. 10	1122	307	23	1426
Pole and chain. Binding.....	H. M. Carlsen.....	276,351	Apr. 24	1908	529	23	1576
Pole and line holder. Clothes.....	W. H. Martyn, Jr.....	289,290	Nov. 27	1864	518	25	859
Pole and shaft. Vehicle.....	W. H. Marrett.....	284,033	Aug. 28	1913	536	24	869
Pole. Buggy.....	P. Papineau.....	290,463	Dec. 18	1376	380	25	1144
Pole. Carriage.....	C. M. Blydenburgh.....	287,412	Oct. 30	2067	562	25	401
Pole. Carriage.....	M. D. Lawrence.....	273,553	Mar. 6	403	108	23	903
Pole. Extension clothes.....	S. D. Jordan.....	275,770	Apr. 10	1180	324	23	1436
Pole. Flag.....	R. Center.....	289,976	Dec. 11	749	212	25	1025
Pole. Hop.....	G. H. Kenyon.....	286,309	Oct. 9	670	179	25	132
Pole safety-bar attachment. Vehicle.....	A. Burson.....	277,676	May 15	1430	366	23	1883
Pole. Vehicle.....	C. Comstock.....	279,710	June 19	1362	380	23	2370
Pole. Vehicle.....	F. G. Crowley.....	275,470	Apr. 10	801	216	23	1371
Policeman's book.....	E. D. Bean.....	284,165	Sept. 4	6	2	24	906
Polishing compound.....	G. W. Buckalew and P. Quinn .....	284,718	Sept. 11	693	.....	24	1028
Polishing device.....	J. N. Spencer.....	275,954	Apr. 17	1404	387	23	1483
Polishing-iron.....	C. Ball.....	277,193	May 8	860	228	23	1779
Polishing or buffing wheel.....	S. T. Wray.....	275,561	Apr. 10	909	246	23	1390
Polishing-paste.....	E. Ludwig.....	289,913	Aug. 7	520	.....	24	593
Polishing-tool.....	T. R. Almond.....	289,879	Dec. 11	635	177	25	1004
Polishing-wheel.....	W. S. Bishop.....	285,559	Sept. 25	1707	481	24	1321
Polishing-wheel.....	F. H. Morse.....	277,325	May 8	1013	272	23	1807
Pomace. Method of and apparatus for separating apple-seed from.....	J. D. Canup.....	280,130	June 26	1866	526	23	2465
Pontoon.....	A. H. Williams.....	280,272	June 26	2037	573	23	2495
Pool and billiard tables. Supplemental pocket for.....	F. Kiekenapp.....	281,518	July 17	1477	405	24	272
Pool apparatus. Lawn.....	W. H. Kelly.....	278,341	May 29	2280	623	23	2046
Pool-ball rack.....	J. Carr.....	286,114	Oct. 2	411	113	25	76
Pool-ball rack.....	W. F. Whitney.....	272,609	Feb. 20	1294	361	23	681
Pool-counter.....	J. G. Swanton.....	269,896	Jan. 2	87	26	23	19
Pool-table ball-rack.....	O. T. Bugg and D. Ivey.....	269,825	Jan. 2	4	1	23	3
Pool-table ball-rack.....	J. H. Spangler.....	288,675	Nov. 20	1119	308	25	717
Pool-triangle.....	W. H. Wiggins.....	283,732	Aug. 21	1521	429	24	789
Porcelain-paste. Apparatus for pulverizing.....	J. R. Alsing. (Reissue).....	10,382	Sept. 18	1480	417	24	1173
Porous silicious materials to be used as fire-bricks, filters, &c. Manufacturing.....	A. Frank.....	287,817	Nov. 6	32	.....	25	513

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr & G	Vol.	Page.
Port-lid and hawse-pipe. Combined	A. Alfson	280,552	July 3	258	69	24	47
Portable bath	W. Kendall	253,117	Aug. 14	769	216	24	644
Portable bracket	L. Baumeister	276,336	Apr. 24	1893	525	23	1574
Portable drill	W. Sandford	287,866	Nov. 6	92	27, 28	25	524
Portable elevator	J. T. Haines	275,647	Apr. 10	1025	277	23	1409
Portable engines. Draft attachment for	M. E. Hershey	289,098	Nov. 27	1639	454	25	816
Portable heater	D. H. Erdman	286,410	Oct. 9	794	214	25	154
Portable press	T. A. Bunce	288,006	Nov. 6	280	79	25	555
Portable press	W. J. F. Liddell	272,718	Feb. 20	1426	400	23	705
Portable tank and pump. Combined	N. Vizelech	274,060	Mar. 13	1042	286 287	23	1020
Portfolio	J. N. Brown	284,272	Sept. 4	141	40	24	928
Portfolio	J. W. King and S. W. Goodwin	287,030	Oct. 23	1584	436	25	306
Post:							
See Binding-post.	Fence-post.						
Drilling-machine post.	Fence and telegraph post.						
Electric-conductor post.	Hitching-post.						
	Spiral spring post.						
Post and base. Combined	J. Newton	272,149	Feb. 13	702	192	23	573
Post-drawing device	R. Gibbs	290,637	Dec. 18	1605	441	25	1183
Post-driver	H. E. Fairman	276,677	May 1	184	48	23	1655
Post-driver	H. E. Fairman	285,881	Oct. 2	130	37	25	25
Post-driver	R. M. St. John	274,989	Apr. 3	134	37	23	1248
Post-driving machine	E. Hiatt	286,816	Oct. 16	1301	354	25	251
Post-hole digger	C. L. Carter	278,878	June 5	279	81	23	2171
Post-hole digger	C. L. Carter	283,753	Aug. 28	1559	439	24	607
Post-hole digger	F. E. Kohler	281,193	July 10	1057	292	24	194
Post-hole digger	W. H. Rhodes	281,137	July 10	983	275	24	180
Post-hole digger	A. Rogers	283,282	Aug. 14	973	271	24	681
Post-hole digger	W. C. Switzer	274,531	Mar. 27	1687	467	23	1146
Post-hole-digging machine	B. Crawford	280,585	July 3	301	83	24	54
Post-office box	J. A. Howe	273,992	Mar. 13	927	264	23	1006
Post-office-box indicator	R. Page	282,602	Aug. 7	224	65	24	538
Post-office-box indicator	R. Page	283,918	Aug. 28	1747	493	24	840
Post-office-box lock	W. H. Camp	280,718	July 3	454	130	24	81
Post-office lock-box	W. H. Taylor	284,988	Sept. 11	1013	285	24	1085
Postal cabinet	L. C. Gray	275,194	Apr. 3	400	110 111	23	1295
Postal-card	J. J. Williamson	283,841	Aug. 28	1660	469	24	825
Pot:							
See Coffee-pot.	Stove fire-pot.						
Coffee and tea pot.	Tea-pot.						
Coffee or tea pot.	Tea and coffee pot.						
Flower-pot.	Tea or coffee pot.						
Glass-pot.							
Pot and kettle	D. Snyder	274,147	Mar. 20	1161	330	23	1048
Pot and kettle	D. Snyder	279,671	June 19	1323	367	23	2362
Potato-digger	A. Adam	290,305	Dec. 18	1158	324 325	25	1106
Potato-digger	A. Ansley	272,845	Feb. 27	1613	451	23	745
Potato-digger	W. F. Austin	271,015	Jan. 23	1473	424	23	302
Potato-digger	J. W. Cook	277,461	May 15	1176	316	23	1841
Potato-digger	S. P. Hedges	271,068	Jan. 23	1534	443	23	312
Potato-digger	L. G. Kelsey	275,669	Apr. 10	1049	285	23	1414
Potato-digger	G. Norsëng	282,917	Aug. 7	523	146 147	24	593
Potato-digger	J. Shannon	288,875	Nov. 20	1362	374	25	760
Potato digger and picker	S. Raymond	286,961	Oct. 16	1487	408 409	25	282
Potato digging and separating machinery	R. A. Clark	271,601	Feb. 6	23	6	23	444
Potato-digging machine	J. T. Warren	282,135	July 31	2286	627	24	420
Potato-peeling machine	J. A. Moffat	273,125	Feb. 27	1949	547	23	803
Potter's table and carriage. Combined	M. W. Jordan	274,001	Mar. 13	972	267	23	1008
Pottery-lawn	J. H. Moon	282,752	Aug. 7	336	96	24	559
Pottery. Machine for the manufacture of	C. M. Ribon	282,369	July 31	2579	707 708	24	470
Pottery. Manufacture of	F. A. Magowan and R. M. Bassett	290,443	Dec. 18	1347	373	25	1139
Pottery-mold	J. Tams	285,321	Sept. 18	1418	401	24	1164
Powder and nitro-glycerine. Apparatus for thawing giant.	G. Murray and M. A. Gibbs	276,862	May 1	422	113	23	1700
Powder and nitro-glycerine. Apparatus for thawing giant.	G. Murray and M. A. Gibbs	276,863	May 1	423	113	23	1700
Powder-charger. Adjustable.	O. E. Michaelis	272,072	Feb. 13	606	164	23	557
Powder-duster	W. B. Allen	277,655	May 15	1407	379	23	1879
Powder-duster	H. H. Hayes	277,900	May 22	1697	463	23	1938
Powder-flask	P. O. Kessler	288,066	Nov. 6	343	96	25	566
Powders. Machine for preparing papers for physicians	D. M. Smyth	276,297	Apr. 24	1827	508 509	23	1563
Powders upon surfaces. Apparatus for distributing.	W. Hadden	269,850	Jan. 2	38	12	23	10
Power:							
See Churn-power.	Mechanical power.						
Cotton-gin power.	Motive power.						
Foot-power.	Tread-power.						
Horse-power.	Tread and railway power.						
Horse and hand power.	Treadle-power.						
Manual power.	Wave-power.						
Weight-power.							
Power-accumulator	J. B. Edison	273,044	Feb. 27	1851	518	23	786
Power-converter	H. Croft, Jr	287,634	Oct. 30	2364	638	25	458
Power-converter	J. P. Winchell	270,621	Jan. 16	980	283	23	208
Power-elevator	T. Hill	279,243	June 12	783	216	23	2267
Power from a central station. System for transmitting	J. L. Boone	279,694	June 19	1346	374	23	2366
Power-jack	M. V. Barron	287,792	Nov. 6	5	2	25	508



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Power loading apparatus.....	F. Poteler.....	277,337	May 8	1027	{ 275 276 }	{ 23 23 }	1809
Power-motor.....	H. H. Holden.....	278,962	June 5	498	117	23	2196
Power-press.....	R. E. Boschert.....	279,695	June 19	1348	375	23	2367
Power-press.....	A. H. Merriman.....	286,839	Oct. 16	1335	{ 364 365 }	{ 25 25 }	257
Power-press.....	O. P. Morgan.....	272,303	Feb. 13	883	247	23	606
Power to machinery. Attachment for applying.....	J. W. Ostrander.....	281,293	July 17	1189	329	24	224
Power-transmitter.....	W. R. Somers.....	282,679	Aug. 7	242	70, 71	24	541
Power-transmitting apparatus.....	S. W. Hudson.....	278,018	May 22	1840	502	23	1961
Precious and imitation precious stones. Preparing.....	S. Grossiord.....	290,040	Dec. 11	831	.....	25	1040
Precious metals. Apparatus for sizing and amalgamating.....	C. D. Bigelow.....	275,325	Apr. 3	563	154	23	1322
Precious metals by means of the lead bath. Apparatus for extracting the.....	W. W. Brown and L. A. Gates.....	289,064	Nov. 27	1597	{ 442 443 }	{ 25 25 }	809
Precious metals from ores. Extracting.....	A. K. Huntington and W. E. Koch.....	281,074	July 10	907	253	24	168
Precious stones. Obtaining artificial.....	S. Grossiord.....	280,467	July 3	169	.....	24	31
Preservative compound.....	W. S. Fickett.....	285,350	Sept. 18	1452	.....	24	1169
Preserving and transporting food. Method of and apparatus for.....	S. H. Linn.....	270,549	Jan. 9	888	257	23	183
Preserving edible animal fats.....	W. P. Clotworthy.....	284,184	Sept. 4	33	.....	24	910
Preserving food.....	I. M. Mitchell.....	277,768	May 15	1541	418	23	1904
Preserving food. Composition for.....	J. Howard.....	276,246	Apr. 24	1764	.....	23	1553
Preserving food. Compound for.....	R. F. Humiston.....	270,899	Jan. 23	1329	.....	23	279
Preserving food. Process of and apparatus for.....	G. F. Foote.....	285,741	Sept. 25	1940	549	24	1262
Press: See Baling-press. Hay-press. Box-packing press. Hay and cotton press. Brick-press. Ingot-press. Button-press. Lard-press. Canning-press. Matrix-drying press. Cheese-press. Portable press. Cider-press. Power-press. Cider and wine press. Printer's proof-press. Cigar-mold press. Printing-press. Copying-press. Punching-press. Copying and print- Punching and drawing ing press. press. Corset-press. Screw-press. Cotton-press. Seal-press. Cotton and hay press. Seaming-press. Die-press. Shaft-press. Filter-press. Sheet-metal press. Fruit-press. Tobacco-press. Glass-press. Toggle-press. Glass-molding press. Trunk-lid press. Harness and box- Veneer-press. loop press. Wine and cider press. Harness-pad press.	A. J. Borchard.....	286,582	Oct. 16	1007	272	25	199
Press.....	G. H. and O. P. Bushnell.....	285,108	Sept. 18	1173	329	24	1119
Press.....	D. W. De Forest.....	270,936	Jan. 23	1371	396	23	286
Press.....	J. R. Devor.....	269,922	Jan. 2	116	34	23	24
Press.....	P. Lord.....	280,840	July 10	627	176	24	117
Press.....	G. Wildey and A. Rollins.....	271,754	Feb. 6	204	57	23	475
Press for cornstalks, &c.....	T. L. Vought.....	281,417	July 17	1347	372	24	250
Press for sacking bran, sawdust, &c.....	A. L. Battson.....	290,515	Dec. 18	1448	400	25	1157
Press for stearine, &c.....	J. McCord.....	275,926	Apr. 17	1374	378	23	1477
Presses. Mechanism for adjusting rods or pitmen of die.....	J. M. Seymour.....	284,910	Sept. 11	920	{ 259 260 }	{ 24 24 }	1068
Pressing-board. Tailor's.....	J. Neerpasch.....	272,746	Feb. 20	1467	412	23	712
Presser-foot device. Lifting and rotating.....	G. M. Morris.....	289,687	Dec. 4	391	112	25	955
Pressure and vacuum gage.....	A. H. Emery.....	278,909	June 5	335	94	23	2180
Pressure brake. Fluid.....	G. A. Boyden.....	290,285	June 26	2048	576	23	2497
Pressure device.....	W. A. Moore.....	284,044	Aug. 28	1925	539	24	871
Pressure-gage.....	A. H. Emery.....	278,907	June 5	332	93	23	2180
Pressure-gage.....	A. H. Emery.....	278,908	June 5	334	93	23	2180
Pressure-gage.....	A. H. Emery.....	278,910	June 5	337	94	23	2181
Pressure-gage. Differential.....	J. W. Hyatt.....	283,490	Aug. 21	1240	348	24	736
Pressure-gage. Fluid.....	F. G. Hesse.....	275,765	Apr. 10	1176	{ 322 323 }	{ 23 23 }	1435
Pressure-gage. Recording.....	F. A. Jones.....	287,685	Oct. 30	2428	{ 653 654 }	{ 25 25 }	472
Pressure-gage. Recording.....	F. A. Jones.....	287,686	Oct. 30	2428	654	25	472
Pressure-gage. Recording.....	F. A. Jones and S. Glines.....	287,684	Oct. 30	2426	653	25	472
Pressure-gage. Steam.....	G. H. Crosby.....	272,860	Feb. 27	1629	456	23	748
Pressure-gage. Steam.....	M. McNeil.....	278,164	May 22	2016	555	23	1993
Pressure-gage tester. Fluid.....	G. Westinghouse, Jr.....	287,894	Nov. 6	131	38, 39	25	530
Pressure-gage. Thermo steam.....	P. Bonte.....	277,446	May 15	1158	311	23	1838
Pressure-gage trap. Steam.....	G. H. Crosby.....	288,693	Nov. 20	1142	314	25	721
Pressure regulator. Fluid.....	G. Ross.....	285,163	Sept. 18	1242	349	24	1130
Pressure regulator. Fluid.....	G. Westinghouse, Jr.....	280,269	June 26	2031	572	23	2494
Pressure regulator or governor.....	G. B. Price.....	273,389	Mar. 6	197	53	23	868
Printed designs from paper to sheets of tin, &c. Transferring.....	H. Mathieson.....	278,030	May 22	1854	.....	23	1964
Printed sheets. Drying.....	G. D. Carroll.....	273,816	Mar. 13	751	204	23	971
Printer's chase.....	J. B. Moreau, Jr.....	270,969	Jan. 23	1418	408	23	293
Printer's correcting-table.....	L. L. Bender.....	285,556	Sept. 25	1703	480	24	1220
Printer's galley.....	R. E. A. Dorr and T. Williams.....	288,038	Nov. 6	312	88	25	561
Printer's galley.....	N. Roemer.....	287,581	Oct. 30	2294	620	25	446
Printer's imposing-stone.....	D. W. Whitaker.....	286,979	Oct. 16	1512	415	25	286
Printer's inking and distributing roller.....	A. Campbell.....	280,447	July 3	136	37	24	26
Printer's inking-roller.....	A. Campbell.....	285,011	Sept. 18	1057	296	24	1099
Printer's proof-press.....	B. F. Jacobs.....	271,468	Jan. 30	2048	569	23	409
Printer's roller.....	L. P. Bardwell.....	271,567	Jan. 30	2165	624	23	422

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Printers' rules. Machine for cutting .....	R. S. Robson .....	271,204	Jan. 23	1700	491	23	339
Printers' rules. Machinery for cutting and mitring .....	C. Mitchell .....	271,349	Jan. 30	1890	547	23	381
Printing .....	E. Anthony .....	273,431	Mar. 6	247	67	23	876
Printing and embossing machine. Plate .....	E. Hewitt .....	272,878	Feb. 27	1656	463	23	752
Printing and perforating machine. Label .....	W. R. Landfear .....	288,349	Nov. 13	703	192	25	637
Printing blocks. Producing patterns upon .....	A. Jackson .....	274,944	Apr. 3	77	21, 22	23	1238
Printing-cylinder .....	E. Haas .....	278,937	June 5	398	109	23	2191
Printing, embossing, and power presses. Stop-movement for .....	M. Gally .....	287,821	Nov. 6	38	12	25	514
Printing endless paper. Machine for .....	E. Abadie .....	276,547	May 1	1	1	23	1627
Printing fabrics. .....	F. L. Palmer .....	280,075	June 26	1807	508	23	2454
Printing fabrics. Machine for .....	J. Kerr and J. Howard .....	276,426	Apr. 24	2000	554	23	1592
Printing frame. Sun- .....	J. S. Hambaugh .....	276,173	Apr. 24	1677	464	23	1538
Printing in colors. Photo-mechanical .....	F. C. Hösch .....	287,938	Nov. 6	187	53	25	540
Printing-machine .....	E. Anthony .....	275,113	Apr. 3	302	84	23	1278
Printing-machine .....	J. H. Cranston .....	284,947	Sept. 11	964	271	24	1076
Printing-machine .....	J. E. Hinds. (Reissne) .....	10,330	May 22	2220	608	23	2027
Printing-machine .....	G. W. Kendall and C. Kruse .....	287,383	Oct. 23	2026	551	25	386
Printing-machine .....	S. D. Tucker .....	272,604	Feb. 20	1286	358	23	679
Printing-machine air-cushioning apparatus .....	L. C. Crowell .....	274,084	Mar. 13	1074	296	23	1026
Printing-machine air-cushioning apparatus .....	L. C. Crowell .....	277,550	May 15	1285	345	23	1858
Printing-machine. Multicolor .....	H. P. Feister .....	273,672	Mar. 6	554	147	23	929
Printing-machine. Oscillating-cylinder .....	A. Campbell .....	289,810	Dec. 11	546	152	25	988
Printing machine. Plate .....	H. Lee .....	282,995	Aug. 14	612	173	24	616
Printing-machine sheet-delivery apparatus .....	L. C. Crowell .....	276,672	May 1	165	43	23	1654
Printing machine. Web .....	J. P. Vienot .....	274,534	Mar. 27	1686	468	23	1146
Printing machines. Variable bed-motion for .....	A. Campbell .....	273,875	June 5	274	79, 80	23	2170
Printing on metals. Process of and composition for making a drier for ink used for .....	H. Mathieson .....	277,499	May 15	1221		23	1649
Printing-plate .....	J. F. Earhart .....	284,399	Sept. 4	294	82	24	953
Printing-press .....	G. L. Adams .....	276,207	Apr. 24	1718	475	23	1545
Printing-press .....	E. Anthony .....	273,430	Mar. 6	243	66	23	876
Printing-press .....	J. Brooks .....	274,558	Mar. 27	1712	475	23	1150
Printing-press .....	A. Campbell .....	283,201	Aug. 14	870	243	24	662
Printing-press .....	C. B. Cottrell .....	290,747	Dec. 25	1758	485	25	1218
Printing-press .....	C. B. Cottrell .....	290,748	Dec. 25	1761	486	25	1219
Printing-press .....	T. B. Dooley .....	286,689	Oct. 16	1147	309	25	224
Printing-press .....	J. T. Hawkins .....	272,834	Feb. 20	1579	443	23	732
Printing-press .....	J. T. Hawkins .....	272,835	Feb. 20	1583	444	23	733
Printing-press .....	J. T. Hawkins .....	286,814	Oct. 16	1298	353	25	251
Printing-press .....	J. W. Hopkins .....	271,333	Jan. 30	1865	541	23	376
Printing-press .....	B. Huber .....	270,670	Jan. 16	1046	299	23	220
Printing-press .....	B. Huber .....	285,750	Sept. 25	1933	552	24	1264
Printing-press .....	R. M. Hunter .....	271,070	Jan. 23	1537	443	23	312
Printing-press .....	C. D. Lloyd .....	285,421	Sept. 25	1551	437	24	1192
Printing-press .....	T. McIlroy .....	285,826	Oct. 2	55	17	25	12
Printing-press .....	G. W. Prouty .....	290,267	Dec. 18	1111	312	25	1098
Printing-press .....	W. B. Shedd .....	286,337	Oct. 9	709	189	25	139
Printing-press .....	G. Williamson .....	276,517	Apr. 24	2111	586	23	1612
Printing-press .....	G. Williamson .....	290,301	Dec. 18	1150	322	25	1105
Printing-press air-cushioning device .....	G. P. Fenner .....	272,673	Feb. 20	1374	385	23	695
Printing-press air-cushioning mechanism .....	W. Scott .....	282,379	July 31	2588	711	24	471
Printing-press attachment .....	F. M. Brooke .....	288,404	Nov. 13	785	212	25	652
Printing-press beds. Mechanism for operating .....	A. Campbell .....	274,560	Mar. 27	1715	476	23	1151
Printing-press cushioning apparatus .....	W. Scott .....	288,872	Nov. 20	1358	373	25	769
Printing-press delivery apparatus .....	C. B. Cottrell .....	280,584	July 3	299	83	24	53
Printing-press delivery mechanism .....	G. W. Van Allen .....	270,267	Jan. 9	520	152	23	112
Printing-press. Device for straightening sheets delivered from the fly of a .....	T. H. Bowes .....	276,221	Apr. 24	1733	480	23	1547
Printing-press face-cloth .....	A. Campbell .....	279,129	June 12	658	180	23	2246
Printing-press feed-gage .....	E. L. Megill .....	289,014	Nov. 27	1531	423	25	798
Printing-press feed-gage .....	T. H. Winchester .....	277,396	May 8	1089	293	23	1820
Printing-press folder .....	C. Kahler .....	276,972	May 1	571	149	23	1724
Printing-press for printing on wood .....	G. W. Prouty .....	291,002	Dec. 25	2087	575	25	1273
Printing-press gage-pin .....	E. L. Megill .....	277,500	May 15	1221	328	23	1849
Printing-press gripper .....	H. Ayres .....	274,546	Mar. 27	1699	471	23	1148
Printing-press gripper mechanism .....	J. T. Hawkins .....	281,763	July 24	1799	491	24	332
Printing-press gripper-motion .....	G. P. Fenner .....	272,674	Feb. 20	1375	386	23	695
Printing-press grippers. Tumbler-motion for .....	C. B. Cottrell .....	280,583	July 3	298	82	24	53
Printing-press. Hand-stamp .....	T. B. Cosley .....	276,779	May 1	325	85	23	1682
Printing-press ink-fountain .....	H. Willson .....	279,301	June 12	854	237	23	2279
Printing-press inking apparatus .....	J. Brooks .....	280,127	June 26	1863	525	23	2465



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Printing-press inking apparatus .....	J. W. Osborne .....	287,569	Oct. 30	2968	615	25	441
Printing-press movement .....	C. F. Owen .....	276,621	May 1	94	25	23	1643
Printing press. Plate .....	J. S. Ives .....	276,591	May 1	61	17	23	1638
Printing-presses. Automatic cutting and feeding } attachment for	C. E. Clement .....	287,239	Oct. 23	1850	506 507 508	25	354
Printing-presses. Automatic feeding device for .....	C. Ellery .....	272,419	Feb. 20	1054	296	23	639
Printing-presses. Automatic piling device for .....	J. Flanders .....	273,052	Feb. 27	1858	521	23	757
Printing-presses. Counting apparatus for rotary .....	G. Rosquist .....	277,945	May 22	1744	476	23	1945
Printing-presses. Driving mechanism for oscillating .....	F. H. Richards .....	289,558	Dec. 4	234	66	25	937
Printing-presses. Mechanism for shifting the angle- rollers of	A. Campbell .....	284,607	Sept. 11	548	155	24	1003
Printing-presses. Mounting form-rollers for .....	A. Campbell .....	282,956	Aug. 14	570	161	24	609
Printing-presses. Paper folding, pasting, and trim- ming attachment for	T. C. Dexter .....	287,422	Oct. 30	2078	565	25	403
Printing-presses. Sliding bearer for beds of .....	A. Campbell .....	286,997	Oct. 23	1538	424	25	296
Printing. Preventing offset in web .....	S. Wheeler .....	284,929	Sept. 11	941	264	24	1072
Printing, &c. Production of surfaces for .....	J. J. Sachs .....	274,519	Mar. 27	1668		23	1143
Printing stones or plates. Device for stippling, shad- ing, or tinting	C. C. Macbrair .....	288,081	Nov. 6	361	100	25	569
Prison-cells. Armor for .....	P. Herzog .....	271,633	Feb. 6	62	17	23	451
Privy .....	F. B. Kendall .....	290,776	Dec. 25	1791	494	25	1224
Privy and attachments .....	F. Bauer and D. T. Kenney .....	273,439	Mar. 6	256	69	23	877
Privy-sink .....	T. Keely .....	278,558	May 29	2539	693	23	2092
Privy vaults and drains. Device for preventing the escape of effluvia from	H. C. Buddenberg .....	282,437	July 31	2671	732	24	487
Programme-card for dances .....	E. Mendum and S. G. Swett .....	276,191	Apr. 24	1698	469	23	1541
Projectile .....	J. G. Butler .....	290,970	Dec. 25	2045	562	25	1266
Projectile .....	H. B. Littlepage .....	275,674	Apr. 10	1054	286	23	1414
Projectile .....	T. Nordenfelt .....	270,101	Jan. 2	314	93	23	64
Projectile .....	E. Palliser .....	275,258	Apr. 3	478	133	23	1307
Projectile. Air .....	W. T. Chamberlain .....	279,539	June 19	1167	323	23	2335
Projectile for carrying and discharging oil .....	W. D. Baker .....	272,400	Feb. 20	1026	287	23	635
Projectile for ordnance .....	J. Vavasseur .....	271,382	Jan. 30	1932	550	23	388
Projectile. Line-carrying .....	G. F. Griffin and C. W. Dixon .....	289,909	Dec. 11	674	188	25	1011
Proof. Apparatus for taking .....	C. E. Baldwin .....	278,848	June 5	240	69	23	2164
Propeller and operating mechanism. Reciprocating .....	R. Smith .....	279,987	June 26	1694	476	23	2434
Propeller. Boat .....	J. W. Cooper .....	284,821	Sept. 11	816	227 228	24	1049
Propeller. Chain .....	B. Roy .....	272,159	Feb. 13	714	196	23	575
Propeller. Endless-band .....	M. J. Larsen .....	278,027	May 22	1850	505	23	1963
Propeller for boats. Vibrating .....	H. A. Hannum .....	278,945	June 5	408	112	23	2193
Propeller for ships, &c .....	J. David .....	289,094	Dec. 11	776	218	25	1030
Propeller for steam-vessels .....	M. S. Nilsson .....	281,915	July 24	1991	545	24	366
Propeller. Hydraulic .....	T. L. Sturtevant .....	274,839	Mar. 27	2039	568	23	1209
Propeller. Paddle-wheel .....	D. E. Duntrow .....	276,010	Apr. 17	1472	406	23	1495
Propeller. Reciprocating .....	J. A. Arthur .....	274,693	Mar. 27	1875	522	23	1180
Propeller. Screw .....	R. Bell and D. Selkirk .....	285,212	Sept. 18	1296	365	24	1141
Propeller. Screw .....	A. P. Bliven .....	271,212	Jan. 30	1713	496	23	350
Propeller. Screw .....	N. H. Bergfeldt .....	285,002	Sept. 18	1045	293	24	1097
Propeller. Screw .....	J. F. Folmer .....	283,592	Aug. 21	1355	378	24	757
Propeller. Screw .....	R. M. Fryer .....	283,336	Aug. 14	1039	292	24	694
Propeller. Screw .....	J. Gartner .....	274,307	Mar. 20	1368	375	23	1084
Propeller. Vibrating .....	W. C. Cowie .....	271,041	Jan. 23	1496	431 432	23	306
Propeller. Vibrating .....	A. M. Freeman .....	272,949	Feb. 27	1741	486	23	765
Propeller. Vibrating .....	P. Gleason .....	285,480	Sept. 25	1615	453	24	1204
Propeller. Vibrating .....	R. M. McKee .....	282,656	Aug. 7	217	63,64	24	537
Propeller. Vibrating .....	J. B. Merkl .....	270,455	Jan. 9	762	223	23	158
Propeller. Vibrating .....	R. Smith .....	289,867	Dec. 11	620	179	25	1002
Propellers. Instrument for ascertaining the pitch of screw	D. B. Hutton .....	284,427	Sept. 4	328	91	24	958
Propelling boats, &c .....	W. Presley .....	284,325	Sept. 4	206	57	24	939
Propelling-wheel .....	B. B. Powell .....	286,149	Oct. 2	450	122	25	84
Propulsion of boats .....	F. M. Marquis .....	276,144	Apr. 17	1639	451 452	23	1523
Propulsion of ships, &c .....	J. Kelly .....	286,205	Oct. 9	520	143	25	106
Protector:							
See Book-cover protector. Head-wear protector.							
Boot or shoe heel protector. Hose-protector.							
protector. Leg and foot protector.							
Breast-strap pro- Link-protector.							
jector. Mustache-protector.							
Brush-protector. Oil-tank protector.							
Bung-hole protector. Pantaloon-protector.							
Chest-protector. Pants-protector.							
Chimney-protector. Plant-protector.							
Corset-protector. Rain-protector.							
Crimp-protector. Skirt-protector.							
Ear-protector. Sole-protector.							
Electrical-instru- Sole and upper protector.							
ment protector. Stocking-protector.							
Electrical-wire pro- Telephone and telegraph							
jector. protector.							
Foot and leg pro- Tree-protector.							
jector. Wash-board protector.							
Furnace-protector. Watch-protector.							
Garment-protector. Watch hair-spring pro-							
Hand-protector. tector.							
Hatchway-protector.							
Protractor .....	P. Kennelly .....	285,907	Oct. 2	165	47	25	32
Protractor and chart-holder. Combined .....	B. T. Putnam .....	280,328	June 26	2108	591	23	2507
Protractor, square, and bevel. Combined .....	J. Duckworth and E. Smith .....	282,966	Aug. 14	581	165	24	611
Pruning implement .....	J. McWilliams .....	279,413	June 12	1011	281	23	2303
Pruning shears .....	A. De Caunes .....	289,995	Dec. 11	777	218	25	1030

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. E.	Vol.	Page.
Puddling-furnace .....	J. Bergqvist .....	275,119	Apr. 3	314	87	23	1280
Puddling-furnace .....	J. Evans .....	270,184	Jan. 2	418	121	23	85
Puddling-furnace. Gas-burning .....	J. C. Williams .....	289,201	Nov. 27	1764	489	25	840
Puller:							
See Cork-puller.	Staple-puller.						
Flax-puller.	Stump-puller.						
Nail-puller.	Stump and grub puller.						
Spike-puller.	Weed-puller.						
Pulley .....	H. R. Allen .....	285,780	Oct. 2	2	1	25	3
Pulley .....	W. F. Boysen .....	281,828	July 24	1884	514	24	347
Pulley .....	W. H. Carruthers .....	281,669	July 24	1671	455	24	309
Pulley .....	H. H. Fulton and O. R. Olsen .....	278,425	May 29	2381	650	23	2064
Pulley .....	H. H. Fulton and O. R. Olsen .....	282,513	Aug. 7	44	13	24	508
Pulley .....	H. Goodman .....	290,572	Dec. 18	1525	420	25	1170
Pulley .....	W. J. Innis .....	285,816	Oct. 2	42	14	25	9
Pulley .....	W. J. Innis .....	285,817	Oct. 2	43	14	25	10
Pulley .....	J. J. Irvine .....	273,544	Mar. 6	393	105	23	901
Pulley .....	G. S. Long .....	274,349	Mar. 20	1422	390	23	1095
Pulley .....	G. S. Long .....	285,635	Sept. 25	1802	513	24	1239
Pulley .....	P. Medart .....	287,843	Nov. 6	63	19	25	518
Pulley .....	O. R. Olsen .....	280,228	June 26	1981	556	23	2485
Pulley .....	O. R. Olsen and H. H. Fulton .....	271,108	Jan. 23	1582	455	23	320
Pulley .....	A. Walton .....	282,422	July 31	2646	726	24	482
Pulley and attachment for window-shade rollers .....	S. A. Hurley .....	272,882	Feb. 27	1667	465	23	753
Pulley and drum. Sheet-metal .....	N. Macbeth .....	286,028	Oct. 2	304	85	25	57
Pulley. Band .....	W. H. Dodge .....	276,230	Apr. 24	1744	483	23	1549
Pulley. Belt .....	A. Wood .....	280,775	July 3	547	152	24	96
Pulley-block .....	A. Bachman .....	272,186	Feb. 13	745	206	23	581
Pulley-block .....	T. R. Ferrall .....	279,553	June 19	1185	328	23	2339
Pulley-block .....	T. R. Ferrall .....	279,554	June 19	1186	328	23	2339
Pulley-block .....	B. Jackson and G. W. T. Carter .....	275,916	Apr. 17	1364	375	23	1475
Pulley-block .....	P. King .....	286,021	Oct. 2	297	83	25	55
Pulley-block .....	C. Maschmeyer .....	271,252	Jan. 30	1754	507	23	357
Pulley block and tackle .....	A. M. Clark .....	276,561	May 1	19	6	23	1630
Pulley-block. Differential .....	P. Murray, Jr. .....	280,218	June 26	1964	553	23	2483
Pulley. Chain .....	A. B. Hendryx .....	285,263	Sept. 18	1355	382	24	1152
Pulley. Cone .....	H. Newmaker .....	283,646	Aug. 21	1413	396	24	768
Pulley-covering .....	W. W. Campbell .....	276,559	May 1	17	5	23	1630
Pulley-covering .....	W. Painter .....	283,356	Aug. 14	1072	301	24	700
Pulley-fastening .....	E. F. Spaulding .....	286,340	Oct. 9	713	190	25	139
Pulley for use in connection with awnings, &c. ....	P. C. Rowe .....	274,036	Mar. 13	1009	276	23	1015
Pulley guard. Band .....	C. E. Frick .....	272,677	Feb. 20	1377	387	23	696
Pulley. Hoisting .....	C. F. Batt .....	278,078	May 22	1902	521	23	1973
Pulley. Loose .....	G. H. Albee .....	276,208	Apr. 24	1719	476	23	1545
Pulley lubricator. Loose .....	P. Breen .....	271,193	Jan. 23	1688	487	23	337
Pulley or wheel .....	J. Walker .....	288,522	Nov. 13	927	253	25	677
Pulley or wheel. Belt .....	E. B. Martindale .....	286,320	Oct. 9	691	184	25	135
Pulley rig. Dead .....	H. C. Crowell .....	285,467	Sept. 25	1602	450	24	1201
Pulley rig. Dead .....	H. C. Crowell .....	289,073	Nov. 27	1609	446	25	812
Pulley, roller, or friction-wheel .....	J. W. Osborne .....	287,567	Oct. 30	2261	614	25	440
Pulley, roller, or friction-wheel .....	J. W. Osborne .....	289,367	Nov. 27	1962	546	25	878
Pulley, roller, or wheel .....	J. W. Osborne .....	287,568	Oct. 30	2263	614	25	441
Pulley, roller, or wheel .....	J. W. Osborne .....	289,368	Nov. 27	1964	547	25	878
Pulley. Self-belting .....	J. E. Donovan .....	270,028	Jan. 2	238	69	23	49
Pulley. Split .....	H. Lilley and J. T. Hillsley .....	277,910	May 22	1706	466	23	1939
Pulley. Split .....	G. B. Sanborn .....	275,947	Apr. 17	1397	385	23	1482
Pulley tightening device. Belt .....	N. W. Holt .....	273,081	Feb. 27	1888	530	23	792
Pulley-wheel .....	E. L. Babcock .....	285,869	Oct. 2	111	33	25	22
Pulley-wheel .....	J. Walker .....	288,386	Nov. 13	762	205	25	647
Pulley. Wood-rim .....	W. W. Carey .....	271,416	Jan. 30	1972	570	23	396
Pulley. Wood-rim .....	W. W. Carey .....	282,161	July 31	2312	635	24	424
Pulley. Wood-rim .....	A. S. Ladd .....	284,133	Aug. 28	2040	567	24	891
Pulleys, &c. Taper-sleeve fastening for .....	H. C. Crowell .....	281,618	July 17	1600	437	24	292
Pulp and fiber. Machine for reducing wood to .....	G. F. Evans .....	279,551	June 19	1183	327	23	2338
Pulp and similar material. Machinery for assorting wood .....	N. Kaiser .....	276,250	Apr. 24	1768	492	23	1553
Pulp-engine roll-bar .....	A. Hankey .....	288,234	Nov. 13	548	151	25	612
Pulp-extractor. Automatic .....	S. L. Gould .....	277,268	May 8	942	252	23	1794
Pulp from sugar-cane, &c. Producing .....	E. C. Le Bourgeois .....	287,302	Oct. 23	1931	253	25	369
Pulp from wood, &c. Making .....	E. Thompson .....	287,980	Nov. 6	240	68	25	549
Pulp-grinder .....	W. H. Howell .....	272,258	Feb. 13	836	233	23	597
Pulp. Machine for assorting wood .....	F. Voith .....	289,187	Nov. 27	1747	485	25	836
Pulp. Machine for forming hollow ware from wood .....	J. G. Bodge .....	289,614	Oct. 30	2342	632	25	454
Pulp machine. Wood .....	R. Cartmell and A. Ball .....	286,902	Oct. 16	1413	388	25	270
Pulp-strainer .....	H. Reinicke .....	287,164	Oct. 23	1749	479	25	337
Pulp-washing machine .....	E. J. F. Quirin .....	284,232	Sept. 4	67	27	24	921
Pulverizer .....	H. Bailey .....	275,566	Apr. 10	915	248	23	1390
Pulverizer and grader. Combined .....	W. Commearns .....	284,946	Sept. 11	963	270	24	1076
Pulverizer and stalk-cutter. Ground .....	J. V. Harter .....	282,724	Aug. 7	310	88	24	554
Pulverizer. Soil .....	R. B. Lillie .....	278,803	June 5	170	50	23	2151
Pulverizing apparatus .....	E. A. Griffiths .....	276,394	Apr. 24	1964	544	23	1586
Pulverizing machine .....	H. B. Feldmann .....	275,031	Apr. 3	200	53	23	1260
Pulverizing machine .....	H. B. Feldmann .....	290,874	Dec. 25	1910	527	25	1244
Pulverizing-machine .....	R. D. Gates .....	270,217	Jan. 9	467	136	23	102
Pulverizing-machine .....	R. D. Gates .....	286,290	Oct. 9	650	173	25	128
Pulverizing-machine .....	R. D. Gates .....	287,658	Oct. 30	2393	645	25	465
Pulverizing-machine .....	R. D. Gates .....	288,050	Nov. 6	328	92	25	563
Pulverizing-machine .....	T. M. Rogers .....	276,145	Apr. 17	1641	452	23	1524
Pulverizing-machine .....	S. P. M. Tasker .....	274,050	Mar. 13	1022	280	23	1017



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Pulverizing-machine hopper	H. B. Feldmann	274,090	Mar. 13	1081	298	23	1027
Pulverizing-machine hopper	S. P. M. Tasker	274,051	Mar. 13	1026	281	23	1018
Pulverizing machine. Soil-	C. W. Smith	281,149	July 10	998	279	24	183
Pump	H. M. D. L. Babcox	284,708	Sept. 11	678	191	24	1025
Pump	C. E. Barber	274,551	Mar. 27	1704	473	23	1149
Pump	G. F. Beebe	279,214	June 12	748	206	23	2261
Pump	G. F. Blake	271,775	Feb. 6	227	63	23	480
Pump	G. Brett	273,663	Mar. 6	538	145	23	936
Pump	H. Caslow	285,226	Sept. 18	1313	370	24	1144
Pump	G. M. Conway	273,962	Mar. 13	923	253	23	999
Pump	L. B. Cooley	285,015	Sept. 18	1061	297	24	1100
Pump	D. M. Cooper	276,226	Apr. 24	1738	481	23	1548
Pump	G. H. Corliss	276,003	Apr. 17	1462	403	23	1494
Pump	J. Cox	273,261	Mar. 6	21	7	23	838
Pump	C. S. Dean	288,030	Nov. 6	303	86	25	559
Pump	D. Dieckmann and C. Schmiedt-zinsky.	289,517	Dec. 4	182	51	25	918
Pump	T. Dowling	279,923	June 26	1616	454	23	2421
Pump	J. B. Drake	282,864	Aug. 7	467	132	24	583
Pump	J. B. Drake	285,241	Sept. 18	1331	375	24	1147
Pump	W. Eames	280,920	July 10	717	201	24	133
Pump	J. Everitt	282,973	Aug. 14	588	166	24	612
Pump	C. L. Fouts	280,079	Nov. 27	1617	448	25	813
Pump	A. Fyfe and T. Rawson	285,402	Sept. 25	1525	429	24	1187
Pump	R. P. Garsed	285,477	Sept. 25	1612	452	24	1203
Pump	H. C. Hall	274,760	Mar. 27	1949	542	23	1194
Pump	C. J. Hamilton	270,789	Jan. 16	1193	344	23	243
Pump	F. B. Hanson	274,937	Apr. 3	68	19	23	1337
Pump	J. Harris	273,985	Mar. 13	949	261	23	1004
Pump	W. H. and C. A. Holcombe	281,695	July 24	1707	464	24	315
Pump	A. G. Hollister	287,935	Nov. 6	183	52, 53	25	539
Pump	G. H. Holt	279,949	June 26	1632	463	23	2427
Pump	A. J. Hopkins	274,446	Mar. 20	1554	{ 425 426 }	23	1117
Pump	S. Jackson	270,900	Jan. 23	1329	{ 383 384 }	23	279
Pump	H. M. Johnston	276,048	Apr. 17	1519	418	23	1502
Pump	H. and J. Kelly	289,270	Nov. 27	1836	507	25	854
Pump	J. M. Laing	284,310	Sept. 4	188	53	24	936
Pump	W. H. Lambert and G. C. Deems	274,791	Mar. 27	1988	552	23	1200
Pump	W. S. Marshall	289,288	Nov. 27	1862	517	25	859
Pump	M. E. Moore	279,581	June 19	1216	337	23	2344
Pump	P. A. Myers	276,865	May 1	426	114	23	1701
Pump	P. A. Myers	282,755	Aug. 7	339	96	24	559
Pump	L. Patric	274,965	Apr. 3	107	30, 31	23	1243
Pump	P. T. Perkins	287,461	Oct. 30	2121	577	25	412
Pump	J. W. Powers	287,053	Oct. 23	1612	444	25	311
Pump	J. B. Root	280,402	July 3	77	21	24	16
Pump	W. R. Smith and N. H. Bigger	272,343	Feb. 13	936	260	23	614
Pump	M. D. Temple	285,443	Sept. 25	1574	443	24	1196
Pump	J. Wock	285,093	Sept. 18	1156	323	24	1116
Pump. Air	R. P. Garsed	289,641	Dec. 4	333	93	25	946
Pump. Air	C. Moore. (Reissue)	10,374	Aug. 28	2076	577	24	897
Pump and preserver. Beer	E. Sharnberg	271,659	Feb. 6	89	24	23	456
Pump and ventilator. Rotary	L. B. Villebonnet	281,165	July 10	1016	284	24	186
Pump and water-wheel. Centrifugal	S. S. Richardson	289,559	Dec. 4	235	67	25	928
Pump. Barrel-	L. E. and E. E. Guignon	280,428	Oct. 9	815	221	25	158
Pump. Beer-	R. B. Ruggles	272,089	Feb. 13	628	171	23	560
Pump-box	D. D. Casey	290,211	Dec. 18	1037	292	25	1086
Pump-bucket	T. C. Munger	284,048	Aug. 28	1930	540	24	872
Pump-bucket	J. La Tourette	276,685	May 1	206	53	23	1659
Pump bucket. Chain-	A. R. Forney and J. L. Stoever	280,597	July 3	312	87	24	56
Pump bucket. Chain-	L. M. Rumsey	271,522	Jan. 30	2112	608	23	421
Pump bucket. Chain-	O. E. Wadhams	287,348	Oct. 23	1985	541	25	379
Pump-bucket. Rubber	J. W. Voglesong	274,061	Mar. 13	1042	287	23	1020
Pump-casing	G. W. Weyburn	280,105	June 26	1842	519	23	2461
Pump. Centrifugal	C. A. Christensen	288,409	Nov. 13	790	214	25	653
Pump. Centrifugal	N. Didiot	287,508	Oct. 30	2185	593	25	424
Pump. Chain-	H. Jones	282,960	Aug. 7	508	142	24	590
Pump. Chain-	J. C. Kearns	283,894	Aug. 28	1722	486	24	835
Pump-chains. Machine for making	E. J. Watson	280,422	July 3	101	27, 28	24	20
Pump. Compound	H. C. Langrehr	280,835	July 10	619	174	24	115
Pump. Compound	H. C. Langrehr	283,257	Aug. 14	943	{ 263 264 }	24	675
Pump condenser. Steam-	W. A. Miles	271,096	Jan. 23	1569	452	23	318
Pump condenser. Steam-	W. A. Miles	271,097	Jan. 23	1570	452	23	318
Pump condenser. Steam-	W. A. Miles	272,456	Feb. 20	1097	309	23	647
Pump condenser. Steam-	W. A. Miles	272,457	Feb. 20	1098	310	23	647
Pump. Deep-well	G. A. and L. H. Kimball	271,082	Jan. 23	1556	448	23	316
Pump. Direct-acting steam-	J. E. Sinclair	279,452	June 12	1055	292	23	2311
Pump. Direct-action steam-	J. Henwood	284,010	Aug. 28	1889	{ 529 530 }	24	865
Pump. Double-acting	H. Q. French and G. G. Shenton	271,829	Feb. 6	295	81	23	493
Pump. Double-acting	J. Henwood	277,279	May 8	954	256	23	1797
Pump. Double-acting	D. S. Hines, W. A. Perry, and C. C. Worthington.	289,535	Dec. 4	205	58	25	922
Pump. Double-acting	T. O. Perry	288,108	Nov. 6	395	{ 111 112 }	25	576
Pump. Double-acting	J. Singler	290,125	Dec. 11	931	264	25	1050
Pump. Double-acting	N. A. Wolcott	278,208	May 22	2075	572	23	2003
Pump. Double-acting force-	J. B. Griswold	276,172	Apr. 24	1675	463	23	1537
Pump. Double-acting steam-	E. Davies	287,252	Oct. 23	1866	511	25	357
Pump. Double-action	G. B. McCoy	276,614	May 1	85	23	23	1642
Pump fixture. Chain-	M. D. Temple	274,409	Mar. 20	1495	412	23	1107

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Pump for oil-tanks .....	F. Sloan .....	272,340	Feb. 13	933	259	23	614
Pump for steam-boilers. Compound feed .....	J. Houpt .....	285,622	Sept. 25	1787	508	24	1236
Pump. Force .....	A. Annibale .....	272,616	Feb. 20	1305	364	23	683
Pump. Force .....	W. A. Bickford .....	269,913	Jan. 2	106	31	23	22
Pump. Force .....	T. Calver .....	288,007	Nov. 6	280	79	25	555
Pump. Force .....	P. T. Coffield .....	276,134	Apr. 17	1623	449	23	1521
Pump. Force .....	W. Johnston .....	284,859	Sept. 11	860	242	24	1057
Pump. Force .....	M. L. G. Wheeler .....	280,106	June 26	1842	510	23	2461
Pump. Forcing and mixing .....	J. W. Galloway .....	275,632	Apr. 10	1003	271	23	1405
Pump-frame .....	J. Prestou .....	274,141	Mar. 20	1152	317	23	1047
Pump. Gas .....	F. Stitzel .....	283,036	Aug. 14	671	189	24	626
Pump-handle bracket .....	R. M. Lafferty .....	272,889	Feb. 27	1674	468	23	755
Pump iron. Chain .....	C. H. Miller .....	281,106	July 10	938	262	24	173
Pump-joint. Sleeping-car .....	J. Kirby, Jr .....	281,192	July 10	1056	291	24	194
Pump. Lift .....	H. C. Langrehr .....	280,834	July 10	618	{ 173 } 174	24	115
Pump. Measuring .....	S. M. Cole .....	270,021	Jan. 2	229	67	23	47
Pump. Measuring .....	H. E. Marchand .....	275,680	Apr. 10	1060	288	23	1415
Pump. Measuring .....	H. E. Marchand .....	287,697	Oct. 30	2447	659	25	475
Pump. Oil-can .....	E. M. Turner .....	283,834	Aug. 28	1652	{ 465 } 466	24	823
Pump-piston .....	L. L. Bigelow .....	279,318	June 12	876	243	23	2282
Pump-piston .....	J. O. Davis .....	272,662	Feb. 20	1361	382	23	693
Pump-piston .....	S. W. George .....	274,308	Mar. 20	1368	375	23	1085
Pump-piston .....	C. Newburgh .....	277,919	May 22	1715	468	23	1941
Pump-piston .....	A. S. Parke .....	279,663	June 19	1310	364	23	2361
Pump reel. Chain .....	W. P. Harrison .....	272,433	Feb. 20	1070	301	23	642
Pump-regulator .....	J. H. Blessing .....	282,402	July 31	2145	{ 588 } 589	24	397
Pump regulator. Steam .....	W. D. Hooker .....	288,436	Nov. 13	820	222	25	658
Pump regulator. Steam .....	J. Wagner .....	287,069	Oct. 23	1634	449	25	315
Pump-rod coupling .....	O. R. Mehaffey .....	275,065	Apr. 3	244	67	23	1268
Pump. Rotary .....	C. Comstock .....	283,377	Aug. 21	1164	{ 311 } 312	24	711
Pump. Rotary .....	G. W. Hunter .....	273,737	Mar. 13	642	171	23	952
Pump. Rotary .....	G. W. Shamp .....	283,153	Aug. 14	808	226	24	650
Pump. Rotary double piston .....	E. Neff, W. Enders, and J. B. Fieser .....	275,844	Apr. 17	1281	352	23	1460
Pump. Rotary steam .....	J. Moffet .....	276,857	May 1	414	110	23	1699
Pump. Ship's .....	A. Russell and F. Curtis .....	274,145	Mar. 20	1156	{ 318 } 319	23	1047
Pump. Ship's .....	A. Russell and F. Curtis. (Reissue) .....	10,418	Dec. 4	524	145	25	977
Pump. Steam .....	J. H. Blessing .....	283,064	Aug. 14	705	198	24	633
Pump. Steam .....	C. Rosine .....	287,863	Nov. 6	86	25	25	523
Pump. Steam .....	E. Thayer .....	274,154	Mar. 20	1169	323	23	1050
Pump. Steam .....	G. B. N. Tower .....	270,515	Jan. 9	846	246	23	175
Pump. Steam .....	B. C. Vanduzen .....	288,384	Nov. 13	753	205	25	646
Pump. Steam vacuum .....	G. A. Greeven .....	283,101	Aug. 14	750	211	24	640
Pump-stroke regulator .....	J. Bundy .....	283,070	Aug. 14	710	199	24	634
Pump tubing. Well .....	J. Marsden .....	285,909	Oct. 2	166	47	25	32
Pump. Vacuum .....	W. F. Garrison .....	280,600	July 3	314	88	24	56
Pump. Vacuum .....	E. Weston .....	283,545	Aug. 21	1296	363	24	746
Pump-valve .....	J. H. Blessing .....	272,198	Feb. 13	760	209	23	583
Pump-valve .....	J. Flower .....	276,170	Apr. 24	1673	{ 462 } 463	23	1537
Pump-valve .....	W. H. Guild .....	276,805	May 1	351	94	23	1687
Pump-valve .....	T. F. Lemassena .....	289,668	Dec. 4	366	103	25	951
Pump-valve .....	W. P. Olden .....	270,102	Jan. 2	315	93	23	64
Pump-valve .....	J. E. Sinclair .....	270,853	Jan. 16	1264	364	23	262
Pump-valve .....	F. Stock, Jr .....	286,742	Oct. 16	1213	327	25	235
Pump valve. Air .....	G. B. Brayton .....	269,914	Jan. 2	107	32	23	22
Pump valve and valve-gear. Steam .....	J. K. Vellacott .....	273,645	Mar. 6	519	139	23	923
Pump-valve. Steam-actuated .....	L. Lamy .....	284,744	Sept. 11	724	202	24	1033
Pump valves. Operating steam .....	C. A. Goyno .....	289,250	Nov. 27	1816	562	25	850
Pump. Windmill .....	E. S. Smith .....	270,256	Jan. 9	509	149	23	110
Pumps. Automatic leak-valve for .....	J. Watson .....	288,283	Nov. 13	612	168	25	623
Pumps. Feed-water adjustment for .....	N. W. Hawkinson .....	273,276	Mar. 6	37	12	23	841
Pumps in deep wells and mines. Operating .....	J. H. Huffer .....	270,671	Jan. 16	1048	300	23	220
Pumps. Journal-bearing and dog for chain .....	C. L. Merrill .....	278,992	June 5	460	126	23	2262
Pumps. Motor for operating .....	H. Melde .....	287,950	Nov. 6	293	59	25	543
Pumps. Rubber bucket for chain .....	M. D. Temple .....	290,282	Dec. 18	1129	317	25	1101
Pumps. Suction-condenser for steam .....	T. Blass .....	289,748	Dec. 4	474	134	25	969
Pumps to oil and other cans. Device for attaching .....	W. G. Holden .....	279,165	June 12	762	191	23	2253
Pumps. Utilizing the exhaust of steam .....	H. W. Robie and W. H. Lyons .....	286,074	Oct. 2	363	101	25	67
Pumping and flowing oil-wells. Apparatus for .....	E. S. Williamson .....	276,116	Apr. 17	1698	443	23	1517
Pumping and measuring machine. Adjustable .....	M. H. Richards .....	286,070	Oct. 2	358	99	25	66
Pumping and other machinery. Equalizing apparatus for .....	C. Bridges .....	270,007	Jan. 2	215	62	23	44
Pumping apparatus .....	W. R. Eckart .....	275,473	Apr. 10	804	217	23	1371
Pumping apparatus for deep wells and mines .....	J. H. Huffer .....	278,019	May 22	1841	502	23	1962
Pumping Artesian wells. Machine for .....	T. Korner .....	287,444	Oct. 30	2103	572	25	468
Pumping-engine .....	A. E. and M. W. Hall .....	289,648	Dec. 4	342	97	25	948
Pumping-engine .....	E. H. Martin .....	279,407	June 12	1066	279	23	2362
Pumping-engine .....	J. Waters .....	279,679	June 19	1330	370	23	2364
Pumping-engine condenser .....	W. A. Miles .....	272,458	Feb. 20	1098	310	23	647
Pumping-engine. Duplex .....	G. F. Blake .....	270,575	Jan. 16	923	{ 266 } 267	23	198
Pumping-engine. Geared .....	H. F. Gaskill .....	289,828	Dec. 11	571	{ 159 } 160	25	993
Pumping-engine. Steam .....	G. F. Blake .....	270,574	Jan. 16	922	266	23	197
Pumping-engine. Steam .....	C. P. Deane .....	288,214	Nov. 13	523	145	25	668
Pumping-engine. Steam .....	H. F. Gaskill .....	281,261	July 17	1156	319	24	218
Pumping-engine. Steam .....	P. S. Kingsland .....	272,264	Feb. 13	845	235	23	599
Pumping mechanism for supplying railway-tanks .....	R. P. Garsed .....	282,070	July 31	2186	600	24	404
Pumping system for surface-condensers .....	C. W. Copeland .....	273,965	Mar. 13	928	264	23	1001



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. E.	Vol.	Page.
Punch. Eyeletting.	C. Morrill	279,493	June 12	1103	304	23	2318
Punch for nut-machines	G. G. McMurtry	274,957	Apr. 3	98	27	23	1242
Punch-grinding machine	W. L. Hayes	271,322	Mar. 20	1383	380	23	1087
Punch. Hand	W. H. Newton	271,104	Jan. 23	1578	454	23	319
Punch-holder	C. Gray	280,608	July 3	325	91	24	58
Punch. Sheet-metal	F. W. Toedt	278,633	May 29	2633	720	23	2108
Punch. Ticket	W. H. Campbell	281,835	July 24	1891	516	24	349
Punch. Ticket	R. Woodman	285,867	Oct. 2	100	32	25	21
Punching and countersinking machine. Combined	W. E. Highfield	289,835	Dec. 11	581	162	25	995
Punching and cutting machine	E. Salomon	272,332	Feb. 13	923	257	23	612
Punching and drawing press	J. Gardner	271,531	Feb. 6	297	81	23	493
Punching and registering tickets. Apparatus for	M. Bebro	269,911	Jan. 2	103	31	23	22
Punching and shearing machine	J. M. Sailer	271,277	Jan. 30	1759	519	23	363
Punching-machine	A. Albin	283,740	Aug. 28	1338	435	24	803
Punching-machine	H. H. Packer	272,151	Feb. 13	704	193	23	573
Punching-machine	A. F. Spooner	289,577	Dec. 4	257	72	25	933
Punching machine. Metal	M. G. Wilder and C. T. Parry	277,817	May 15	1587	434	23	1912
Punching-press	E. Jordan	290,433	Dec. 18	1335	370	25	1137
Purifying, heating, and condensing apparatus	G. B. Field	272,831	Feb. 20	1568	441	23	731
Purse	C. B. Adams	288,539	Nov. 13	945	258	25	680
Purse-frame	C. Beard and C. E. Baldwin	284,364	Sept. 4	250	69	24	946
Purse or bag clasp	E. Sontheimer	277,064	May 8	699	182	23	1752
Purses. Fastening for closing	A. Alexandre	284,791	Sept. 11	786	219	24	1043
Putting-out machine	W. M. Hoffman	288,941	Nov. 20	1440	397	25	775
Putting-out machine	J. W. Vaughn	274,858	Mar. 27	2063	574	23	1213
Putty. Commercial	R. W. Davis	271,973	Feb. 6	471	11	23	523
Puzzle	J. U. Mackenzie	278,571	May 29	2553	697	23	2095
Puzzle	R. H. and J. T. Williams	284,525	Sept. 4	448	127	24	980
Puzzle. Combination numerical instruction	S. McCleary	284,037	Aug. 28	1919	537	21	870
Puzzle. Mechanical	W. J. Decker	286,395	Oct. 9	778	210	25	152
Puzzle or toy	F. W. Davenport	277,120	May 8	770	203	23	1764
Pyroxyline compounds. Treating	W. McCaine	276,443	Apr. 24	2020	23	1597	
Pyroxyline fabric	J. A. McClelland	271,493	Jan. 30	2077	598	23	415
Pyroxyline. Machine for treating compounds of	A. Olszewski	280,659	July 3	382	107	24	68
Pyroxyline. Manufacture of	J. W. Hyatt and F. V. Pool	274,335	Mar. 20	1405	108	23	1091
Pyroxyline, &c. Treating	D. and D. McCaine	286,212	Oct. 9	529	25	108	
Quadracycle for land and water	H. S. Blanchard	277,667	May 15	1490	383	23	1882
Quilt-holder. Safety	C. Lassen	275,671	Apr. 10	1052	285	23	1414
Quilting-frame	R. B. Bledsoe	281,605	July 17	1581	433	24	289
Quilting frame	R. B. Bledsoe	281,626	July 24	1882	514	24	347
Quilting frame	H. T. Davis	271,688	Feb. 6	124	34	23	461
Quilting frame	J. Pratt	274,967	Apr. 3	110	31	23	1244
Quilting-machine	L. Schultz	281,732	July 24	1756	476	24	324
Quilting-frame	E. H. Talianferro	289,171	Nov. 27	1720	480	25	832
Quilting-frame clamp	J. T. Snapp	290,940	Dec. 25	1997	551	25	1259
Quilting-frame for sewing-machines	H. T. Davis	271,689	Feb. 6	124	34	23	461
Quilting machine	E. Barton	271,403	Jan. 30	1957	566	23	393
Quilting-machine	A. Beck	276,657	May 1	145	37	23	1651
Quilting-machine	A. Beck	279,632	June 19	1272	353	23	2355
Quilting-machine	A. Brenzinger	289,884	Dec. 11	643	179	25	1005
Quilting-machine	W. Koch	271,475	Jan. 30	2056	592	23	411
Quilting-machine	L. Schultz	276,480	Apr. 24	2065	573	23	1604
Quilting-machine	J. Thomas	289,579	Dec. 4	260	73	25	933
Quoit	H. F. Mann	281,773	July 24	1814	495	24	335
Rack:							
See Advertising-card	Hay and grain rack.						
rack.	Key-rack.						
Barrel-rack.	Pen-rack.						
Clothes-rack.	Piano music-rack.						
Clothes and towel	Pool-ball rack.						
rack.	Pool-table-ball rack.						
Dish-draining rack.	Rein-rack.						
Display-rack.	Umbrella and parasol						
Drying-rack.	rack.						
Egg-rack.	Wagon-rack.						
Feed-rack.	Watch show-rack.						
Hay-rack.	Whip-rack.						
Rack and truck	O. Wilson	290,160	Dec. 11	968	273	25	1066
Rack for graduated glass measures, &c	F. L. McKee	278,161	May 22	2012	554	23	1992
Radiating apparatus. Steam and water heat	L. Crusins	279,721	June 19	1375	384	23	2372
Radiator	T. McAvity, Jr.	281,297	July 24	1972	539	24	362
Radiator attachment. Steam	R. T. Crane	287,099	Oct. 23	1672	459	25	323
Radiator attachment. Steam	G. Engel	275,757	Apr. 10	1163	319	23	1433
Radiator for furnaces	D. S. Richardson	272,326	Feb. 13	916	255	23	611
Radiator for furnaces	D. S. Richardson	279,666	June 19	1313	365	23	2361
Radiator. Steam	G. B. Boomer	289,965	Dec. 11	736	208	25	1023
Radiator. Steam	G. Clark	286,780	Oct. 16	1259	340	25	243
Radiator. Steam	J. Collis	290,665	Dec. 25	1641	452	25	1196
Radiator. Steam	S. F. Gold	288,995	Nov. 27	1509	417	25	795
Radiator. Steam	E. F. Gordon and H. Hobbs	271,330	Jan. 30	1861	539	23	375
Radiator. Steam	P. Gormly and L. Bridge	270,053	Jan. 2	265	77	23	54
Radiator. Steam	A. A. Griffing	273,066	Feb. 27	1873	526	23	769
Radiator. Steam	H. Macdonald	271,723	Feb. 6	163	45	23	468
Radiator. Steam	S. H. Morrill	287,770	Oct. 30	2549	680	25	493
Radiator. Steam	D. Renshaw	274,626	Mar. 27	2025	564	23	1207
Radiator. Steam and hot-water	J. Haag	257,122	Oct. 23	1700	465	25	328
Radiator tube. Steam	J. Keefe	273,740	Mar. 13	645	172	23	953

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Rag-cutting machine.....	L. Baumann.....	286,373	Oct. 9	748	201	25	146
Rag-engine.....	G. W. Cressman.....	289,235	Nov. 27	1800	498	25	847
Rag-joining knife.....	J. A. Fulwiler.....	288,991	Nov. 27	1506	416	25	794
Rags and waste from shoddy. Process of and apparatus for picking.....	F. L. Palmer.....	280,076	June 26	1808	509	23	2454
Rail-dog.....	J. Findlay.....	285,352	Sept. 18	1454	409	24	1169
Rail for railways and tramways.....	G. Cowdery and E. R. Thomas.....	289,626	Dec. 4	313	88	25	942
Rail for street-car tracks.....	A. J. Moxham.....	289,355	Nov. 27	1944	540	25	874
Rail-joint.....	C. F. Hartman.....	274,593	Mar. 27	1757	488	23	1159
Rail-joint.....	W. Seaton.....	280,406	July 3	82	22	24	17
Rail-joint fastener.....	G. F. Hoefler.....	273,735	Mar. 13	640	171	23	952
Rail-joint. Insulated.....	T. A. B. Putnam.....	284,668	Sept. 11	620	{ 175 176 }	24	1015
Rail-joint splice-bar.....	J. S. Seaman.....	276,900	May 1	469	124	23	1708
Rail-lifter.....	F. Jackson and E. R. Austin.....	274,609	Mar. 27	1777	494	23	1163
Rail-spike.....	H. W. Fowler.....	279,736	June 19	1392	368	23	2375
Rail-straightening machine.....	W. K. Seaman. (Reissue).....	10,276	Jan. 23	1703	492	23	340
Rail-straightening machine.....	C. P. Tittle.....	283,535	Aug. 21	1283	359	24	744
Rail straightening or bending machine.....	P. Frichett.....	273,353	Mar. 6	150	42	23	859
Rail-supporter.....	R. H. Wingate.....	288,907	Nov. 20	1399	386	25	767
Rail. System of transport on a single.....	C. F. M. T. Lartigue.....	270,063	Jan. 2	266	88	23	60
Rail-tie.....	E. B. Hungerford.....	276,414	Apr. 24	1966	550	23	1590
Rails and bars. Apparatus for bending.....	L. Vojáček.....	274,678	Mar. 27	1855	517	23	1177
Rails. Tool for cutting slots in.....	J. K. P. Renfro.....	274,659	Mar. 27	1832	508	23	1173
Railing. Iron.....	J. C. Erb.....	282,180	July 31	2346	646	24	428
Railway-alarm. Automatic.....	F. Clifford.....	279,225	June 12	761	210	23	2263
Railway and car.....	L. Angsath.....	283,947	Aug. 28	1792	507	24	849
Railway and car. Elevated.....	S. R. Thompson.....	270,513	Jan. 9	844	246	23	175
Railway and locomotive. Electric.....	W. M. Thomas.....	288,513	Nov. 13	918	251	25	675
Railway and working-car. Combined portable.....	T. Dark.....	280,802	July 10	582	162	24	109
Railway apparatus. Cable.....	C. W. Rasmusen.....	290,707	Dec. 25	1695	{ 467 468 }	25	1206
Railway apparatus. Cable.....	C. W. Rasmusen.....	290,708	Dec. 25	1699	{ 468 469 470 }	25	1207
Railway. Automatic electric.....	E. N. Dickerson, Jr., and C. G. Curtis.....	270,209	Jan. 9	452	{ 132 133 }	23	100
Railway-bar joints. Screw or nut fastening for.....	B. F. Crocker.....	287,806	Nov. 6	20	7	25	511
Railway-brake.....	S. G. Celquhoun.....	276,359	Apr. 24	1915	531	23	1578
Railway-brake.....	J. Woods.....	273,214	Feb. 27	2065	580	23	823
Railway-brake connection.....	G. Westinghouse, Jr.....	288,388	Nov. 13	764	206	25	648
Railway-bridge indicator.....	E. A. Gross.....	289,770	Dec. 4	491	137	25	972
Railway, bridging, &c. Elevated.....	L. T. Pyott.....	276,878	May 1	441	118	23	1704
Railway-buffer stop.....	A. A. Langley.....	271,478	Jan. 30	2061	593	23	412
Railway. Cable.....	A. S. Hallidie.....	276,239	Apr. 24	1758	489	23	1552
Railway. Cable.....	W. McCall and J. V. De Vry.....	286,044	Oct. 2	325	90, 91	25	60
Railway. Cable.....	H. Root.....	285,514	Sept. 25	1654	465	24	1211
Railway. Cable street.....	W. Haddock.....	275,378	Apr. 10	672	179	23	1349
Railway cattle-guard.....	B. F. Dillon and A. Gartner.....	275,333	Apr. 3	590	158	23	1326
Railway-chair.....	W. P. Comstock, Jr.....	290,209	Dec. 18	1035	291	25	1066
Railway-chair.....	C. E. Mark.....	285,142	Sept. 18	1221	343	24	1126
Railway-chair.....	A. E. Mersowsky.....	290,189	Dec. 11	1001	282	25	1071
Railway-chair.....	J. H. Ream.....	274,377	Mar. 20	1456	399	23	1100
Railway chair and joint.....	T. J. Christy.....	271,573	Jan. 30	9171	625	23	430
Railway chair and tie.....	L. Haas.....	282,309	July 31	2497	686	24	455
Railway coaling-station.....	W. H. Ridgway.....	276,077	Apr. 17	1550	428	23	1508
Railway-conductor. Electric.....	L. Dart.....	289,697	Dec. 11	658	184	25	1008
Railway cross-tie.....	H. F. Flickinger.....	283,230	Aug. 14	904	252	24	668
Railway cross-tie.....	J. Mahoney and D. W. Shockley.....	280,200	June 26	1942	546	23	2478
Railway-crossing.....	J. C. Coulter.....	290,541	Dec. 18	1481	409	25	1162
Railway-crossing.....	H. F. Cox. (Reissue).....	10,265	Jan. 2	434	126	23	89
Railway-crossing.....	E. Evans.....	275,028	Apr. 3	195	52	23	1258
Railway-crossing.....	D. Lippy.....	273,112	Feb. 27	1937	543	23	800
Railway-crossing.....	D. C. Pierce.....	285,511	Sept. 25	1650	464	24	1210
Railway-crossing alarm.....	J. A. B. Lovett.....	272,723	Feb. 20	1434	{ 402 403 }	23	706
Railway crossing and station signal.....	W. B. Wood.....	275,313	Apr. 3	549	149	23	1319
Railway-crossing barrier or gate.....	W. B. Morris.....	271,102	Jan. 23	1575	453	23	319
Railway-crossing gate.....	E. J. Henkle.....	287,674	Oct. 30	2413	651	25	469
Railway-crossing gate or signal.....	T. A. B. Putnam.....	284,669	Sept. 11	622	176	24	1015
Railway-crossing signal and alarm.....	H. H. Licmke.....	271,876	Feb. 6	350	97	23	502
Railway-crossings. Automatic alarm device for.....	E. E. Ries.....	282,776	Aug. 7	363	103	24	564
Railway. Electric.....	F. B. Crocker, C. G. Curtis, and S. S. Wheeler.....	281,672	July 24	1675	456	24	310
Railway. Electric.....	L. Daft.....	276,569	May 1	32	9	23	1633
Railway. Electric.....	C. J. Van Depoele.....	285,858	Oct. 2	98	29	25	19
Railway electric signal apparatus.....	C. A. Scott.....	282,229	July 31	2400	660	24	439
Railway electric signaling apparatus.....	C. A. Scott.....	282,230	July 31	2403	661	24	440
Railway. Electrical.....	T. A. Edison.....	273,494	Mar. 6	323	88	23	889
Railway. Elevated.....	G. W. Cook.....	271,425	Jan. 30	1933	{ 572 573 }	23	398
Railway. Elevated.....	E. S. Watson.....	288,194	Nov. 6	494	{ 137 138 }	25	593
Railway. Elevated endless single-track.....	W. R. Bishop and R. W. Eames.....	288,400	Nov. 13	780	211	25	651
Railway. Elevated wire.....	S. H. Knapp and A. E. Adams.....	282,200	July 31	2368	652	24	432
Railway fog-signal.....	W. S. Phelps.....	287,157	Oct. 23	1741	477	25	336
Railway foot-guard.....	F. W. Spencer.....	287,973	Nov. 6	232	66	25	548
Railway-frog.....	A. H. Gorton, O. C. Patchell, and W. E. Gorton.....	287,274	Oct. 23	1891	517	25	362
Railway-frog.....	W. J. Morden.....	288,652	Nov. 20	1090	299	25	712
Railway-frog.....	D. C. Pierce.....	276,070	Apr. 17	1543	425	23	1507
Railway-frog.....	W. H. Waters.....	270,521	Jan. 9	853	248	23	177
Railway-frogs, &c. Safety-guard for.....	J. F. Webb.....	279,849	June 19	1522	426	23	2398
Railway-gate.....	I. L. Ballard and J. W. Craig.....	285,951	Oct. 2	221	62	25	42



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Railway-gate	C. A. Ely	289,244	Nov. 27	1810	500	25	848
Railway-gate	G. A. Hall	282,631	Aug. 7	191	55, 56	24	533
Railway-gate	G. A. Hall and G. S. Fogg	280,307	June 26	2080	586	23	2503
Railway-gate	S. B. Langford	288,580	Nov. 13	995	274	25	690
Railway-gate	M. H. Lantz	286,713	Oct. 16	1179	317	25	229
Railway-gate	D. McNeely and J. A. Drake	287,147	Oct. 23	1729	473	25	334
Railway-gate	C. F. Strack	272,099	Feb. 13	646	{ 175 176 }	23	563
Railway gates or signals. Electrically operating	T. A. B. Putnam	284,670	Sept. 11	626	177	24	1016
Railway grip. Cable	A. H. Lighthall	288,180	Nov. 6	479	{ 132 133 }	25	591
Railway gripping attachment. Cable	W. Haddock	275,379	Apr. 10	676	180	23	1350
Railway-guard	S. J. Gray	290,770	Dec. 25	1783	493	25	1223
Railway-head	W. E. Whitehead	284,585	Sept. 4	521	146	24	992
Railway-head stop-motion	C. A. Tabor	288,137	Nov. 6	425	120	25	582
Railway-heads. Evener for	A. Schaer	287,585	Oct. 30	2298	{ 621 622 }	25	457
Railway-joints. Combined chair and fish-plate for	H. B. Nickerson	288,656	Nov. 20	1093	300	25	713
Railway metallic cross-tie and trough	G. L. Putnam	285,842	Oct. 2	74	22	25	15
Railway. Mine	J. G. Thompson	290,143	Dec. 11	951	269	25	1063
Railway operated by underground ropes	J. B. Low	280,384	July 3	54	15	24	12
Railway. Pneumatic	E. F. Melony	273,297	Mar. 6	70	20	23	846
Railway pneumatic switch and electric indicator	C. A. Cooper	281,839	July 24	1897	517	24	350
Railway. Portable elevated	B. S. Curtis and J. A. Cook	285,116	Sept. 18	1185	332	24	1121
Railway pressure-brakes. Relief-valve for	R. J. Wilson	284,154	Aug. 28	2067	574	24	895
Railway-rail	W. M. Dayton	289,628	Dec. 4	315	88	25	943
Railway-rail	J. F. Hanlon	276,242	Apr. 24	1760	490	23	1552
Railway-rail	A. McKenney	277,766	May 15	1538	418	23	1903
Railway-rail and rail-joint	P. A. Locke	282,739	Aug. 7	324	92	24	556
Railway rail and tie elevator and lifting-jack	T. C. Naramore	276,452	Apr. 24	2034	565	23	1539
Railway-rail brace	M. R. Perkins	287,573	Oct. 30	2273	616	25	442
Railway-rail chair	C. Armstrong and G. Abbott	272,617	Feb. 20	1306	364	23	683
Railway-rail chair	J. McMurtry	285,642	Sept. 25	1809	515	24	1240
Railway-rail. Compound	N. D. Wright	285,196	Sept. 18	1273	359	24	1138
Railway-rail coupling	H. Parker	280,760	July 3	519	146	24	92
Railway-rail cross-tie and fastening	L. O. Orton	290,793	Dec. 25	1806	500	25	1227
Railway-rail curving and straightening machine	L. C. Brastow and G. W. Twining	275,881	Apr. 17	1328	365	23	1469
Railway-rail cushion and joint	W. F. Gould	280,030	June 26	1755	493	23	2445
Railway-rail. Electric	L. Daff	283,760	Aug. 28	1568	443	24	809
Railway-rail, fish-joint, &c	F. C. Winby	284,155	Aug. 28	2069	574	24	895
Railway-rail joint	J. H. Bloomfield and M. W. Boone	282,259	July 31	2434	{ 669 670 }	24	445
Railway-rail joint	J. A. Eno	276,792	May 1	339	91	23	1685
Railway-rail joint	T. H. Gibbon	288,704	Nov. 20	1154	317	25	722
Railway-rail joint	W. F. Gould	285,406	Sept. 25	1529	430	24	1188
Railway-rail joint	C. M. Keefer	287,296	Oct. 23	1924	526	25	368
Railway-rail joint	J. E. Moeller	289,298	Nov. 27	1873	520	25	861
Railway-rail joint	R. P. Morgan, Jr	280,654	July 3	378	106	24	67
Railway-rail joint	J. W. Ollis	273,882	Mar. 13	832	226	23	984
Railway-rail joint	J. L. Pope	286,843	Oct. 16	1342	367	25	258
Railway-rail joint	W. J. Stevens	288,378	Nov. 13	747	203	25	645
Railway-rail joint	S. F. Stever	289,465	Dec. 4	108	31, 32	25	906
Railway-rail joint and lock	T. E. Billington	284,169	Sept. 4	13	4	24	906
Railway-rail lock	J. Patterson	285,662	Sept. 25	1831	522	24	1244
Railway-rail spike	W. J. Morden	277,597	May 15	1339	360	23	1867
Railway-rail splice-bar	I. Nutt	272,749	Feb. 20	1470	413	23	712
Railway rail. Street	T. L. Johnson	272,554	Feb. 20	1217	{ 340 341 }	23	668
Railway-rail. Tubular	A. McKenney	277,765	May 15	1536	418	23	1903
Railway-rails. Bar for aligning	B. J. Noonan	275,256	Apr. 3	476	133	23	1307
Railway-rails. Electrical connection for	W. W. Le Grande	285,494	Sept. 25	1631	458	24	1206
Railway-rails. Hot-bed for cooling	W. K. Seaman	272,781	Feb. 20	1507	{ 424 425 }	23	719
Railway-rails. Machine for curving	W. E. Kichline	279,394	June 12	990	275	23	2300
Railway-rails. Machine for straightening	F. H. Treat	286,655	Oct. 16	1099	{ 296 297 }	25	215
Railway-rails. Machinery for and method of manufacturing steel	J. Reese	276,712	May 1	230	58, 59	23	1664
Railway-recorder	L. K. Fuller	272,230	Feb. 13	799	223	23	590
Railway. Rope	J. B. Low	288,646	Nov. 20	1078	296	25	710
Railway running-gear	C. Brown	278,770	June 5	114	32, 33	23	2143
Railway safety-alarm	W. B. Morris	274,635	Mar. 27	1803	501	23	1168
Railway safety appliance	A. G. Cummings	276,564	May 1	26	7	23	1631
Railway safety-guard	B. Briody	279,700	June 19	1353	377	23	2368
Railway safety-switch	C. T. Johns	274,200	Mar. 20	1223	336	23	1060
Railway-signal	N. Allen	272,613	Feb. 20	1306	362	23	682
Railway-signal	A. H. Baker	271,296	Jan. 30	1815	{ 526 527 }	23	368
Railway-signal	W. C. Beckwith	277,200	May 8	868	230	23	1780
Railway-signal	G. W. Blodgett	284,716	Sept. 11	691	194	24	1027
Railway-signal	J. L. Booth	280,842	Dec. 25	1871	517	25	1238
Railway-signal	T. Breen	272,851	Feb. 27	1620	453	23	746
Railway-signal	G. F. Carlie	289,385	Dec. 4	15	5	25	890
Railway-signal	C. R. Collins	270,205	Jan. 9	449	131	23	99
Railway-signal	W. L. Doyle	285,589	Sept. 25	1745	{ 494 495 }	24	1228
Railway-signal	H. H. Eatherton	286,122	Oct. 2	420	115	25	78
Railway-signal	H. H. Eatherton	286,915	Oct. 16	1431	393	25	272
Railway-signal	D. Frank	278,231	May 22	2105	{ 579 580 }	23	2008
Railway-signal	J. Gray	270,305	Jan. 9	565	166	23	120
Railway-signal	W. Hadden	273,513	Mar. 6	343	93	23	893
Railway-signal	W. Hadden	273,514	Mar. 6	346	93	23	893
Railway-signal	A. G. Leonard	285,632	Sept. 25	1799	512	24	1238

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & E.	Vol.	Page.
Railway-signal.....	P. Long and W. S. Turney .....	276,254	Apr. 24	1772	{ 493 494	{ 23	1554
Railway-signal.....	L. R. Munson.....	270,604	Jan. 16	963	279	23	205
Railway-signal.....	W. H. Peddle and S. P. Thornton ..	287,051	Oct. 23	1610	443	25	310
Railway-signal.....	C. M. Risley.....	283,281	Aug. 14	971	271	24	680
Railway-signal.....	J. S. Trites.....	279,463	June 12	1066	295	23	2312
Railway signal and alarm. Automatic	H. G. Jones.....	282,730	Aug. 7	314	90	24	555
Railway signal and switch system. Electric inter- locking	J. K. Knight and W. H. Baker .....	272,839	Feb. 20	1590	{ 446 447	{ 23	734
Railway signal apparatus.....	M. C. Bragdon.....	290,388	Dec. 18	1262	{ 354 355	{ 25	1125
Railway signal apparatus.....	O. Gassett.....	289,827	Dec. 11	568	159	25	993
Railway signal apparatus.....	W. Hadden.....	273,515	Mar. 6	349	93	23	893
Railway signal apparatus.....	W. Hadden.....	273,516	Mar. 6	351	93	23	894
Railway signal apparatus.....	W. Hadden.....	273,517	Mar. 6	354	94	23	894
Railway signal apparatus.....	F. Lane.....	288,348	Nov. 13	700	192	25	637
Railway signal apparatus.....	J. P. Livermore.....	273,558	Mar. 6	409	110	23	904
Railway signal apparatus.....	C. D. Tisdale.....	273,639	Mar. 6	510	137	23	921
Railway-signal. Automatic	T. Arndt.....	289,953	Dec. 11	719	203	25	1019
Railway-signal. Automatic	J. S. McLeod.....	275,064	Apr. 3	239	66, 67	23	1267
Railway-signal. Automatic	C. M. Raffensparger.....	287,961	Nov. 6	219	62	25	545
Railway-signal. Automatic electrical	D. H. Applegate.....	285,944	Oct. 2	213	60	25	41
Railway-signal. Electric.....	D. C. Farrington.....	279,929	June 26	1627	{ 456 457	{ 23	2423
Railway-signal. Electric.....	W. Hadden.....	278,940	June 5	400	110	23	2191
Railway-signal. Electric.....	A. W. Hall.....	276,807	May 1	353	94	23	1688
Railway-signal. Electric.....	S. C. Hendrickson.....	276,038	Apr. 17	1507	415	23	1500
Railway-signal. Electric.....	W. W. Le Grande.....	272,142	Feb. 13	696	{ 190 191	{ 23	572
Railway-signal. Electric.....	W. W. Le Grande.....	272,276	Feb. 13	858	240	23	601
Railway-signal. Electric.....	W. W. Le Grande.....	287,446	Oct. 30	2107	573	25	409
Railway-signal. Electric.....	G. S. Maxwell.....	290,338	Dec. 18	1200	336	25	1114
Railway-signal. Electric.....	C. J. Means.....	273,377	Mar. 6	183	50	23	865
Railway-signal. Electric.....	H. C. Nicholson.....	275,255	Apr. 3	473	132	23	1307
Railway-signal. Electric.....	E. L. Orcutt.....	272,464	Feb. 20	1105	312	23	648
Railway signal locking apparatus.....	O. Gassett.....	283,232	Aug. 14	907	253	24	669
Railway-signal. Electro-pneumatic	O. Gassett.....	276,931	Apr. 17	1456	409	23	1497
Railway-signal. Pneumatic	E. M. Chase.....	275,019	Apr. 3	177	48, 49	23	1256
Railway-signal. Telegraphic	R. M. Hunter.....	277,569	May 15	1307	351	23	1862
Railway-signals. Apparatus for operating	A. G. Cummings.....	277,118	May 8	768	202	23	1763
Railway-signals. Automatic circuit-breaker for	M. W. Long.....	289,008	Nov. 27	1524	421	25	797
Railway-signals. Circuit-instrument for electric	J. Weiss.....	277,390	May 8	1083	201	23	1819
Railway-signals. Electrical connection for	T. J. Pottinger.....	287,466	Oct. 30	2131	579	25	414
Railway-signaling. Electric circuit for	G. Westinghouse, Jr.....	270,567	Jan. 16	1279	369	23	264
Railway-skid. Reversible	S. Lowe.....	277,302	May 8	985	265	23	1802
Railway sleeper and chair	T. J. Bronson and A. Armstrong ..	277,000	May 8	612	160	23	1737
Railway-sleeper. Metallic.....	H. Reese.....	272,477	Feb. 20	1126	{ 316 317	{ 23	651
Railway-spike.....	W. Goldie.....	278,428	May 29	2386	651	23	2065
Railway splice-bar.....	M. Sellers.....	285,688	Sept. 25	1860	531	24	1250
Railway-springs. Machine for making bands for	J. Palmer.....	273,302	Mar. 6	75	21	23	847
Railway-stations. Electric signal for.....	A. D. Blodgett, R. M. Read, and J. P. Tirrell.....	284,114	Aug. 28	2016	{ 560 561	{ 24	887
Railway stock-gate.....	E. H. Taylor.....	279,672	June 19	1325	367	23	2363
Railway structure and car therefor. Street-	O. D. Orvis and N. B. Adams.....	285,657	Sept. 25	1823	{ 519 520	{ 24	1243
Railway-switch.....	A. Ayres.....	275,115	Apr. 3	309	86	23	1279
Railway-switch.....	T. Breen.....	276,762	May 1	304	78, 79	23	1678
Railway-switch.....	G. Chalmers.....	286,682	Oct. 16	1137	306	25	222
Railway-switch.....	T. J. Daly.....	277,552	May 15	1288	346	23	1859
Railway-switch.....	W. P. Dodson.....	287,810	Nov. 6	23	8	25	511
Railway-switch.....	J. Elmer.....	277,697	May 15	1453	392	23	1887
Railway-switch.....	J. Evans.....	283,675	Aug. 28	1699	479	24	831
Railway-switch.....	A. T. Fay.....	276,794	May 1	341	91	23	1685
Railway-switch.....	J. Gobby, Jr.....	281,486	July 17	1438	394	24	265
Railway-switch.....	J. Gibbon.....	278,533	May 29	2512	685	23	2088
Railway-switch.....	J. Gray and W. Hollenback ..	275,038	Apr. 3	207	56	23	1261
Railway-switch.....	J. L. Hill.....	278,548	May 29	2527	690	23	2090
Railway-switch.....	J. Leet and A. C. Isreal.....	278,344	May 29	2284	624	23	2047
Railway-switch.....	P. Lyon.....	271,486	Jan. 30	2070	596	23	414
Railway-switch.....	W. McCall.....	273,865	Mar. 13	813	220	23	951
Railway-switch.....	G. McCall.....	289,677	Dec. 4	379	{ 108 109	{ 25	953
Railway-switch.....	G. Millerstedt.....	280,215	June 26	1962	552	23	2422
Railway-switch.....	J. Murphy.....	274,643	Mar. 27	1812	503	23	1169
Railway-switch.....	S. Nichols.....	274,814	Mar. 27	2014	561	23	1204
Railway-switch.....	C. M. Parks.....	272,313	Feb. 13	897	251	23	608
Railway-switch.....	J. H. Quimby.....	275,518	Apr. 10	857	233	23	1380
Railway-switch.....	J. T. Rigney.....	275,711	Apr. 10	1097	300	23	1422
Railway-switch.....	W. Spielman.....	272,789	Feb. 20	1518	428	23	721
Railway-switch.....	F. Vanoll.....	279,509	June 12	1126	312	23	2321
Railway-switch.....	F. C. Weir.....	273,785	Mar. 13	711	192	23	964
Railway-switch.....	J. C. West.....	285,190	Sept. 18	1274	358	24	1136
Railway-switch.....	W. A. Wood.....	280,988	July 10	802	223	24	148
Railway-switch adjusting and locking device	R. G. Brooks.....	274,713	Mar. 27	1893	528	23	1184
Railway switch and frog	H. Berlin.....	289,377	Dec. 4	7	3	25	888
Railway switch and signal mechanism	C. Stewart.....	271,334	Jan. 30	2124	611	23	422
Railway switch-block	J. Fonda.....	287,920	Nov. 6	165	47	25	536
Railway-switch bridle	J. Gray.....	270,544	Jan. 9	882	256	23	182
Railway-switch. Safety	D. H. Hault.....	280,476	July 3	178	47	24	32
Railway-switch safety-plate	A. E. Black and R. English.....	276,554	May 1	11	3	23	1628
Railway-switch signal	H. L. Pinney.....	269,958	Jan. 2	161	47	23	34
Railway-switch-stand	E. J. Beard and H. V. Hinckley ..	277,539	May 15	1269	340	23	1856
Railway-switch stand	H. Elliot.....	289,633	Dec. 4	332	89	25	944



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Railway-switch stand	A. Grindor	285,356	Sept. 18	1462	411	24	1170
Railway-switch stand	P. O'Hern	284,144	Aug. 28	2058	571	24	893
Railway switch-stand. Revolving	E. J. Beard and H. V. Hinckley	276,552	May 1	10	3	23	1628
Railway switches and rails. Braco for	F. C. Weir	273,786	Mar. 13	712	192	23	964
Railway switches and signals. Apparatus for operating	A. G. Cummings	271,808	Feb. 6	267	74, 75	23	487
Railway switches and signals. Interlocking apparatus for	J. W. Harper	273,681	Mar. 6	569	151	23	931
Railway-system. Electro-magnetic	T. A. Edison	273,490	Mar. 6	318	86	23	888
Railway-tie	T. Breck	272,850	Feb. 27	1619	452	23	746
Railway-tie	T. J. Bronson and A. Armstrong	289,806	Dec. 11	540	151	25	937
Railway-tie	C. Fisher	285,986	Oct. 2	255	72	25	49
Railway-tie	A. R. Spaulding	281,806	July 24	1858	507	24	342
Railway-tie	E. L. Taylor	286,651	Oct. 16	1096	295	25	215
Railway tie and chair. Combined	W. H. Gibbs and G. W. Snook	274,309	Mar. 20	1370	375	23	1085
Railway-tie and fastening	J. L. Chapman	270,637	Aug. 14	718	201	24	635
Railway-tie and stringer	J. Newton	285,833	Oct. 2	62	19	25	13
Railway-tie. Metallic	J. Clark	270,637	Jan. 16	1002	289	23	212
Railway-tie. Metallic	S. B. Wright	280,110	June 26	1845	520	23	2461
Railway-tie. Metallic	J. W. Young	284,157	Aug. 28	2071	575	24	896
Railway-ties from the refuse of sugar-cane. Manufacture of	E. C. Le Bourgeois	278,978	June 5	442		23	2199
Railway-ties. Instrument for tamping the beds of.	S. W. Hudson	273,363	Mar. 6	163	46	23	862
Railway-ties. Wear-plate for	D. Servis. (Reissue)	10,302	Apr. 3	615	165	23	1330
Railway time-indicator	J. M. Kelly	281,516	July 17	1473	404	24	272
Railway time-recorder	A. H. Dean and S. H. Whiting	279,723	June 19	1378	385	23	2373
Railway time-signal	H. H. Eatherton	279,084	June 5	580	159	23	2223
Railway time-signal	S. J. Swayze and J. C. Lane	286,156	Oct. 2	459	125	25	85
Railway time-signal	W. H. Waddell	288,519	Nov. 13	924	252	25	676
Railway-track	J. A. Merrill	283,632	Aug. 21	1396	391	24	765
Railway-track circuits. Electrical connector for	S. D. Field	275,180	Apr. 3	385	106	23	1293
Railway-track cleaner	G. W. Willey	288,903	Nov. 20	1394	384	25	766
Railway-track cleaner	G. Royal	287,583	Oct. 30	2296	621	25	446
Railway-track gate	H. R. Vordermark	270,707	Jan. 16	1095	313	23	229
Railway-track joint	J. H. Hohlgreen	278,016	May 22	1839	501	23	1961
Railway-track layer	J. Turner	275,096	Apr. 3	285	78	23	1275
Railway-track signal. Detonating	J. A. Paullin	269,955	Jan. 2	158	46	23	33
Railway-tracks. Alarm-signal for	J. Clark	285,571	Sept. 25	1719	456	24	1223
Railway-tracks. Device for connecting portable	J. J. Clarke	287,418	Oct. 30	2073	563	25	402
Railway-tracks. Device for raising and lining	W. R. Dickerson	271,611	Feb. 6	34	9	23	446
Railway-tracks. Mechanism for laying	A. Michelson	287,952	Nov. 6	204	59	25	543
Railway. Traction-	W. B. Reaney	281,924	July 24	2001	548	24	367
Railway. Traction-cable	O. H. Jadin	281,020	Aug. 28	1901	533	24	867
Railway. Traction-rope	A. Bonzano	281,440	July 17	1371	738	24	254
Railway. Traction-rope	C. F. Findlay and D. J. Miller	281,256	July 17	1150	317	24	216
Railway. Traction-rope	D. J. Miller and C. F. Findlay	281,284	July 17	1177	325	24	221
Railway. Traction-rope	J. H. Robertson	289,563	Dec. 4	239	68	25	928
Railway. Traction-rope	S. H. Terry	270,508	Jan. 9	828	241	23	172
Railway. Traction-rope	W. Wharton, Jr.	281,593	July 17	1565	422	24	286
Railway-train signal. Electric	E. R. E. Cowell	286,268	Oct. 9	597	163	25	119
Railway-trains. Apparatus for automatically stopping	W. C. Crandell, Jr.	275,599	Apr. 10	950	258	23	1397
Railway-trains. Electric signaling apparatus for	G. M. Bedinger, Jr.	275,879	Apr. 17	1325	365	23	1469
Railway-trains. Electric signaling apparatus for	F. A. Shaw and H. E. Judkins	277,358	May 8	1050	282	23	1813
Railway-trains on bridges. Apparatus for recording speed of	J. H. M. Waldorp	279,292	June 12	838	232	23	2277
Railway-trains. Stopping	J. Chandler	273,465	Mar. 6	290	79, 80	23	883
Railway-trains. Stopping	J. Chandler	283,754	Aug. 28	1560	440	24	808
Railway-trains. Tail-light bracket for	J. D. Hollister	288,058	Nov. 6	335	94	25	564
Railway turn-table. Electric	T. A. Edison	273,489	Mar. 6	318	86	23	888
Railway-wagon	J. McCulloch and W. Cook	272,967	Feb. 27	1758	491	23	769
Railway. Wire-rope	W. S. Ray	278,041	May 22	1868	510	23	1967
Railways. Cable switch or shifter for underground endless-cable	A. H. Lighthall	288,947	Nov. 20	1448	399	25	776
Railways. Cable-tube for traction-	S. H. Terry	270,506	Jan. 9	824	240	23	171
Railways. Conduit for traction-rope	A. Bonzano	287,920	Oct. 23	1827	500	25	350
Railways. Conduit for traction-rope	E. Samuel	281,502	July 17	1525	418	24	280
Railways. Conduit for traction-rope	E. Samuel	282,783	Aug. 7	370	105	24	565
Railways. Construction of	D. J. Miller	271,727	Feb. 6	168	46	23	469
Railways. Curve, frog, &c., for street-	T. L. Johnson	276,419	Apr. 24	1991	551	23	1591
Railways. Gripping and carrying apparatus for cable	H. Root	286,163	Oct. 2	466	127	25	87
Railways. Motor for use near	R. Zinsmaier and M. Burt	272,012	Feb. 6	523	141	23	530
Railways. Permanent way for	F. Schauman	279,280	June 12	826	229	23	2275
Railways. Permanent way for mountain	R. Abt	284,790	Sept. 11	786	219	24	1043
Railways. Permanent way of	J. Whiteford	273,923	Mar. 13	880	240	23	993
Railways. Sand-guard for	T. W. Stapleton	285,700	Sept. 25	1877	535	24	1253
Railways. Take-up mechanism for endless-cable	A. H. Lighthall	288,948	Nov. 20	1449	399	25	776
Railing for cemetery-plats	V. T. Meredith	278,579	May 29	2560	699	23	2096
Rain-protector for chimneys and roofs	I. Sage	280,085	June 26	1820	512	23	2456
Rake:							
See Hand-rake.	Hay-rake.						
Harvester-rake.	Lawn-rake.						
Harvester chain-rake.	Ore-washer rake.						
Rake.	C. W. Knapp	272,268	Feb. 13	848	236	23	600
Rake.	W. W. Knowlton	281,524	July 17	1482	407	24	273

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Rake.....	J. M. Nolan.....	285,653	Sept. 25	1820	518	24	1242
Rake and tedder. Combined.....	A. B. Pixley.....	271,265	Jan. 30	1773	515	23	360
Rake-straightening device.....	G. N. Sweet.....	277,077	May 8	719	187	23	1754
Rakes and forks. Making metallic.....	W. W. Knowlton.....	281,634	July 17	1618	443	24	295
Rakes. Making metallic.....	C. A. Lindgren.....	282,336	July 31	2537	695	24	462
Rakes. Mold for garden and other.....	J. F. Hay.....	273,683	Mar. 6	572	152	23	932
Ram. Hydraulic.....	G. Yellott.....	281,749	July 24	1776	483	24	327
Randing-machine.....	J. Paquette.....	288,850	Nov. 20	1334	366	25	755
Range.....	J. A. Price.....	277,781	May 15	1551	422	23	1906
Range and stove.....	L. L. Culver.....	289,988	Dec. 11	765	216	25	1029
Range and stove. Cooking.....	P. Brake.....	282,263	July 31	2439	671	24	446
Range-boiler setting.....	J. H. Burnett.....	287,231	Oct. 23	1842	503 504	25	353
Range. Cooking.....	J. C. Barnes.....	280,782	July 10	563	157	24	106
Range or stove. Cooking.....	C. Fuller.....	272,131	Feb. 13	686	187	23	570
Range water-back and boiler fitting.....	J. McGinley.....	289,847	Dec. 11	599	166	25	998
Rasp.....	S. T. Harrison.....	279,750	June 19	1407	393	23	2378
Rasp.....	R. Volschitz.....	285,185	Sept. 18	1270	356	24	1135
Rasp and saw. Combined.....	W. S. How.....	289,104	Nov. 27	1646	456	25	818
Rat-trap.....	S. H. B. Harwell.....	290,580	Dec. 18	1531	422	25	1171
Ratchet-brace.....	J. Chantrell.....	286,683	Oct. 16	1139	307	25	222
Ratchet-drill.....	C. T. Colebrook.....	285,733	Sept. 25	1928	547	24	1261
Ratchet-drill.....	S. Gardner.....	273,676	Mar. 6	562	149	23	930
Ratchet-drill.....	J. A. Haase.....	286,294	Oct. 9	656	174	25	129
Ratchet-drill.....	R. K. Jones.....	285,629	Sept. 25	1796	511	24	1238
Ratchet-drill.....	A. Söderström.....	288,882	Nov. 20	1371	378	25	762
Ratchet-drill.....	W. M. Turner.....	270,516	Jan. 9	847	247	23	175
Ratchet-drill.....	O. S. Walker.....	282,809	Aug. 7	399	113	24	570
Ratchet-wrench.....	W. D. Forbes.....	277,256	May 8	930	249	23	1792
Ratchet-wrench.....	G. Gontier.....	290,036	Dec. 11	827	233	25	1039
Ratchet-wrench.....	B. F. Lancaster.....	282,462	July 31	2699	742	24	491
Ratchet-wrench.....	A. E. Petticrew.....	285,669	Sept. 25	1839	525	24	1246
Ratchet-wrench.....	J. W. Pruitt.....	283,357	Aug. 14	1074	301	24	700
Ratchet-wrench.....	J. W. Womelsdorff.....	272,822	Feb. 20	1561	439	23	729
Ratchet wrench and drill.....	W. C. Shipherd.....	278,053	May 22	1878	514	23	1969
Rattan scraping and splitting machine.....	S. Sawyer.....	284,241	Sept. 4	108	30	24	923
Rattan-scraping machine.....	G. S. Colburn.....	277,235	May 8	902	240	23	1787
Rattan-splitting machine. Guide for.....	D. F. Pratt.....	286,957	Oct. 16	1483	407	25	282
Rattle. Child's.....	P. Lesson.....	276,251	Apr. 24	1770	493	23	1554
Razor-guard.....	J. P. Tryner.....	290,146	Dec. 11	954	270	25	1063
Razor-sheath.....	T. Clarke.....	289,389	Dec. 4	20	6	25	890
Razor-strop.....	G. W. Cook.....	283,862	Aug. 28	1683	475	24	829
Razor-strop.....	J. Darling.....	282,173	July 31	2333	643	24	427
Razor-strop.....	E. P. Haff.....	272,042	Feb. 13	569	154	23	551
Razor-strop.....	A. V. M. Sprague.....	276,092	Apr. 17	1573	433	23	1511
Razor-strop.....	J. R. Torrey.....	272,356	Feb. 13	956	266	23	617
Razor-strop.....	J. R. Torrey.....	272,357	Feb. 13	956	266	23	617
Razor-strop.....	J. R. Torrey.....	279,615	June 19	1249	346	23	2350
Razor-strop.....	J. R. Torrey.....	279,616	June 19	1250	347	23	2351
Razor-strop.....	J. R. Torrey.....	288,380	Nov. 13	749	204	25	645
Razor-strop.....	J. R. Torrey.....	288,381	Nov. 13	750	204	25	646
Razor-strop.....	L. C. Tower and J. Lamont.....	271,997	Feb. 6	508	136	23	528
Razor-strop.....	S. Wales.....	281,419	July 17	1349	372	24	250
Razor-strop.....	J. A. Wilson.....	288,389	Nov. 13	766	206	25	648
Razor strop and drawer. Combined.....	H. B. Emerson.....	287,260	Oct. 23	1876	514	25	359
Reamer.....	C. R. C. French.....	280,368	July 3	36	10	24	8
Reamer. Expanding.....	P. Gendron.....	289,248	Nov. 27	1813	501	25	849
Reamer. Expanding.....	J. Thornton, Jr.....	282,685	Aug. 7	252	73	24	543
Reaming and tapping. Device for.....	J. F. Piper.....	277,507	May 15	1229	331	23	1850
Reaming-machine. Hand.....	M. Flather.....	273,976	Mar. 13	941	259	23	1003
Reaper and harvester.....	B. Hebron.....	275,649	Apr. 10	1027	277	23	1410
Reaper and mower.....	W. N. Whiteley.....	284,931	Sept. 11	943	265	24	1072
Reapers. Gavel-sizing mechanism for.....	G. H. Spaulding.....	282,581	Aug. 7	128	38	24	592
Reaping and mowing machine.....	E. J. Blood.....	273,341	Mar. 6	132	37	23	856
Reaping-machine.....	W. Gause.....	274,931	Apr. 3	60	16	17	1236
Reaping-machine reel.....	A. J. Hartle.....	270,797	Jan. 16	1200	346	23	250
Receptacle. Extensible.....	A. Collin.....	273,030	Feb. 27	1835	513 514	23	783
Reclining-chair.....	R. Adams.....	279,115	June 12	642	175 176	23	2243
Reclining-chair.....	M. O. Baldwin.....	270,724	Jan. 16	1114	318 319	23	233
Reclining-chair.....	M. S. Curtiss.....	280,356	July 3	21	6	24	6
Reclining-chair.....	C. E. Lubarg.....	282,095	July 31	2216	609	24	409
Reclining-chair.....	J. Pursell, Sr.....	271,512	Jan. 30	2100	604	23	419
Reclining-chair lock.....	T. Haynes.....	289,653	Dec. 4	349	98	25	949
Recorder: See Fare-recorder. Railway time-recorder. Passenger-recorder. Time-recorder. Railway-recorder.							
Recording device.....	E. M. Assolstine.....	275,454	Apr. 10	775	207 474	23	1367
Recumbent chair.....	E. E. Peck.....	281,724	July 24	1750	475	24	323
Recuperator-furnace.....	J. Zellweger.....	279,475	June 12	1083	300	23	2315
Reducing substances and extracting juices. Ma- chine for.....	G. Sanford.....	285,165	Sept. 18	1245	349	24	1131
Reducing substances and extracting juices. Ma- chine for.....	G. Sanford.....	285,166	Sept. 18	1246	349 350	24	1131
Reduction-machine.....	J. M. Case.....	276,132	Apr. 17	1626	448	23	1521
Reduction-machine.....	J. W. Collins.....	290,208	Dec. 18	1033	391	25	1035
Reed-plates. Manufacture of.....	M. Bray.....	280,787	July 10	568	159	24	107



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Reel.							
See Belting-reel. Hose-reel.							
Centrifugal reel. Hose and rope reel.							
Check-row-wire reel. Planter check-line reel.							
Clothes-reel. Pump-reel.							
Fishing-reel. Reaping-machine reel.							
Harvester-reel. Wire-reel.							
Reel for coiling wire, rods, or ropes	S. T. Williams	269,905	Jan. 2	97	29	23	21
Reelette	C. B. Clark	277,231	May 8	899	239	23	1786
Reeling yarns, &c. Machine for	J. Garsed	280,601	July 3	315	88	24	56
Refining and oxidizing apparatus. Portable	C. Lévêque	290,075	Dec. 11	870	{ 247 248 }	25	1047
Reflector	J. Jaeger	285,270	Sept. 18	1363	384	24	1154
Reflector and signal frame for car-lamps	H. Roth	278,602	May 29	2588	706	23	2100
Reflector-bracket	W. Somerville	270,703	Jan. 16	1090	312	23	928
Reflector. Combination daylight	T. Hyatt	285,625	Sept. 25	1790	509	24	1337
Reflector for chandeliers, &c.	I. P. Frink	274,930	Apr. 3	58	15, 16	23	1235
Reflector for street-lamps	E. S. Ritchie	270,339	Jan. 9	610	179	23	129
Reflector. Gas-light	J. S. Havens	271,451	Jan. 30	2021	583	23	405
Reflector. Lamp	H. F. W. Seale	272,610	May 29	2309	709	23	2102
Reflectors. Manufacturing head-light	D. Garrett	282,879	Aug. 7	485	136	24	586
Refrigerated air and water. System of and apparatus for producing and distributing	H. D. Cogswell	272,654	Feb. 20	1352	380	23	692
Refrigerating and ice machine	J. T. Davis	287,912	Nov. 6	153	45	25	535
Refrigerating and ice machine	H. Logan	281,090	July 10	922	257	24	170
Refrigerating apparatus	C. C. Palmer	290,794	Dec. 25	1807	{ 500 501 }	25	1227
Refrigerating apparatus	C. C. Palmer	290,795	Dec. 25	1813	501	25	1228
Refrigerating apparatus	J. Reid	281,793	July 24	1842	504	24	339
Refrigerating apparatus	G. R. Wight	275,556	Apr. 10	901	244	23	1388
Refrigerating-car	W. A. Chase	289,977	Dec. 11	750	212	25	1036
Refrigerating-car	F. C. Hills	279,163	June 12	700	190	23	2252
Refrigerating-car	C. C. Palmer	290,600	Dec. 18	1552	{ 428 429 }	25	1175
Refrigerating-car	G. R. Wight	281,421	July 17	1351	373	24	251
Refrigerating-catafalque	J. J. Slevin	273,771	Mar. 13	695	187	23	961
Refrigerating chamber, car, and apparatus	I. Myer and S. K. Bayley	277,150	Jan. 8	811	{ 213 214 }	23	1771
Refrigerating-chamber for railway-cars, &c.	J. H. Ridgway	270,126	Jan. 2	348	102	23	71
Refrigerating liquids and means employed therefor; also apparatus for the subsequent treatment of the refrigerated liquids.	W. Young and A. Neilson	277,822	May 15	1594	436	23	1914
Refrigerating-machines. Compound for use in	C. Marchand	275,834	Apr. 17	1266	.....	23	1457
Refrigerating oils, fats, &c. Apparatus for	J. Siddeley and F. N. Mackay	277,797	May 15	1568	{ 428 429 }	23	1909
Refrigerating structure	W. S. Post	288,260	Nov. 13	585	162	25	618
Refrigerating structure	R. H. Waters	275,000	Apr. 3	147	41	23	1251
Refrigerative vessel	P. Nunn	273,137	Feb. 27	1969	554	23	807
Refrigerator	B. F. Adams	271,391	Jan. 30	1940	561	23	390
Refrigerator	B. F. Adams	290,306	Dec. 18	1159	325	25	1107
Refrigerator	J. Alexander	285,199	Sept. 18	1921	360	24	1138
Refrigerator	J. A. Baldwin	276,752	May 1	293	75	23	1676
Refrigerator	R. P. Beatty	290,387	Dec. 18	1261	354	25	1125
Refrigerator	J. Castell	278,507	May 29	2481	677	23	2082
Refrigerator	J. M. Clock	274,275	Mar. 20	1324	366	23	1078
Refrigerator	J. M. Clock	274,276	Mar. 20	1326	366	23	1078
Refrigerator	E. B. Corby	274,275	Jan. 9	686	203	23	143
Refrigerator	E. S. Farson	275,620	Apr. 10	990	267	23	1403
Refrigerator	G. Fischer	274,750	Mar. 27	1937	539	23	1192
Refrigerator	F. C. Ginther	275,639	Apr. 10	1016	274	23	1407
Refrigerator	H. C. Goodell	282,852	Aug. 7	487	137	24	586
Refrigerator	S. Gray	288,427	Nov. 13	811	219	25	637
Refrigerator	J. Hammer	288,430	Nov. 13	814	220	25	637
Refrigerator	J. B. Hartman	289,833	Dec. 11	576	161	25	994
Refrigerator	T. Keely	278,148	May 22	1997	549	23	1989
Refrigerator	G. Koons	287,691	Oct. 30	2436	655	25	473
Refrigerator	H. H. and H. T. Lovell	288,583	Nov. 13	998	275	25	690
Refrigerator	T. H. Marks	278,158	May 22	2005	552	23	1991
Refrigerator	C. Moore	281,367	July 17	1306	{ 361 362 }	24	244
Refrigerator	C. Pettersson	282,220	July 31	2390	658	24	437
Refrigerator	C. Pettersson	282,221	July 31	2392	658	24	437
Refrigerator	C. A. Sheridan	269,887	Jan. 2	75	23	23	17
Refrigerator	J. Smith and D. E. Blake	286,084	Oct. 2	375	103	25	68
Refrigerator	J. H. Wickes	279,062	June 5	551	152	23	2218
Refrigerator	G. R. Wight	284,932	Sept. 11	944	266	24	1072
Refrigerator and beer-cooler	M. Hohl	281,879	July 24	1947	532	24	358
Refrigerator and producing artificial cold	W. C. Wren	277,649	May 15	1402	377	23	1878
Refrigerator-car	S. K. Bayley	276,952	May 1	545	{ 142 143 }	23	1719
Refrigerator-car	E. N. Bugbey	270,383	Jan. 9	670	196	23	140
Refrigerator-car	B. Z. Collings and C. F. Pike	285,394	Sept. 25	1516	427	24	1186
Refrigerator-car	D. W. Davis	272,124	Feb. 13	677	184	23	569
Refrigerator-car	T. N. Ely, J. W. Cloud, and E. B. Wall	290,324	Dec. 18	1184	332	25	1111
Refrigerator-car	C. P. Jackson	281,631	July 17	1615	442	24	294
Refrigerator-car	C. P. Jackson	282,196	July 31	2365	651	24	432
Refrigerator-car	P. C. Nissen	280,224	June 26	1976	555	23	2424
Refrigerator-car	L. Rutter	283,150	Aug. 14	804	225	24	649
Refrigerator-car	H. M. Sexton	290,805	Dec. 25	1829	{ 505 506 }	25	1230
Refrigerator-car	D. E. Somes	278,285	May 22	2174	{ 599 600 }	23	2019
Refrigerator-car shelf	R. H. Waters	278,757	June 5	102	29	23	2141

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Refrigerator cars and buildings. Heat insulation of.	S. K. Bayley .....	284,361	Sept. 4	247	69	24	946
Refrigerator creamery attachment .....	J. Miller .....	280,940	July 10	752	209	24	138
Refrigerator, filter, and water-cooler. Combined .....	T. C. Native .....	277,330	May 8	1020	273	23	1808
Refrigerator. Marine .....	S. W. Johnson .....	276,824	May 1	374	100	23	1691
Refrigerator or butter-cooler .....	O. M. Whitman .....	279,296	June 12	844	234	23	2277
Refrigerator. Portable .....	J. D. Bell .....	286,375	Oct. 9	750	201	25	146
Refrigerator-room .....	J. Hess .....	285,893	Oct. 2	147	42	25	29
Refrigerator. Window- .....	E. H. Benoist .....	275,799	Apr. 17	1228	336	23	1451
Refrigerators. Absorber for ammonia .....	G. W. Stockman .....	275,869	Apr. 17	1312	362	23	1466
Regenerating-furnace .....	I. and S. Harper .....	274,320	Mar. 20	1380	{ 379 } { 380 }	23	1087
Regenerative furnace .....	W. Swindell .....	285,522	Sept. 25	1665	{ 468 } { 469 }	24	1213
Regenerator for securing a uniform temperature in steel ingots.	J. Reese .....	270,249	Jan. 9	500	148	23	108
Regenerator-furnace .....	W. Swindell .....	282,586	Aug. 7	136	40, 41	24	524
Register:							
See Barber's - chair reg- ister.	Erasable register.						
	Fare-register.						
	Carriage-register.						
	Hot-air register.						
	Cash-register.						
	Passenger-register.						
	Differential register.						
	Watchman's register.						
	Engine-register.						
Register .....	G. Abrams .....	286,671	Oct. 16	1122	302	25	219
Register .....	J. L. Harley .....	277,130	May 8	789	207	23	1767
Register and alarm. Combined .....	J. G. Lettelier .....	286,317	Oct. 9	686	{ 182 } { 183 }	25	135
Register and ventilator. Combined .....	A. D. Gallentine .....	282,977	Aug. 14	591	167	24	612
Register and ventilator. Combined .....	W. H. Maxfield .....	290,084	Dec. 11	883	251	25	1049
Registering apparatus. Autographic .....	J. C. Shoup .....	286,560	Oct. 9	974	262	25	187
Registering apparatus. Cashier's .....	B. W. Webb .....	274,424	Mar. 20	1515	{ 416 } { 417 }	23	1111
Regulator:							
See Air-brake pressure-regulator.	Feed-regulator.						
	Feed-water regulator.						
	Clock-regulator.						
	Gas-regulator.						
	Damper-regulator.						
	Gas-pressure regulator.						
	Draft-regulator.						
	Governor-regulator.						
	Heat and gas regulator.						
	Electric - apparatus regulator.						
	Horse-power speed-regulator.						
	Electric-current-regulator.						
	Lamp-regulator.						
	Mine air-regulator.						
	Electric-light regulator.						
	Pressure-regulator.						
	Pump-regulator.						
	Electric machine regulator.						
	Pump-stroke regulator.						
	Speed-regulator.						
	Electrical-generator regulator.						
	Temperature-regulator.						
	Watch-regulator.						
	Electro-magnetic regulator.						
Rein and whip holder .....	F. C. Ayer .....	270,016	Jan. 23	1474	425	23	302
Rein carrier. Check- .....	L. E. Champlain .....	279,707	June 19	1360	379	23	2369
Rein. Driving- .....	O. F. Coy .....	289,072	Nov. 27	1609	445	25	812
Rein fastener. Check- .....	W. R. Coe .....	281,616	July 17	1599	437	24	292
Rein-guard .....	C. R. Chute .....	273,955	Mar. 13	918	252	23	999
Rein-guard for whiffletrees .....	N. C. Moody .....	286,145	Oct. 2	446	121	25	83
Rein guide. Driving- .....	N. B. Stowers .....	280,530	July 3	235	63	24	42
Rein-holder .....	F. S. Baldwin and P. A. Migasi .....	276,655	May 1	143	36	23	1651
Rein-holder .....	T. W. Beers and J. W. Craig .....	279,906	June 26	1597	448	23	2418
Rein-holder .....	E. E. Brewster .....	282,609	Aug. 7	162	49	24	529
Rein-holder .....	A. Cottrell .....	285,466	Sept. 25	1602	450	24	1201
Rein-holder .....	J. K. Craig .....	285,976	Oct. 2	246	70	25	47
Rein-holder .....	J. E. Daniels .....	285,468	Sept. 25	1604	450	24	1201
Rein-holder .....	H. A. Hudson .....	277,734	May 15	1493	405	23	1895
Rein-holder .....	W. S. Laney and C. F. Yost .....	287,031	Oct. 23	1585	436	25	306
Rein-holder .....	D. McGladery .....	279,411	June 12	1010	280	23	2303
Rein-holder .....	D. C. Montgomery .....	276,062	Apr. 17	1535	422	23	1505
Rein-holder .....	J. L. Thomson .....	285,525	Sept. 25	1669	470	24	1214
Rein-holder. Vehicle .....	D. McDougald .....	287,556	Oct. 30	2246	609	25	437
Rein hook. Check- .....	J. R. Shaw .....	283,154	Aug. 14	809	226	24	650
Rein-rack .....	P. Bossidy .....	277,668	May 15	1422	384	23	1882
Relay or circuit-closer. Automatic shunt- .....	T. A. B. Putnam .....	289,137	Nov. 27	1682	407	25	825
Relay or electro-magnet. Double-current .....	A. C. Fraser .....	286,917	Oct. 16	1433	394	25	273
Rendering animal-fats. Apparatus for .....	L. M. Ohly .....	275,404	Apr. 10	710	190	23	1356
Rendering apparatus .....	S. Stephens .....	282,584	Aug. 7	133	39	24	524
Rendering fats. Apparatus for .....	C. H. Robison .....	287,862	Nov. 6	84	25	25	522
Rendering-tank .....	R. Garstang .....	271,700	Feb. 6	137	38	23	464
Rendering-tank .....	W. Spiegel .....	269,969	Jan. 2	174	50	23	36
Reporting speech. System or method of .....	J. C. Zachos .....	290,830	Dec. 25	1859	514	25	1236
Resawing-machine .....	R. B. Jones and G. F. Wetherell .....	272,445	Feb. 20	1081	305	23	644
Reservoir for water-works .....	B. F. Stephens .....	274,987	Apr. 3	131	37	23	1248
Respirator .....	H. A. Stewart .....	279,200	June 12	736	202	23	2259
Respirator. Nasal .....	W. A. Fruhling, Jr. .....	270,655	Jan. 16	1027	295	23	217
Reticule .....	C. De Quilfeldt .....	271,974	Feb. 6	472	{ 128 } { 129 }	23	523
Retort-furnace for roasting ores .....	C. Cherry, Sr. .....	290,212	Dec. 18	1038	292	25	1086
Retouching-machine .....	E. Allen .....	270,923	Jan. 23	1355	391	23	283
Return-ball .....	C. W. Clark .....	289,221	Nov. 27	1785	494	25	844
Return-flue boiler .....	C. H. Fitch .....	270,212	Jan. 9	461	134	23	101
Reverberatory furnace .....	J. H. Canavan .....	285,462	Sept. 25	1597	443	24	1200
Reverberatory furnace .....	G. Fenwick and B. Cochrane .....	271,442	Jan. 30	2008	579	23	403
Reverberatory smelting-furnace .....	R. P. Wilson .....	284,992	Sept. 11	1019	286	24	1087
Revolver .....	H. Goodman .....	274,093	Mar. 13	1085	299	23	1086



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Revolver.....	D. Smith.....	279,197	June 12	733	201	23	2259
Revolver.....	J. E. Tarbianx.....	273,644	Mar. 6	516	139	23	922
Revolver.....	D. B. Wesson.....	234,756	Sept. 11	782	218	24	1042
Revolver-lock.....	G. W. Cilley.....	270,204	Jan. 9	448	131	23	99
Revolving sprinkler.....	J. H. Henderson and E. Schutz.....	270,664	Jan. 16	1037	297	23	219
Revolving wrench.....	S. A. Thomas.....	287,194	Oct. 23	1790	491	25	344
Rheostat.....	G. W. O'Harra.....	283,138	Aug. 14	789	221	24	647
Ribbon box and reel.....	E. H. Bacon.....	283,949	Aug. 28	1794	508	24	849
Ribbon-holder.....	I. T. Lane.....	288,070	Nov. 6	347	97	25	566
Ribbon-holder.....	J. Mellette.....	275,685	Apr. 10	1068	291	23	1417
Ribbon-holder.....	J. Mellette.....	282,745	Aug. 7	329	94	24	557
Ribbon-roll.....	J. Mellette.....	282,744	Aug. 7	329	94	24	557
Rice-beater.....	J. Decker.....	271,810	Feb. 6	273	75	23	488
Rice beating and cleaning machine.....	W. H. Shelfer.....	275,426	Apr. 10	738	195 196	23	1361
Rice-field trunk and gate.....	W. S. Mallard.....	283,264	Aug. 14	952	266	24	677
Rice-huller.....	E. Lischy.....	279,404	June 12	1004	278	23	2302
Rice hulling and polishing machine.....	L. S. Seaver.....	277,947	May 22	1748	476 477	23	1945
Rifle barrel and extractor therefor. Auxiliary.....	P. B. Howe.....	282,194	July 31	2362	650	24	431
Rifle-sight.....	J. F. Gaffey and G. W. Cook.....	290,225	Dec. 18	1059	297	25	1090
Rifle-sight.....	J. V. Mountford and W. G. Kelsall.....	282,658	Aug. 7	220	64	24	538
Rifles. Range-finder for.....	E. O. C. Ord, Jr., and J. A. Kress.....	277,922	May 22	1718	469	23	1941
Ring:							
See Curtain-ring. Lamp coupling-ring.							
Curtain-pole ring. Martingale-ring.							
Ear-ring. Napkin-ring.							
Finger-ring. Packing-ring.							
Grappling-ring. Spinning-ring.							
Harness pole-ring. Spinning-frame ring.							
Hog-nose ring. Watch dust-ring.							
Key-ring. Watch pendant-ring.							
Ring for charms.....	J. N. B. White.....	288,899	Nov. 20	1391	383	25	766
Ring for halters, tie-straps, pessaries, &c.....	H. G. Farr.....	277,473	May 15	1190	320	23	1844
Ring-sockets. Manufacture of.....	M. Bray.....	280,786	July 10	567	158	24	107
Ripping the seams of garments. Device for.....	A. De Beaumont.....	288,031	Nov. 6	305	86	25	558
Rivet-feeding device.....	J. B. Root.....	280,404	July 3	80	22	24	17
Rivet-setting machine.....	C. M. Platt.....	270,555	Jan. 9	895	259	23	184
Rivet-setting machine.....	E. E. Spencer.....	277,369	May 8	1061	286	23	1815
Rivet. Tubular.....	B. L. D'Aubigné.....	275,158	Apr. 3	362	99	23	1289
Riveting hollow cylinders. Device for.....	J. H. Clinch.....	280,452	July 3	143	38	24	27
Riveting-machine.....	J. F. Allen.....	289,369	Dec. 4	1	1	25	887
Riveting-machine.....	J. K. Conner.....	287,630	Oct. 30	2359	636	25	457
Riveting-machine.....	J. Rohan.....	274,143	Mar. 20	1154	318	23	1047
Riveting-machine.....	J. L. Saxe.....	287,730	Oct. 30	2457	670	25	482
Riveting metals together.....	J. M. Griest.....	290,229	Dec. 18	1062	297	25	1090
Roach-trap.....	W. H. Banks.....	272,372	Feb. 13	973	271	23	621
Road.....	O. L. De Forest.....	282,253	July 31	2460	677	24	450
Road-engine.....	A. O. Frick and W. H. Snyder.....	273,978	Mar. 13	943	259	23	1003
Road-engine.....	B. F. Opp.....	287,709	Oct. 30	2460	663	25	477
Road-engine.....	F. D. Pierce.....	274,024	Mar. 13	996	273	23	1013
Road-engine.....	W. N. Rumely.....	273,396	Mar. 6	205	55	23	869
Road-engine.....	C. K. Sweet.....	284,147	Aug. 28	2061	571	24	894
Road-engine.....	E. J. Taylor and C. L. Pagenhart.....	270,999	Jan. 23	1453	419	23	299
Road-engine.....	J. S. Woolsey.....	285,942	Oct. 2	211	59	25	40
Road-making machine.....	F. M. Meulton.....	281,715	July 24	1731	470	24	319
Road-mender.....	L. Lambern.....	277,748	May 15	1511	410	23	1898
Roads. Machine for making and repairing.....	G. W. Taft.....	276,093	Apr. 17	1573	433 434	23	1511
Roads, sidewalks, &c. Constructing.....	W. B. Henning. (Reissue).....	10,388	Sept. 25	1997	565	24	1270
Roaster:							
See Coffee-roaster.							
Roaster.....	D. B. Eastburn.....	282,617	Aug. 7	171	51	24	530
Roasting and baking pan.....	C. Jackson.....	288,604	Nov. 20	1071	294	25	709
Roasting and reducing furnace for gold and silver ores.....	J. E. Rice.....	275,272	Apr. 3	495	137	23	1310
Roasting and smelting furnace.....	B. O. Russell.....	290,115	Dec. 11	916	260 261	25	1056
Roasting and smelting furnace. Combined.....	E. Holman.....	286,822	Oct. 16	1312	357 358	24	253
Rock and earth boring apparatus.....	T. Lindell.....	286,837	Oct. 16	1332	363 364	25	256
Rock-breaker.....	B. F. Kramer.....	278,801	June 5	168	49	23	2151
Rock-breaker.....	L. Radovich.....	286,223	Oct. 9	539	148	25	109
Rock-breaker.....	W. S. Sharpneck.....	271,138	Jan. 23	1615	464	23	325
Rock breaker and dredger.....	C. A. Scanlan.....	290,482	Dec. 18	1400	386 387	25	1149
Rock-crusher.....	M. B. Dodge.....	273,478	Mar. 6	308	83	25	886
Rock-drill.....	E. A. Armstrong.....	290,309	Dec. 18	1164	326	25	1107
Rock-drill.....	J. Naylor and R. Thornton.....	289,300	Nov. 27	1874	521 521	25	862
Rock-drill.....	T. Radford.....	272,977	Feb. 27	1771	495	23	771
Rock-drill.....	W. H. Randall.....	281,922	July 24	1999	548	24	367
Rock-drill.....	R. V. Rogers and J. M. Allen.....	274,035	Mar. 13	1008	276	23	1015
Rock-drill.....	A. Shedlock.....	285,516	Sept. 25	1657	466	24	1211
Rock-drill.....	C. W. Stickney.....	270,613	Jan. 16	972	281	23	207
Rock-drill. Hand.....	E. Moreau.....	269,952	Jan. 2	155	45	23	33
Rock-drill. Power.....	J. B. Waring.....	271,168	Jan. 23	1655	476	23	332
Rock-drill. Steam.....	J. W. V. Rawlins.....	280,668	July 3	894	110	24	70
Rock-drill. Steam.....	A. and A. L. Stevens.....	280,971	July 10	784	217	24	144
Rock-drill support.....	G. R. Cullingworth.....	287,102	Oct. 23	1675	460	25	324
Rock-drill tripod.....	G. R. Cullingworth.....	287,103	Oct. 23	1676	460	25	324
Rock-drills. Connecting-rod for.....	C. A. Sterling.....	287,188	Oct. 23	1784	489	25	343
Rock-drilling apparatus.....	G. M. Derby.....	278,517	May 29	2492	681	23	2085
Rock-drilling machine.....	H. Dunham.....	277,244	May 8	915	245	23	1789

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Drig.	Vol.	Page.
Rock-drilling machine .....	H. F. Parsons and H. Borchardt.....	281,719	July 24	1739	{ 472 473 }	{ 24 24 }	{ 321 321 }
Rock-drilling machine .....	A. Shedlock .....	282,382	July 31	2593	712	24	472
Rock-drilling machine .....	T. Threlfall .....	282,686	Aug. 7	253	73, 74	24	543
Rock-drilling machine .....	T. Threlfall .....	282,687	Aug. 7	256	74	24	543
Rock-drilling machine. Hand .....	H. F. Parsons and H. Borchardt.....	281,718	July 24	1734	{ 471 472 }	{ 24 24 }	{ 320 320 }
Rock-pulverizer .....	F. M. and W. Case .....	284,611	Sept. 11	554	157	24	1004
Rocker. Detachable .....	O. B. Olmsted .....	271,907	Feb. 6	390	107	23	509
Rocker. Juvenile .....	S. Woldon .....	281,420	July 17	1351	372	24	251
Rocket .....	J. J. Detwiller .....	276,007	Apr. 17	1467	404	23	1494
Rocket and whip .....	T. Dockum .....	268,985	Nov. 27	1498	415	25	793
Rocking attachment for chairs .....	H. H. Schneider .....	277,617	May 15	1362	367	23	1871
Rocking-chair .....	J. E. Cotton .....	284,822	Sept. 11	818	228	24	1049
Rocking-chair .....	H. Lamprecht .....	286,449	Oct. 9	539	227	25	163
Rocking-chair .....	C. Niemiller .....	279,879	June 19	1559	436	23	2404
Rocking-chair .....	G. A. Stiles .....	279,886	June 19	1565	438	23	2406
Rocking-chair and fan. Combined .....	H. P. Roberts .....	278,047	May 22	1871	512	23	1967
Rocking-chair and hobby-horse. Combined .....	J. F. Butler and U. McClinchie .....	275,583	Apr. 10	832	253	23	1393
Rocking-chair. Base .....	A. B. Stevens .....	273,630	Mar. 6	499	134	23	920
Rocking-chair fan attachment .....	T. Powell .....	271,114	Jan. 23	1589	456	23	321
Rocking-chair foot-rest .....	E. Emerson and G. G. Cook .....	280,160	June 26	1898	534	23	2471
Rocking-chair. Spring .....	A. H. Ordway .....	281,124	July 10	969	271	24	178
Rocking-chair treadle attachment .....	M. V. B. Evesson .....	290,634	Dec. 18	1601	439	25	1182
Rocking horse and gig .....	W. E. Crandall .....	270,023	Jan. 2	232	67	23	48
Rocking, reclining, and easy chair .....	D. B. Hartley .....	276,687	May 1	197	50, 51	23	1658
Rod:							
See Car-brake rod. Lightning-rod.							
Fishing-rod. Sucker-rod.							
Gun-rod. Wantage or ullage rod.							
Leveling-rod.							
Roll-brasses and making the same .....	H. and H. B. Chess .....	290,535	Dec. 18	1475	407	25	1161
Roll for slitting iron .....	H. Greer .....	281,184	July 10	1047	290	24	192
Roll-mounting .....	R. A. Carter .....	285,567	Sept. 25	1715	485	24	1222
Rolled bars while cooling. Treating hot .....	J. L. Lewis .....	278,246	May 22	2123	585	23	2011
Roller:							
See Belt-roller. Leather-dressing roller.							
Clay crushing and grinding roller. Log-roller.							
Coal-crushing roller. Paper-hanger roller.							
Copying-roller. Printer's roller.							
Curtain-roller. Printer's inking-roller.							
Curtain-roller. Pulley-roller.							
Curtain-fixtured roller. Saw-mill log-roller.							
Elastic roller. Shade-roller.							
Friction-roller. Skate-roller.							
Gudgeon-roller. Spring-roller.							
Inking-roller. Trawl-roller.							
Land-roller. Window-shade roller.							
Roller and harrow. Combined .....	S. P. Kimball .....	287,836	Nov. 6	56	17	25	517
Roller-die .....	J. B. Sutch and W. C. McElheny .....	274,840	Mar. 27	2039	568	23	1209
Roller-feed mechanism .....	W. O. Gunckel .....	282,720	Aug. 7	307	87	24	553
Roller fixture. Spring .....	A. B. Shaw .....	280,249	June 26	2006	564	23	2490
Roller grain-mill .....	O. W. Tresselt .....	279,673	June 19	1326	{ 367 368 }	{ 23 23 }	{ 2363 2363 }
Roller-mill .....	E. T. Butler .....	281,237	July 17	1123	309	24	212
Roller-mill .....	C. B. Campbell .....	272,644	Feb. 20	1340	376	23	690
Roller-mill .....	H. J. Gilbert .....	276,237	Apr. 24	1757	489	23	1551
Roller-mill .....	H. J. Gilbert .....	276,238	Apr. 24	1757	489	23	1552
Roller-mill .....	H. J. Gilbert .....	280,170	June 26	1906	537	23	2472
Roller-mill .....	R. J. Good .....	289,083	Nov. 27	1621	449	25	814
Roller-mill .....	N. W. Holt .....	286,440	Oct. 9	829	225	25	161
Roller-mill .....	J. Livingston .....	275,675	Apr. 10	1056	286	23	1414
Roller-mill .....	J. Livingston .....	280,195	June 26	1936	544	23	2478
Roller-mill .....	J. Livingston .....	284,135	Aug. 28	2041	{ 567 568 }	{ 24 24 }	{ 891 891 }
Roller-mill .....	D. W. Marmon .....	274,508	Mar. 27	1651	{ 459 460 }	{ 23 23 }	{ 1140 1140 }
Roller-mill .....	D. W. Marmon .....	275,835	Apr. 17	1267	{ 348 349 }	{ 23 23 }	{ 1458 1458 }
Roller-mill .....	D. W. Marmon .....	276,440	Apr. 24	2015	559	23	1595
Roller-mill .....	D. W. Marmon .....	277,307	May 8	992	266	23	1803
Roller-mill .....	D. W. Marmon and J. Warrington .....	275,055	Apr. 3	223	61, 62	23	1264
Roller-mill .....	S. B. Rickerson .....	271,518	Jan. 30	2109	607	23	490
Roller-mill .....	S. B. Rickerson .....	278,272	May 22	2161	594	23	2017
Roller-mill .....	S. B. Rickerson .....	278,273	May 22	2162	{ 594 595 }	{ 23 23 }	{ 2017 2017 }
Roller-mill .....	S. B. Rickerson .....	278,274	May 22	2163	{ 595 596 }	{ 23 23 }	{ 2017 2017 }
Roller-mill .....	E. Strong .....	288,886	Nov. 20	1375	379	25	763
Roller-mill .....	J. Warrington .....	277,525	May 15	1249	{ 336 337 }	{ 23 23 }	{ 1853 1853 }
Roller-mill .....	F. Wegmann .....	276,104	Apr. 17	1587	{ 438 439 }	{ 23 23 }	{ 1514 1514 }
Roller-mill .....	A. N. Wolf .....	288,750	Nov. 20	1217	333	25	733
Roller-mill feed mechanism .....	D. E. Dowling .....	289,518	Dec. 4	183	51	25	918
Roller-mill feed mechanism .....	G. V. Hecker .....	287,126	Oct. 23	1703	466	25	329
Roller-mill feed mechanism .....	N. W. Holt .....	288,808	Nov. 20	1282	{ 351 352 }	{ 25 25 }	{ 745 745 }
Roller-mill feed mechanism .....	W. M. Jewell .....	280,184	June 26	1920	540	23	2475
Roller-mill sieve .....	H. J. and G. A. Gilbert .....	275,190	Apr. 3	396	109	23	1295
Roller-mill test-plate .....	W. D. Gray .....	273,065	Feb. 27	1872	526	23	789
Rollers with toothed metal. Apparatus for covering .....	W. T. Leech .....	277,297	May 8	980	263	23	1801



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Rolling axes. Die for.....	L. Hammond .....	278,544	May 29	2523	688	23	2089
Rolling car-couplings. Roll for.....	J. W. Higgs .....	289,001	Nov. 27	1517	{ 419 420 }	{ 25 25 }	796
Rolling coupling-pins. Machine for.....	J. Maseth .....	286,324	Oct. 9	694	185	25	136
Rolling hoops, sheets, or hollow cylinders. Machine for.....	J. Reese .....	276,284	Apr. 24	1809	504	23	1561
Rolling-machine.....	C. V. Woerd .....	270,170	Jan. 2	404	117	23	82
Rolling metal bars. Machine for.....	J. Ostrander .....	274,964	Apr. 3	105	29, 30	23	1243
Rolling metal rods and bars.....	F. H. Daniels .....	271,225	Jan. 30	1726	500	23	332
Rolling metal. Roll for.....	W. E. Harris and E. B. Evans .....	288,176	Nov. 6	475	131	25	590
Rolling-mill.....	J. H. Bickley .....	289,605	Dec. 4	291	82	25	939
Rolling-mill.....	A. Crandell .....	281,978	July 24	2066	565	24	378
Rolling-mill.....	G. Erkenzweig .....	281,474	July 17	1420	390	24	263
Rolling-mill.....	G. Erkenzweig .....	281,475	July 17	1423	390	24	263
Rolling-mill.....	J. S. Griffin .....	282,718	Aug. 7	303	85, 86	24	552
Rolling-mill.....	W. Hart .....	276,177	Apr. 24	1680	465	23	1538
Rolling-mill.....	P. Kirk .....	270,441	Jan. 9	748	219	23	155
Rolling-mill.....	J. J. Roberts .....	276,629	May 1	106	28	23	1645
Rolling-mill.....	T. Shaffer .....	276,086	Apr. 17	1562	431	23	1510
Rolling-mill.....	T. Shaffer .....	280,248	June 26	2006	564	23	2490
Rolling-mill.....	T. Shaffer .....	288,501	Nov. 13	904	226	25	672
Rolling-mill.....	R. Uren .....	274,856	Mar. 27	2047	573	23	1212
Rolling-mill.....	S. T. Wellman .....	277,815	May 15	1586	{ 433 434 }	{ 23 23 }	1912
Rolling-mill.....	S. T. Wellman .....	277,860	May 15	1642	{ 447 448 }	{ 23 23 }	1922
Rolling-mill.....	S. T. Williams .....	284,700	Sept. 11	607	188	24	1023
Rolling-mill.....	S. R. Wilmot .....	281,595	July 17	1568	429	24	286
Rolling-mill. Continuous.....	G. W. Cobbett and J. E. Cunningham. ham. ....	285,113	Sept. 18	1182	331	24	1120
Rolling-mill. Continuous.....	F. H. Daniels .....	287,008	Oct. 23	1551	{ 427 428 }	{ 25 25 }	299
Rolling-mill. Continuous.....	W. W. McCallip .....	277,044	May 8	609	174	23	1746
Rolling-mill. Continuous.....	J. Reese .....	275,856	Apr. 17	1293	355	23	1462
Rolling-mill. Continuous.....	M. V. Smith .....	274,524	Mar. 27	1672	464	23	1144
Rolling-mill. Continuous.....	M. V. Smith .....	274,525	Mar. 27	1674	464	23	1144
Rolling-mill guide.....	A. A. Simonds .....	280,093	June 26	1827	514	23	2458
Rolling mill. Metal.....	J. I. Williams .....	275,309	Apr. 3	542	148	23	1318
Rolling-mill plant.....	W. Garrett .....	289,524	Dec. 4	190	53, 54	25	920
Rolling-mill roll.....	S. R. Wilmot .....	281,596	July 17	1571	429	24	287
Rolling-mill roll.....	S. R. Wilmot .....	281,597	July 17	1572	429	24	287
Rolling-mill. Universal.....	J. Reese .....	272,086	Feb. 13	625	{ 169 170 340 341 }	{ 23 23 24 24 }	560
Rolling-mill. Wire-rod.....	F. H. Daniels .....	283,470	Aug. 21	1212	340	24	731
Rolling-mills. Billet-guide for.....	W. W. McCallip .....	271,725	Feb. 6	165	45	23	469
Rolling mills. Lift for plate.....	R. Barrett .....	271,766	Feb. 6	217	60, 61	23	478
Rolling-pin.....	J. Nath .....	278,258	May 22	2148	589	23	2015
Rolling railway-rails. Device for.....	A. J. Acaster .....	276,322	Apr. 24	1877	321	23	1571
Rolling socket-blanks for oil-well rods. Machine for.....	L. Yakel. (Reissue) .....	10,314	Apr. 10	1252	334	23	1442
Rolling steel springs. Roll for.....	D. F. Kanaley .....	272,556	Feb. 20	1221	341	23	608
Rolling tubes, columns, &c. Machine for.....	C. Kellogg .....	276,340	May 29	2279	633	23	2046
Rolling wire rods and apparatus therefor.....	T. H. Dodge .....	290,002	Dec. 11	786	221	25	1032
Roof.....	N. Butterfield .....	274,265	Mar. 20	1313	362	23	1076
Roof.....	C. Svendsen .....	270,859	Jan. 16	1270	366	23	263
Roof and sidewalk for basements and rear extensions of buildings. Vault-light.....	T. Hyatt .....	285,358	Sept. 18	1404	412	24	1171
Roof and sidewalk for constructing basements, &c., to buildings. Vault-light.....	T. Hyatt .....	286,137	Oct. 2	437	119	25	81
Roof-coating.....	J. H. Kelley .....	289,003	Nov. 27	1519	.....	25	796
Roof. Composition.....	J. F. Hoffman .....	285,131	Sept. 18	1201	337	24	1124
Roof. Insulated metallic.....	H. C. Thomas .....	283,166	Aug. 14	823	230	24	653
Roof. Portable.....	H. C. Herron .....	284,846	Sept. 11	847	238	24	1054
Roof snow-guard.....	C. A. Neuert .....	272,148	Feb. 13	701	192	23	573
Roof. Stack.....	J. W. Harper .....	286,431	Oct. 9	818	222	25	159
Roof-valley. Sheet-metal.....	C. B. Cooper .....	287,632	Oct. 30	2302	637	25	458
Roof. Vault or combination skylight reflector.....	T. Hyatt .....	284,963	Sept. 11	984	277	24	1080
Roofs. Construction of glazed.....	W. E. Rendle .....	270,337	Jan. 9	607	179	23	128
Roofs, &c. Illuminating.....	J. K. Ingalls .....	271,854	Feb. 6	325	90	23	498
Roofers. Metal-bending machine for tin.....	R. C. Snowden .....	274,398	Mar. 20	1484	408	23	1105
Roofing.....	W. C. Smalstig and W. Massey .....	280,681	July 3	410	114	24	73
Roofing-cement. Wallkill.....	T. T. Crane and J. G. Sanderson .....	274,178	Mar. 20	1200	330	23	1056
Roofing. Composite.....	S. L. Foster .....	270,943	Jan. 23	1383	400	23	288
Roofing composition.....	W. White .....	282,138	July 31	2858	.....	24	420
Roofing, &c. Composition for.....	N. McCoy .....	275,507	Apr. 10	842	.....	23	1378
Roofing composition to felting. Machine for applying.....	J. F. Perry .....	284,891	Sept. 11	892	252	24	1063
Roofing compound.....	D. Brobst .....	284,371	Sept. 4	257	.....	24	948
Roofing compound.....	J. Bushey and R. Woodcock .....	273,948	Mar. 13	911	.....	23	997
Roofing compound.....	W. Detrick .....	284,725	Sept. 11	701	.....	24	1029
Roofing compound.....	H. H. Hutchins .....	270,436	Jan. 9	743	.....	23	154
Roofing fabric.....	H. M. Miner .....	278,732	June 5	62	19	23	2135
Roofing fabric. Apparatus for making.....	H. M. Miner .....	275,841	Apr. 17	1276	350	23	1459
Roofing fabric. Machine for making.....	H. M. Miner .....	276,856	May 1	413	110	23	1699
Roofing-felt.....	W. White .....	282,139	July 31	2229	628	24	420
Roofing-knife or tinner's scraper.....	G. J. Cline .....	272,649	Feb. 20	1346	378	23	691
Roofing machine.....	R. C. Snowden .....	283,291	Aug. 14	981	274	24	683
Roofing. Machine for flattening the seams of sheet-metal.....	W. Painter, J. L. Murrill, and L. R. Keizer .....	277,332	May 8	1022	274	23	1808
Roofing. Machine for preparing tin-plates for.....	A. J. Coaner .....	270,022	Jan. 2	230	67	23	48
Roofing material.....	S. M. Allen .....	278,481	May 29	2447	.....	23	2076
Roofing. Metallic.....	T. F. and J. Fitzberger .....	277,254	May 8	938	249	23	1792
Roofing. Metallic.....	E. Severin .....	276,085	Apr. 17	1562	430	23	1510
Roofing. Plastic compound for.....	C. Taylor .....	270,151	Jan. 2	383	.....	23	78

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Roofing-slates. Device for attaching .....	J. C. Chambers .....	282,439	July 31	2672	733	24	497
Roofing tile .....	W. Ludowici .....	283,126	Aug. 14	778	210	24	645
Roofing tile mold .....	L. Lane and L. D. Woodworth .....	279,402	June 12	1000	277	23	2301
Rope and cord fastening .....	C. S. Upton .....	277,632	May 15	1381	372	23	1874
Rope-clamp .....	C. Littlefield .....	278,155	May 22	2003	551	23	1990
Rope-driving apparatus .....	O. C. Woolson .....	285,095	Sept. 18	1158	323	24	1116
Rope driving apparatus .....	O. C. Woolson. (Reissue) .....	10,407	Nov. 20	1471	406	25	781
Rope-end fastener .....	J. Gibbons .....	286,897	Oct. 16	1291	349	25	249
Rope-hitch .....	G. D. Mosher .....	283,719	Aug. 21	1507	425	24	786
Rope, &c. Machine for making .....	M. M. Zellers .....	275,743	Apr. 10	1134	310	23	1428
Rope-serving machine .....	J. H. Nute .....	275,937	Apr. 17	1387	382	23	1490
Rosaniline. Manufacture of the nitro-leuco base of .....	E. Fischer .....	283,766	Aug. 28	1574	.....	24	810
Rosin and spirits of turpentine. Manufacturing .....	L. Bellingrath .....	284,367	Sept. 4	253	.....	24	947
Rotary crusher .....	D. Bnshman .....	277,543	May 15	1273	341	23	1857
Rotary cutter .....	O. J. Beale .....	277,405	May 8	1100	295	23	1822
Rotary cutter .....	J. H. Busell .....	270,633	Jan. 16	998	288	23	211
Rotary cutter .....	W. D. Orcutt .....	283,803	Aug. 28	1624	457	24	818
Rotary cutter .....	A. E. Stierckler .....	284,086	Aug. 28	1978	551	24	880
Rotary cutters. Gage-slide for .....	M. L. Orum .....	278,815	June 5	184	53, 54	23	2154
Rotary drill. Expansion .....	S. W. Douglass .....	274,740	Mar. 27	1919	535	23	1189
Rotary engine .....	B. T. Babbitt .....	269,991	Jan. 2	199	57	23	41
Rotary engine .....	C. H. Bacon .....	280,438	July 3	126	34	24	24
Rotary engine .....	J. J. Blair .....	281,004	July 10	820	228	24	152
Rotary engine .....	J. H. Blake .....	273,446	Mar. 6	265	71	23	878
Rotary engine .....	C. P. Case .....	273,951	Mar. 13	913	249 250 251	23	998
Rotary engine .....	E. H. Corbin .....	282,171	July 31	2330	643	24	426
Rotary engine .....	C. F. Cory .....	276,360	Apr. 24	1917	532	23	1578
Rotary engine .....	D. Dudley .....	282,505	Aug. 7	35	10	24	506
Rotary engine .....	M. Fav .....	280,162	June 26	1899	535	23	2471
Rotary engine .....	J. P. Fletcher .....	289,822	Dec. 11	560	157	25	991
Rotary engine .....	I. N. Forbes .....	274,475	Mar. 27	1587	436 437 438	23	1131
Rotary engine .....	I. N. Forbes .....	274,476	Mar. 27	1594	438 439 439	23	1132
Rotary engine .....	I. N. Forbes .....	274,477	Mar. 27	1596	440 441 441	23	1132
Rotary engine .....	I. N. Forbes .....	274,478	Mar. 27	1600	441 442	23	1133
Rotary engine .....	I. N. Forbes .....	274,479	Mar. 27	1607	443 485	23	1133
Rotary engine .....	W. J. Frazier .....	276,235	Apr. 24	1752	486 487 488	23	1551
Rotary engine .....	C. C. Garcelon and W. A. Woods .....	280,027	June 26	1752	492	23	2444
Rotary engine .....	A. H. Gleason .....	290,035	Dec. 11	825	233	25	1039
Rotary engine .....	J. Goehring .....	275,819	Apr. 17	1248	344	23	1455
Rotary engine .....	G. E. Hibbard .....	282,520	Aug. 7	53	16	24	509
Rotary engine .....	C. C. Jones .....	275,667	Apr. 10	1047	284	23	1413
Rotary engine .....	M. G. Lewis .....	272,904	Feb. 27	1754	490	23	768
Rotary engine .....	A. B. Lipsey .....	280,194	June 26	1932	543 544	23	2477
Rotary engine .....	N. J. Pritchard .....	286,844	Oct. 16	1342	367	25	258
Rotary engine .....	T. M. Rinchart .....	280,766	July 3	530	149	24	94
Rotary engine .....	O. H. Robinson .....	281,796	July 24	1846	505	24	340
Rotary engine .....	C. M. Sanderson .....	273,162	Feb. 27	1999	562	23	811
Rotary engine .....	C. A. Sbalor .....	286,232	Oct. 9	549	150 151	25	111
Rotary engine .....	J. L. Starks .....	274,669	Mar. 27	1845	514	23	1175
Rotary engine .....	J. M. X. Terhuden .....	271,156	Jan. 23	1638	471 472	23	330
Rotary engine .....	J. C. Wands .....	271,555	Jan. 30	2150	619	23	427
Rotary engine .....	J. C. Wharton .....	290,508	Dec. 18	1440	398	25	1155
Rotary engine .....	T. and J. W. Wilbraham .....	272,818	Feb. 20	1555	437	23	728
Rotary engine and pump .....	S. Marcus .....	282,340	July 31	2543	696	24	464
Rotary engine and pump .....	N. N. Tverskoy .....	273,916	Mar. 13	870	236 237	23	991
Rotary meter .....	B. Fitts and J. F. Wilson .....	281,257	July 17	1152	318	24	217
Rotary meter .....	H. Fredrick .....	271,233	Jan. 30	1735	502	23	354
Rotary meter .....	H. Fredrick .....	287,529	Oct. 30	2209	600	25	430
Rotary motor .....	H. F. Hodges .....	271,459	Jan. 30	2034	586	23	407
Rotary motor .....	A. Kissan .....	282,001	July 24	2089	573	24	382
Rotary motor .....	G. Lenhardt .....	272,562	Feb. 20	1242	345	23	672
Rotary steam-engine .....	W. Gibb .....	284,125	Aug. 28	2031	565	24	890
Rotary steam-engine .....	L. D. Hooper .....	287,379	Oct. 23	2022	550	25	386
Rotary steam-engine .....	J. A. Knight .....	282,907	Aug. 7	514	144	24	592
Rotary steam-engine .....	J. M. Smelser and E. L. Kennedy .....	286,845	Oct. 16	1355	371	25	260
Rotary steam-engine .....	D. L. Smith .....	284,681	Sept. 11	642	181	24	1019
Rotary steam-engine .....	G. W. Wado and J. M. Wardell .....	270,160	Jan. 2	393	114	23	80
Rotary steam-engine .....	A. B. Wood .....	286,102	Oct. 2	398	109	25	73
Rotating furnace .....	J. B. Hyde .....	285,627	Sept. 25	1792	510	24	1237
Roundabout .....	H. J. F. Schulze .....	274,348	Mar. 20	1290	350	23	1068
Roundabout .....	A. West .....	288,898	Nov. 20	1390	383	25	765
Router-bit .....	W. D. Bradt .....	281,442	July 17	1373	379	24	274
Routing machine .....	R. T. White .....	275,002	Apr. 3	149	42	23	1251
Row-boat .....	M. F. Davis .....	282,853	Aug. 7	452	128	24	580
Row-boat seat .....	M. F. Davis .....	282,855	Aug. 7	456	129	24	581
Row-boats. Mirror attachment for .....	E. W. Oppe .....	278,039	May 22	1863	500	23	1966
Row-lock .....	J. Beaudrean .....	271,021	Jan. 23	1479	426	23	303



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Rowlock .....	M. F. Davis .....	282,854	Aug. 7	454	{ 128 129 }	24	580
Rowlock .....	C. W. Morris .....	283,640	Aug. 21	1405	393	24	767
Rowlock .....	J. Passeno .....	287,155	Oct. 23	1739	476	25	335
Rowlock .....	J. Snowman .....	287,971	Nov. 6	230	65	25	547
Rowing apparatus .....	F. D. Smith and W. L. Casaday .....	276,294	Apr. 24	1823	507	23	1562
Rowing apparatus. Boat .....	A. Beckers .....	287,088	Oct. 23	1655	{ 454 455 }	25	319
Rowing-gear .....	J. W. Rutter .....	282,121	July 31	2264	621	24	416
Rowing-gear for boats .....	H. Schunk .....	284,984	Sept. 11	1006	284	24	1084
Rubber and fiber from scraps of india-rubber cloth. Reclaiming india .....	J. L. Chadwick .....	288,013	Nov. 6	286	.....	25	556
Rubber. Apparatus or device for punching .....	W. E. Burk .....	278,091	May 22	1922	527	23	1977
Rubber cloth. Machine for manufacturing .....	F. E. Aldrich. (Reissue) .....	10,325	May 15	1653	450	23	1924
Rubber cloth or fabric .....	F. E. Aldrich .....	283,057	Aug. 14	697	.....	24	631
Rubber compound .....	N. C. Mitchell .....	290,909	Dec. 25	1953	.....	25	1252
Rubber compound. Metallized .....	H. A. Robinson .....	284,760	Sept. 11	744	.....	24	1036
Rubber-dam clamp .....	J. P. Carmichael .....	277,224	May 8	891	237	23	1785
Rubber fabrics. Manufacture of metallic-surfaced india .....	N. S. White .....	278,206	May 22	2073	.....	23	2003
Rubber goods. Manufacture of vulcanized .....	I. F. Williams .....	284,936	Sept. 11	951	267	24	1074
Rubber. Method of and apparatus for making articles of molded .....	H. F. C. Pearson .....	271,911	Feb. 6	394	108	23	510
Rubber plates or sheets for graining. Preparing .....	H. C. Brainerd .....	287,617	Oct. 30	2347	.....	25	455
Rubber veneer and enamel. Ornamenting .....	T. J. Mayall .....	286,034	Oct. 2	316	.....	25	59
Rubber waste. Separating foreign substances from india .....	A. W. Kent .....	281,769	July 24	1808	494	24	334
Rudder for vessels .....	I. Keefer .....	282,643	Aug. 7	203	59	24	535
Rudder for vessels. Floating .....	J. Philp .....	284,477	Sept. 4	383	106	24	969
Rudder-holding device for ferry-boats .....	N. Allen .....	286,367	Oct. 9	743	199	25	145
Rudder. Steam propelling .....	B. H. Burling .....	284,812	Sept. 11	806	225	24	1047
Rug-making machine .....	O. Huff .....	272,697	Feb. 20	1402	{ 393 394 }	23	700
Rings. Manufacture of tufted .....	A. Davis .....	285,735	Sept. 25	1931	547	24	1261
Rufle. Dress-maker's .....	W. Wallace .....	284,783	Sept. 11	779	217	24	1041
Rule. Headed lumber .....	E. T. Lufkin .....	272,279	Feb. 13	862	241	23	602
Rule or measure .....	F. J. Kellogg .....	290,889	Dec. 25	1930	533	25	1248
Ruler. Metal .....	C. A. Smith .....	287,480	Oct. 30	2152	585	25	418
Ruler. Parallel .....	C. A. Shields .....	289,457	Dec. 4	98	28	25	904
Rules. Machine for forming and dressing lumber .....	E. T. Lufkin .....	272,892	Feb. 27	1677	469	23	755
Ruling-machine .....	E. W. Blackhall .....	273,016	Feb. 27	1816	509	23	779
Ruling-machine .....	H. A. Brissard .....	286,382	Oct. 9	758	{ 204 205 }	25	148
Ruling machine. Paper .....	E. J. Piper .....	284,665	Sept. 11	616	{ 173 174 }	24	1014
Ruling machine. Paper .....	G. Schwemlein .....	288,370	Nov. 13	736	200	25	643
Ruling-machines. Packing-box for .....	W. C. Demain .....	275,606	Apr. 10	966	{ 262 263 }	23	1399
Ruling-machines. Pen-beam standard for .....	E. J. Piper .....	284,666	Sept. 11	618	174	24	1015
Running-gear .....	A. J. Beach .....	280,895	July 10	687	193	24	128
Running-gear .....	J. M. Brosius .....	270,382	Jan. 9	669	196	23	140
Running-gear .....	E. Prescott .....	277,780	May 15	1550	422	23	1906
Running-gear .....	C. R. Taylor .....	278,290	May 22	2184	601	23	2021
Rust spots or stains from fabrics. Compound for re- moving .....	W. H. Payne .....	278,176	May 22	2032	.....	23	1995
Saccharine liquids. Defecating and clarifying .....	H. A. Hughes .....	281,188	July 10	1051	.....	24	193
Saccharine matter from vegetable substances. Ex- traction of .....	C. D. Ekman, G. Fry, and W. B. Esput .....	286,187	Oct. 9	501	.....	25	103
Saccharine or other substances. Refining, purify- ing, or clarifying .....	D. MacEachran .....	276,843	May 1	397	.....	23	1696
Sack fastening. Fur .....	C. Altman .....	278,072	May 22	1897	519	23	1972
Sack-filler .....	A. Hay .....	282,984	Aug. 14	598	169	24	614
Sack-holder and scale. Combined .....	W. T. Moore .....	270,094	Jan. 2	307	91	23	63
Sack-turner .....	L. Arthur .....	287,214	Oct. 23	1820	493	25	349
Sad-iron .....	R. F. Preusser .....	289,709	Dec. 4	432	120	25	961
Sad-iron holder .....	J. M. Holmes .....	289,536	Dec. 4	206	58	25	922
Sad-iron holder .....	J. O'Neil .....	279,591	June 19	1223	340	23	2346
Sad-iron holder .....	J. W. Wheelock .....	274,157	Mar. 20	1172	324	23	1051
Sad-iron shield .....	J. D. Muller .....	279,971	June 26	1677	471	23	2430
Sad-iron gas-heater .....	I. M. Seamans .....	286,155	Oct. 2	458	124	25	85
Sad-irons. Manufacture of .....	M. J. Shimer .....	284,249	Sept. 4	119	32	24	925
Saddle .....	M. Comstock .....	288,026	Nov. 6	299	84	25	558
Saddle .....	R. Spencer .....	270,142	Jan. 2	370	108	23	76
Saddle adjuster and fastener .....	O. W. Cline .....	289,225	Nov. 27	1789	495	25	845
Saddle and trimming. Harness .....	B. F. Cornish .....	290,402	Dec. 18	1280	360	25	1129
Saddle. Gig .....	J. Bevard .....	274,260	Mar. 20	1307	360	23	1075
Saddle. Gig .....	J. E. Renz .....	284,235	Sept. 4	101	27	24	921
Saddle. Gig or harness .....	J. Straus .....	270,505	Jan. 9	823	240	23	170
Saddle. Harness .....	H. J. Bickle and J. E. Bridges .....	279,123	June 12	653	178	23	2245
Saddle. Harness .....	E. V. Bretney .....	275,576	Apr. 10	925	251	23	1392
Saddle. Harness .....	J. T. Gurney .....	280,739	July 3	485	137	24	86
Saddle. Harness .....	B. J. Hartman .....	281,501	July 17	1454	398	24	269
Saddle. Harness .....	M. C. Hayes .....	284,419	Sept. 4	320	89	24	957
Saddle. Harness .....	S. A. Marker .....	278,349	May 29	2289	626	23	2048
Saddle. Harness .....	H. C. McConnell .....	273,118	Feb. 27	1942	545	23	802
Saddle. Harness .....	P. McFadden .....	284,039	Aug. 23	1921	537	24	871
Saddle. Harness .....	J. B. Sulgrove .....	285,177	Sept. 18	1260	356	24	1134
Saddle. Harness .....	S. E. Tompkins .....	286,347	Oct. 9	720	193	25	141
Saddle-horn .....	O. Rubarts .....	279,438	June 12	1041	289	23	2309
Saddle. Riding .....	J. Bassler .....	286,674	Oct. 16	1126	303	25	220
Saddle. Riding .....	W. C. Smalstig .....	272,341	Feb. 13	934	259	23	614
Saddle. Riding .....	M. L. Tolbert .....	283,043	Aug. 14	681	191	24	628
Saddle. Riding .....	W. R. Wilbourn .....	270,270	Jan. 9	523	{ 153 154 }	23	112

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Saddle. Riding.....	J. A. Wynne.....	270,196	Jan. 2	433	125	23	89
Saddle sweat-leather. Riding.....	J. W. Harriss.....	290,880	Dec. 25	1917	529	25	1246
Saddle tree. Side.....	W. R. Wilbourn.....	270,269	Jan. 9	522	153	23	112
Saddles. Device for making cart.....	F. A. Eveleth.....	288,933	Nov. 20	1432	394	25	773
Safe.....	J. S. Christie.....	270,888	Jan. 23	1312	379	23	276
Safe.....	M. Hemler.....	284,422	Sept. 4	323	90	24	958
Safe.....	J. N. Lanth and O. B. Hardy.....	283,120	Aug. 14	772	217	24	644
Safe.....	M. Mosler and M. Hemler.....	284,047	Aug. 23	1929	539	24	872
Safe. Burglar-proof.....	W. Corliss.....	271,313	Jan. 30	1835	533	23	371
Safe. Burglar-proof.....	W. Corliss.....	271,314	Jan. 30	1836	534	23	372
Safe. Burglar-proof.....	W. H. Hollar.....	290,052	Dec. 11	844	240	25	1042
Safe. Burglar-proof.....	C. A. E. Ruebel.....	271,131	Jan. 23	1608	462	23	324
Safe. Burglar-proof.....	E. Stockwell.....	296,068	Oct. 2	373	105	25	69
Safe. Burglar-proof.....	J. White.....	287,787	Oct. 30	2570	{ 691 692 }	25	498
Safe-door.....	M. Mosler.....	289,124	Nov. 27	1668	463	25	322
Safe door. Fire-proof.....	M. Mosler.....	287,955	Nov. 6	207	60	25	544
Safe. Fire-proof.....	T. Brett.....	286,996	Oct. 23	1538	494	25	296
Safe. Fire-proof.....	H. C. Johnson.....	281,514	July 17	1470	404	24	271
Safe. Fire-proof.....	M. Mosler.....	273,585	Mar. 6	448	120	23	911
Safe. Fire-proof.....	M. Mosler.....	281,640	July 17	1624	444	24	296
Safe. Kitchen.....	J. S. Hagerty.....	290,879	Dec. 25	1917	529	25	1246
Safe. Kitchen.....	F. X. Oberle.....	274,021	Mar. 13	993	272	23	1012
Safe. Kitchen.....	J. H. Selby.....	289,311	Nov. 27	1887	525	25	864
Safe-lock.....	W. Corliss.....	271,312	Jan. 30	1831	532	23	371
Safe-lock.....	H. F. Newbury.....	270,829	Jan. 16	1238	357	23	257
Safe-lock.....	H. F. Newbury.....	270,830	Jan. 16	1239	358	23	257
Safe-lock.....	H. F. Newbury.....	271,103	Jan. 23	1576	454	23	319
Safe-lock.....	H. F. Newbury.....	283,644	Aug. 21	1409	395	24	768
Safe-lock guard.....	P. Laubenberger.....	274,346	Mar. 20	1421	389	23	1094
Safe or kitchen-cabinet. Provision.....	J. W. Ross.....	273,395	Mar. 6	204	55	23	868
Safe-spindles. Coupling device for.....	L. Moritz.....	269,953	Jan. 2	156	46	23	33
Safes. Explosion-protector for.....	W. De Lamater.....	269,920	Jan. 2	113	33	23	23
Safes. Protecting device for bank.....	A. Wiswall.....	286,566	Oct. 9	982	264	25	188
Safety-elevator.....	J. W. King.....	287,549	Oct. 30	2238	608	25	436
Safety-elevator.....	J. T. Pine.....	287,959	Nov. 6	215	61	25	545
Safety-gate.....	A. B. Flach. (Reissne).....	10,342	June 19	1587	444	23	2409
Safety-hook.....	W. K. Rairigh.....	271,116	Jan. 23	1590	457	23	321
Safety-hook.....	W. K. Rairigh.....	273,310	Mar. 6	86	26	23	848
Safety-hook.....	E. H. Smith.....	286,739	Oct. 16	1210	326	25	235
Safety-pin.....	J. Jenkins.....	276,971	May 1	570	149	23	1724
Safety-pin.....	J. Jenkins.....	281,190	July 10	1054	291	24	193
Safety-pin.....	L. E. Smith.....	281,152	July 10	1001	280	24	183
Safety-pin.....	A. Van Houten.....	272,001	Feb. 6	513	137	23	529
Sail.....	E. Pinaham.....	287,465	Oct. 30	2130	579	25	414
Sail for vessels.....	E. Kraeger.....	288,519	Nov. 20	1295	355	25	748
Sail-hank.....	W. H. Peteler.....	277,338	May 8	1029	276	23	1809
Sail-rigging. Guide for.....	J. W. Sharrett.....	279,965	June 26	1692	475	23	2434
Sails. Mechanism for reefing.....	E. W. Andrews.....	282,599	Aug. 7	150	45	24	327
Sails. Reefing and furling fore-and-aft.....	T. O'Brien.....	287,707	Oct. 30	2459	662	25	477
Salt and apparatus for use therein and for other purposes. Manufacture of.....	H. Frasch.....	277,419	May 8	1116	{ 299 300 }	23	1824
Salt, &c., and apparatus therefor. Graining or crystallizing.....	H. Frasch.....	277,418	May 8	1114	299	23	1824
Salt and pepper cup. Combined.....	T. B. Cleveland.....	287,623	Oct. 30	2357	636	25	457
Salt beds. Apparatus for obtaining brine from.....	J. A. Cook.....	287,909	Nov. 6	149	44	25	534
Salt-box.....	R. E. Caine.....	286,384	Oct. 9	761	206	25	148
Salt-brine from deep veins. Method of and apparatus for making and raising.....	G. H. Smith.....	273,623	Mar. 6	491	132	23	918
Salt-cellar.....	W. Rogers.....	270,131	Jan. 2	356	104	23	73
Salt-cellar or spice-box.....	A. G. Golding.....	270,189	Jan. 2	425	123	23	87
Salt-evaporating pan.....	G. H. Smith.....	287,183	Oct. 23	1777	{ 487 488 }	25	342
Salt-evaporator.....	H. Knowlton.....	269,945	Jan. 2	148	43	23	31
Salt for table use. Preparing.....	C. A. Catlin.....	273,256	Mar. 6	17	23	23	837
Salt-grainer.....	C. Heme.....	278,794	June 5	160	47	23	2150
Salt-water preparatory to purifying and evaporating the same. Apparatus for heating.....	M. R. Hayes.....	273,988	Mar. 13	952	262	23	1005
Salve.....	E. P. Lucas.....	284,314	Sept. 4	193	45	24	937
Salve.....	A. Schirer.....	273,613	Mar. 6	479	123	23	916
Sample-stand. Rotating.....	C. A. Schmidt.....	288,870	Nov. 20	1355	372	25	759
Sampling apparatus.....	G. S. Andrus.....	280,994	July 10	807	225	24	149
Sampling tube or liquor-thief.....	W. P. O'Hara.....	275,694	Apr. 10	1076	294	23	1419
Sand-band.....	W. Cole.....	274,885	Mar. 27	2103	585	23	1219
Sand-band.....	W. M. Farr.....	282,066	July 31	2121	599	24	403
Sand-band.....	E. S. Sutton.....	283,301	Aug. 14	992	277	24	685
Sand-band.....	J. O. Waddell.....	274,535	Mar. 27	1668	468	23	1146
Sand-band.....	D. M. White and J. Hitchcock.....	279,622	June 19	1333	371	23	2364
Sand-bars. Apparatus for removing.....	J. H. Huffer.....	285,487	Sept. 25	1623	455	24	1205
Sand-bars, &c., from rivers and harbors. Apparatus for removing.....	O. H. P. Cornelius and G. H. Turner.....	284,387	Sept. 4	281	78	24	951
Sand-drier.....	W. W. Clark.....	278,883	June 5	284	82	23	2172
Sand-drier.....	J. G. McPherson.....	276,445	Apr. 24	2022	561	23	1597
Sandal.....	G. F. G. Morgan.....	288,653	Nov. 20	1091	299	25	712
Sandal or shoe. Anti-slipping.....	J. W. White.....	287,748	Oct. 30	2515	678	25	487
Sanding-box. Automatic.....	W. Corkill.....	289,984	Dec. 11	761	214	25	1028
Sand-paper machine.....	W. H. Doane.....	273,970	Mar. 13	935	257	23	1062
Sandpapering machine.....	G. D. Fearey.....	282,509	Aug. 7	39	12	24	507
Sandpapering-machine.....	J. R. Thomas, H. J. Cordesman, and F. Danner.....	287,340	Oct. 23	1973	539	25	377
Sandpapering-machine.....	H. T. Weirback and M. B. Bitting.....	277,090	May 8	734	192	23	1757
Sandpapering machines. Sand-drum for.....	J. E. Thomas.....	275,733	Apr. 10	1123	307	23	1426
Sanitary devices, &c. Construction and ventilation of.....	M. F. Deegan.....	270,761	Jan. 16	1161	332	23	242
Sap-boiling apparatus.....	C. A. Butler.....	271,736	Feb. 6	244	68	23	483



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g	Vol.	Page.
Sap-bucket holder	J. M. Lance	289,662	Dec. 4	359	101	25	950
Sap-feeder	E. J. Mitchelson	290,910	Dec. 25	1954	539	25	1252
Sash and frame. Window.	J. Gruninger	273,355	Mar. 6	133	43	23	860
Sash-balance	G. W. Arnold	283,946	Aug. 28	1791	507	24	849
Sash-balance	J. Bavier	279,631	June 19	1272	353	23	2354
Sash-balance	E. Bradshaw	285,216	Sept. 18	1301	366	24	1141
Sash-balance	J. W. Lyons	278,348	May 29	2288	626	23	2048
Sash-balance	W. Ormsby	285,505	Sept. 25	1644	462	24	1209
Sash-balance	D. L. Phipps	278,042	May 22	1867	510	23	1967
Sash-balance	C. O. Power	282,367	July 31	2577	707	24	469
Sash-balance	W. Shumard	285,079	Sept. 18	1136	317	24	1113
Sash-balance	G. B. Smith	289,458	Dec. 4	99	28, 29	25	904
Sash-balance. Roller	R. B. Huguinin	286,931	Oct. 16	1447	397	25	275
Sash-bar. Flexible soft-metal.	A. Friedrich	283,093	Aug. 14	737	207	24	638
Sash-bar. Lead	A. Friedrich	271,696	Feb. 6	134	37	23	403
Sash-cord fastener	H. Smith, Jr.	286,857	Oct. 16	1356	372	25	261
Sash-cord fastener	B. Vogel	289,732	Dec. 4	454	127	25	966
Sash-cord guide	W. W. Boyington	290,203	Dec. 18	1028	289	25	1085
Sash-cord guide	W. S. Greening	290,609	July 3	326	91	24	58
Sash-fastener	J. Shannon	274,831	Mar. 27	2031	565	23	1208
Sash-fastener	W. F. Bailey	280,892	July 10	684	193	24	128
Sash-fastener	H. Bausch	277,441	May 15	1153	310	23	1837
Sash-fastener	W. H. Bayles	285,210	Sept. 18	1295	364	24	1140
Sash-fastener	W. H. Bayles	285,211	Sept. 18	1295	365	24	1141
Sash-fastener	F. Bell	287,409	Oct. 30	2064	561	25	400
Sash-fastener	H. L. Blodgett	277,980	May 22	1787	487	23	1952
Sash-fastener	R. Chandler	275,048	Apr. 3	175	47	23	1255
Sash-fastener	F. Dudley	283,365	Aug. 14	1085	305	24	702
Sash-fastener	H. J. England	272,671	Feb. 20	1371	385	23	695
Sash-fastener	E. and H. S. Ensminger	282,290	July 31	2466	680	24	451
Sash-fastener	H. B. Frost	270,542	Jan. 9	880	255	23	182
Sash-fastener	S. R. Harrah	279,749	June 19	1406	392	23	2378
Sash-fastener	M. Judd	281,768	July 24	1807	494	24	333
Sash-fastener	E. Kempshall	283,896	Aug. 28	1724	486	24	835
Sash-fastener	H. T. King	276,050	Apr. 17	1522	418	23	1503
Sash-fastener	H. T. King	280,935	July 10	746	208	24	137
Sash-fastener	J. Kubler	278,602	June 5	169	50	23	2151
Sash-fastener	J. H. Lacerte	279,771	June 19	1427	399	23	2382
Sash-fastener	M. W. Mahar	275,778	Apr. 10	1189	326	23	1437
Sash-fastener	M. W. Mahar	275,779	Apr. 10	1190	326	23	1437
Sash-fastener	P. Mathis	283,502	Aug. 21	1255	352	24	738
Sash-fastener	R. McCloskey and D. J. Coleman	282,005	July 24	2095	574	24	383
Sash-fastener	W. L. McKelvey	277,591	May 15	1331	357	23	1866
Sash-fastener	A. Montant	281,714	July 24	1730	470	24	319
Sash-fastener	C. Morrill	284,046	Aug. 28	1927	539	24	872
Sash-fastener	H. S. Ohl, Jr.	281,291	July 17	1187	328	24	223
Sash-fastener	F. Outhwaite	285,919	Oct. 2	180	52	25	35
Sash-fastener	F. D. Paradise	288,731	Nov. 20	1195	326	25	729
Sash-fastener	G. E. Parmelee	280,950	July 10	762	211	24	140
Sash-fastener	A. M. Rantz and C. L. Engelhardt	275,706	Apr. 10	1089	297	23	1420
Sash-fastener	G. W. Reeve	286,224	Oct. 9	540	148	25	109
Sash-fastener	J. O. Reily	270,607	Jan. 16	966	279	23	206
Sash-fastener	W. E. Rines	280,400	July 3	75	20	24	16
Sash-fastener	J. S. Sammons	271,367	Jan. 30	1916	554	23	385
Sash-fastener	T. S. Smith	286,859	Oct. 16	1357	372	25	261
Sash-fastener	W. E. Sparks	270,993	Jan. 23	1448	417	23	298
Sash-fastener	W. E. Sparks	279,838	June 19	1506	421	23	2395
Sash-fastener	W. E. Sparks	284,506	Sept. 4	426	121	24	976
Sash-fastener	E. J. Steele	270,347	Jan. 9	621	183	23	131
Sash-fastener	E. R. Wethered	287,747	Oct. 30	2514	678	25	487
Sash-fastener	W. H. Wolfrath	280,987	July 10	801	223	24	147
Sash-follower	J. J. Dwyer	283,384	Aug. 21	1111	313	24	712
Sash for glazing purposes. Building lead.	A. Friedrich	271,697	Feb. 6	134	37	23	463
Sash-holder	W. Abele	284,993	Sept. 18	1031	289	24	1095
Sash-holder	H. H. Asimont	288,611	Nov. 20	1035	285	25	703
Sash-holder	J. M. Baldwin	275,456	Apr. 10	777	208	23	1367
Sash-holder	R. B. Callahan	280,445	July 3	135	36	24	25
Sash-holder	W. P. Clason	280,292	June 26	2059	579	23	2499
Sash-holder	M. Commander	286,909	Oct. 16	1425	391	25	271
Sash-holder	W. Conner	281,458	July 17	1403	385	24	259
Sash-holder	J. Felt	286,125	Oct. 2	422	115	25	78
Sash-holder	F. H. Gross	275,908	Apr. 17	1349	371	23	1473
Sash-holder	N. N. Horton	276,409	Apr. 24	1950	548	23	1589
Sash-holder	S. Lear	278,439	May 29	2401	654	23	2068
Sash-holder	G. W. Lewin	270,229	Jan. 9	478	141	23	104
Sash-holder	W. C. Mathews	280,643	July 3	367	102	24	65
Sash-holder	M. L. Nix and S. McClelland	271,905	Feb. 6	387	106	23	509
Sash-holder	B. F. Reynolds	291,003	Dec. 25	2090	576	25	1273
Sash-holder	F. L. Rosentreter	282,928	Aug. 7	534	151	24	505
Sash-holder	E. E. Shepard	286,559	Oct. 9	973	262	25	187
Sash-holder	C. E. Steller	288,273	Nov. 13	605	165	25	621
Sash-holder	S. S. Waterhouse	273,327	Mar. 6	113	32	23	853
Sash-lifter and lock. Automatic	C. W. Elliott	278,323	May 29	2249	617	23	2040
Sash-lock	F. Osterhage	285,659	Sept. 25	1828	521	24	1244
Sash-securer. Portable	R. Bettermann	283,460	Aug. 21	1202	338	24	720
Sash-stiles. Machine for boring and grooving	J. T. Biers	289,497	Dec. 4	160	43	25	914
Sash-weight	J. J. Johnston	273,238	Feb. 27	2095	587	23	828
Sash-weight	G. B. Smith	276,913	May 1	484	127	23	1711
Sash. Window	R. Vosburgh	276,509	Apr. 24	2103	584	23	1611
Sash. Window	B. Hurtubes	276,416	Apr. 24	1989	551	23	1590
Sash. Window	T. F. Lang	281,379	July 17	1297	359	24	242
Sash. Window	R. Langtry	275,223	Apr. 3	437	120	23	1301
Sash. Window	T. Lanston	290,071	Dec. 11	865	246	25	1046
Sash. Window	A. Rudolph	276,886	May 1	452	121	23	1706

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. G.	Vol.	Page.
Sash. Window.....	A. Rudolph.....	276,887	May 1	453	122	23	1706
Sash. Window.....	F. R. Wolfinger.....	288,751	Nov. 20	1218	333	25	733
Sashes. Machine for shaping meeting-rails for.....	G. W. Steele.....	290,809	Dec. 25	1837	508	25	1232
Satchel.....	S. Scheuer.....	273,398	Mar. 6	207	56	23	869
Satchel and muff.....	L. Havasy.....	273,523	Mar. 6	361	96	23	896
Satchel and muff. Combined.....	L. Havasy.....	284,298	Sept. 4	176	50	24	934
Satchel-lock.....	R. Flocke.....	279,733	June 19	1389	387	23	2374
Satchel. Traveling.....	J. W. Peirson.....	285,305	Sept. 18	1401	396	24	1161
Sauce. Table.....	M. H. Lackersteen.....	281,276	July 17	1170		24	220
Sausage-stuffer.....	H. Bixler.....	283,852	Aug. 28	1671	472	24	836
Sausage-stuffing machine.....	J. Armstrong.....	288,540	Nov. 13	946	259	25	680
Sausage-stuffing machine.....	T. Williams, Jr., and W. Sangster.....	276,115	Apr. 17	1606	442	23	1517
Saw.....	O. M. Allaben.....	284,793	Sept. 11	788	219	24	1043
Saw.....	A. Boynton and H. W. Peace.....	274,708	Mar. 27	1889	527	23	1183
Saw.....	J. E. Emerson.....	281,252	July 17	1145	316	21	215
Saw.....	J. E. Emerson.....	281,253	July 17	1147	316	24	216
Saw.....	E. H. Gabus.....	277,021	May 8	644	168	23	1742
Saw.....	N. Girrens.....	288,791	Nov. 20	1266	346	25	742
Saw and edge-molder. Scroll.....	A. Showalter.....	272,785	Feb. 20	1511	426	23	720
Saw-arbor.....	T. N. Hackett.....	271,840	Feb. 6	310	85	23	495
Saw-arbors. Swinging bridge for.....	D. J. Murray.....	288,589	Nov. 13	1008	277	25	692
Saw attachment. Hand.....	H. Winter.....	275,559	Apr. 16	907	246	23	1389
Saw-blades. Process of and machine for straightening, tempering, and flattening.....	J. E. Emerson.....	286,284	Oct. 9	641	171	25	127
Saw. Buck.....	J. F. French.....	281,627	July 17	1612	441	24	294
Saw. Buck.....	W. H. Grubb.....	290,042	Dec. 11	836	236	25	1040
Saw. Buck.....	E. A. Learned.....	277,141	May 8	802	210	23	1769
Saw-buck.....	H. Floyd.....	274,304	Mar. 20	1363	374	23	1084
Saw-buckle for reciprocating saws.....	W. M. Wilkin.....	286,354	Oct. 9	728	195	25	142
Saw. Chain.....	M. Newlove.....	285,651	Sept. 25	1818	518	24	1242
Saw. Channeling.....	J. Leshner.....	285,633	Sept. 25	1800	513	24	1239
Saw. Circular.....	C. H. Douglas.....	274,922	Apr. 3	46	12	23	1339
Saw-clamp.....	L. Davis.....	275,603	Apr. 10	960	260	23	1399
Saw-clamp.....	G. N. Stearns.....	288,376	Nov. 13	745	202	25	645
Saw. Crosscut.....	E. H. Gabus.....	271,056	Jan. 23	1517	437	23	309
Saw. Drag.....	O. Faehmon.....	285,982	Oct. 2	252	71	25	48
Saw-drag.....	M. A. Ekl, A. Hoyda, M. Cizek, and V. Skala.....	288,558	Nov. 13	968	266	25	684
Saw-drag.....	G. G. Seeger.....	288,264	Nov. 13	592	163	25	619
Saw. Drag.....	E. B. Stilson.....	271,149	Jan. 23	1626	468	23	328
Saw. Drag.....	C. Thompson.....	271,159	Jan. 23	1643	472	23	330
Saw. Drag.....	N. K. Watson.....	275,443	Apr. 10	763	203	23	1364
Saw-feeding device.....	M. S. Harsha.....	288,330	Nov. 13	677	186	25	633
Saw filing and setting machine.....	J. Berton.....	285,557	Sept. 25	1704	420 481	24	1221
Saw-filing machine.....	A. B. Fisher.....	290,875	Dec. 25	1912	527 538	25	1245
Saw-filing machine.....	C. F. Hill.....	283,393	Aug. 21	1119	316	24	714
Saw-filing machine.....	J. A. Rihl.....	290,357	Dec. 18	1224	344	25	1118
Saw. Fire-wood circular.....	A. Albies.....	273,425	Mar. 6	237	64	23	874
Saw-frame.....	W. Jones.....	284,432	Sept. 4	334	93	24	960
Saw frame. Band.....	A. Friedli.....	286,919	Oct. 16	1435	394	25	273
Saw frame. Buck.....	W. Clemson.....	281,837	July 24	1895	517	24	349
Saw frame. Crosscut.....	A. Schooley.....	286,966	Oct. 16	1494	411	25	284
Saw-frame for circular-saw mills.....	T. L. Carley.....	290,174	Dec. 11	983	277	25	1069
Saw gage. Rip.....	T. A. McDonald.....	272,734	Feb. 20	1449	406	25	709
Saw. Gu.....	C. W. Mann.....	287,450	Oct. 30	2112	574	25	410
Saw-guard.....	L. Berische and F. Lofink.....	272,114	Feb. 13	667	182	23	567
Saw-guard.....	A. H. Gretschele.....	285,407	Sept. 25	1530	431	24	1188
Saw-guard.....	J. G. Groff.....	277,711	May 15	1470	397	23	1890
Saw-guard.....	J. G. Groff.....	278,130	May 22	1976	543	23	1985
Saw-guard.....	J. G. Groff.....	284,199	Sept. 4	53	15	24	913
Saw-guard.....	T. P. Heinemann.....	281,690	July 24	1699	462	24	314
Saw-guard.....	L. Hofmann.....	284,849	Sept. 11	850	239	24	1055
Saw-guard.....	H. F. Kuhlmann.....	281,274	July 17	1168	393	24	220
Saw-guard.....	H. F. Kuhlmann.....	281,275	July 17	1169	393	24	220
Saw-guard.....	H. F. Kuhlmann.....	286,710	Oct. 16	1175	316	25	228
Saw-guard.....	A. T. McDonald.....	287,949	Nov. 6	202	58	25	542
Saw-guard.....	D. W. Swank.....	273,404	Mar. 6	213	57	23	870
Saw-guide.....	E. F. Allen.....	279,515	June 19	1137	315	23	2331
Saw-guide.....	J. B. Bradley.....	288,768	Nov. 20	1237	339	25	737
Saw-guide.....	A. Hackett.....	286,295	Oct. 9	657	175	25	129
Saw-guide.....	A. Hackett.....	286,296	Oct. 9	657	175	25	129
Saw-guide.....	F. Harrison.....	284,007	Aug. 28	1887	529	24	864
Saw-guide.....	L. O. Orton.....	288,727	Nov. 20	1191	325	25	728
Saw-guide. Adjustable.....	H. Carman.....	270,387	Jan. 9	677	201	23	142
Saw-guide. Band.....	R. McChesney.....	276,259	Apr. 24	1779	495	23	1555
Saw-guide. Circular.....	S. R. Smith and E. Myers.....	270,139	Jan. 2	368	107	23	75
Saw-guide. Horizontal.....	J. J. Sadler.....	277,351	May 8	1043	280	23	1812
Saw-gummer.....	G. Van Nostrand.....	290,947	Dec. 25	2007	553	25	1260
Saw. Hand.....	G. W. Griffin.....	278,935	June 5	395	108	23	2190
Saw. Hand.....	H. F. Hoffman.....	280,928	July 10	734	204	24	135
Saw. Hand.....	G. G. McChesney.....	270,822	Jan. 16	1231	355	23	256
Saw. Hand.....	T. U. Meckel.....	280,497	July 3	201	53	24	36
Saw. Hand.....	D. A. Neidig.....	279,975	June 26	1682	472	23	2431
Saw. Hand-power log.....	H. C. Yerby and E. B. Stilson.....	282,943	Aug. 7	553	156	21	599
Saw-handle.....	F. Brunson.....	278,088	May 22	1919	526	23	1976
Saw-handle.....	F. A. Buell.....	281,447	July 17	1391	382	24	257
Saw-handle.....	J. Class.....	274,274	Mar. 20	1324	365	23	1078
Saw-handle.....	J. Class.....	280,579	July 3	293	81	24	52
Saw-handle.....	J. N. Dudley.....	283,221	Aug. 14	893	249	24	666
Saw-handle.....	B. Goulton.....	270,419	Jan. 9	714	211	23	149
Saw-handle.....	J. Hall and L. St. André.....	277,026	May 8	648	168	23	1742
Saw-handle.....	H. P. Hood.....	284,739	Sept. 11	717	200	24	1032



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Saw-handle .....	J. Neimeyer .....	277,502	May 15	1223	329	23	1849
Saw-handle .....	W. W. Richardson .....	275,414	Apr. 10	722	192	23	1359
Saw-handle .....	W. W. Richardson .....	286,638	Oct. 16	1081	291	25	212
Saw-handle .....	J. R. Woodrough .....	272,007	Feb. 6	518	139	23	529
Saw-handle. Auxiliary .....	E. C. Atkins .....	287,790	Nov. 6	4	2	25	507
Saw handle. Crosscut .....	A. Sloan .....	286,968	Oct. 16	1496	411	25	284
Saw-handles. Re-enforcing plate for .....	W. H. Hankin, Jr., and C. Tinney .....	250,612	July 3	329	92	24	58
Saw-heating furnace .....	E. C. Atkins .....	288,968	Nov. 27	1478	410	25	789
Saw-holding device .....	J. B. Bradley .....	288,767	Nov. 20	1236	339	25	737
Saw jointer .....	W. H. Smith .....	277,364	May 8	1056	284	23	1815
Saw jointer, set, and gage combined .....	J. Gehring .....	285,609	Sept. 25	1772	502	24	1233
Saw machine. Band .....	W. G. Vernon .....	284,580	Sept. 4	515	144	24	991
Saw machine. Drag .....	J. C. Wygant .....	271,968	Feb. 6	465	127	23	522
Saw-mill .....	J. F. Carter and T. Seely .....	279,537	June 19	1165	322	23	2335
Saw-mill .....	J. Lucia .....	284,870	Sept. 11	872	{ 244 245 }	24	1059
Saw-mill .....	J. Walrath .....	278,064	May 22	1888	517	23	1971
Saw-mill .....	J. C. Wuerfel .....	272,610	Feb. 20	1296	361	23	681
Saw-mill. Band .....	A. Smith .....	283,157	Aug. 14	813	227	24	650
Saw-mill carriage .....	C. Schoch .....	274,227	Mar. 20	1265	349	23	1067
Saw-mill-carriage-feeding device .....	O. S. Hutchinson .....	286,201	Oct. 9	516	142	25	106
Saw-mill. Circular .....	W. J. F. Liddell .....	274,129	Mar. 20	1141	314	23	1044
Saw-mill dog .....	J. Ackerman, A. O. Mitchell, and F. M. Underwood .....	274,099	Mar. 20	1097	303	23	1037
Saw-mill dog .....	T. H. Bottomley .....	277,981	May 22	1789	488	23	1953
Saw-mill dog .....	G. H. Cameron .....	282,048	July 31	2155	591	24	399
Saw-mill dog .....	C. E. Clark .....	285,969	Oct. 2	238	67	25	45
Saw-mill dog .....	T. H. Kennedy .....	277,841	May 15	1621	442	23	1918
Saw-mill dog .....	G. F. Knight .....	272,838	Feb. 20	1589	446	23	734
Saw-mill dog .....	W. J. F. Liddell .....	285,824	Oct. 2	50	16	25	11
Saw-mill dog .....	J. B. Michener and T. L. Varus .....	289,016	Nov. 27	1533	424	25	798
Saw-mill dog .....	J. Moore .....	287,308	Oct. 23	1937	529	25	370
Saw-mill dog .....	A. Myers .....	284,973	Sept. 11	995	280	24	1082
Saw-mill dog .....	G. M. Pelton .....	289,853	Dec. 11	604	168	25	999
Saw-mill dog .....	J. Redline, Jr .....	290,355	Dec. 18	1222	343	25	1118
Saw-mill feed mechanism .....	E. S. Laughinghouse .....	284,443	Sept. 4	345	95	24	902
Saw-mill feed mechanism .....	G. F. Lidy .....	290,078	Dec. 11	875	249	25	1048
Saw-mill feed mechanism .....	S. R. Smith and E. Myers .....	270,140	Jan. 2	369	107	23	75
Saw-mill feed mechanism .....	W. M. Wilkin .....	286,357	Oct. 9	732	196	25	143
Saw-mill feed-roll .....	T. M. Chapman .....	273,817	Mar. 13	752	204	23	971
Saw-mill head-block .....	H. R. Barnhurst .....	281,750	July 24	1777	484	24	327
Saw-mill head-block .....	G. H. Zschech .....	276,321	Apr. 24	1876	521	23	1570
Saw-mill head-block facing .....	A. F. Griswold .....	281,762	July 24	1798	491	24	332
Saw-mill head-block gear .....	M. C. Meeker .....	281,100	July 10	933	261	24	172
Saw-mill log-roller .....	J. Lucia .....	273,561	Mar. 6	416	111	23	905
Saw-mill log-turning attachment .....	H. C. and W. N. Bowers .....	280,124	June 26	1859	524	23	2464
Saw-mill. Portable .....	L. Traxler .....	271,546	Jan. 30	2139	615	23	425
Saw-mill. Portable band .....	H. W. Groves .....	278,936	June 5	396	{ 108 109 }	23	2191
Saw-mill. Reciprocating .....	J. H. Berkshire .....	272,630	Feb. 20	1322	371	23	686
Saw-mill. Reciprocating .....	W. M. Wilkin .....	286,355	Oct. 9	729	{ 195 196 }	25	142
Saw-mill set-works .....	T. L. Carley, L. F. Powell, and H. H. Boggs .....	290,531	Dec. 18	1471	406	25	1161
Saw-mill set-works .....	F. J. Korte .....	286,092	Oct. 2	298	83	25	56
Saw-mill set-works .....	A. C. Osborn .....	282,214	July 31	2363	656	24	436
Saw-mill set-works .....	W. P. Scofield .....	289,572	Dec. 4	252	71	25	932
Saw-mill set-works .....	B. E. Sergeant .....	283,670	Aug. 21	1442	404	24	774
Saw-mill set-works .....	W. H. Snyder .....	284,081	Aug. 28	1072	549	24	879
Saw-mill set-works .....	E. W. Strange .....	290,137	Dec. 11	943	267	25	1061
Saw-mill steam feed-works .....	A. Cunningham .....	274,568	Mar. 27	1725	479	23	1153
Saw mills. Binding roller for gang .....	A. Yarnall .....	288,910	Nov. 20	1465	387	25	768
Saw mills. Delivery-roller for circular .....	J. A. Hay and J. Ralston .....	273,072	Feb. 27	1880	528	23	790
Saw mills. Device for oscillating the guides of reciprocating .....	G. M. Hinkley .....	273,361	Mar. 6	159	45	23	861
Saw-mills. Steam-feed works for .....	G. Clark .....	275,800	Apr. 17	1229	336	23	1451
Saw-mills. Steam set-works for .....	G. Clark and W. J. Taylor .....	275,468	Apr. 10	796	{ 215 216 }	23	1370
Saw-plate and inserted saw-tooth .....	J. J. Bowen .....	283,197	Aug. 14	868	242	24	661
Saw. Reaming .....	G. Meyer .....	281,105	July 10	938	262	24	173
Saw-relief mechanism for saw-mills .....	W. M. Wilkin .....	286,356	Oct. 9	731	196	25	143
Saw. Segment .....	J. Connell and V. Dengler .....	279,344	June 12	918	256	23	2288
Saw-set .....	J. T. East .....	279,140	June 12	673	185	23	2248
Saw-set .....	J. Garland .....	282,304	July 31	2492	684	24	455
Saw-set .....	B. L. Randall .....	279,015	June 5	491	133	23	2207
Saw set and jointer. Combined .....	J. W. Pugh .....	274,030	Mar. 13	1003	{ 274 275 }	23	1014
Saw set and punch .....	W. G. Avery .....	282,600	Aug. 7	151	45	24	527
Saw setting and gumming machine .....	P. D. and C. W. Dunn .....	284,192	Sept. 4	40	12	24	911
Saw setting and jointing device .....	M. E. Beach and A. Burch .....	272,625	Feb. 20	1315	366	23	685
Saw setting and sharpening device .....	M. Cowles .....	280,138	June 26	1874	528	23	2467
Saw-setting device .....	E. H. Ketchum .....	287,835	Nov. 6	55	16, 17	25	517
Saw setting, swaging, and sharpening machine .....	J. C. Stevens .....	276,641	May 1	121	32	23	1648
Saw-sharpening gage .....	L. N. Torrence and R. T. Reid .....	286,348	Oct. 9	721	193	25	141
Saw-sharpening machine .....	J. P. Hansan .....	285,126	Sept. 18	1196	335	24	1123
Saw-swage .....	P. B. Charboneau .....	287,363	Oct. 23	2002	545	25	382
Saw-swage .....	K. E. Conant .....	284,185	Sept. 4	33	8, 9	24	910
Saw-swage .....	M. Covel .....	278,684	June 5	10	3	23	2126
Saw-swage .....	M. Covel .....	279,718	June 19	1371	{ 382 383 }	23	2371
Saw-swage .....	W. Kelly .....	279,251	June 12	792	219	23	2269
Saw-swage .....	S. Kinney .....	279,769	June 19	1425	398	23	2381
Saw-swage .....	J. Mather .....	277,559	May 15	1329	357	23	1665
Saw-tab .....	J. D. Ryan and P. Lane .....	288,867	Nov. 20	1351	371	25	758

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Saw-table .....	J. W. Cole .....	279,341	June 12	915	255	23	2288
Saw-table gage .....	D. K. Barnhart .....	271,018	Jan. 23	1476	425	23	302
Saw-table gage .....	J. R. Brennan .....	271,408	Jan. 30	1964	568	23	395
Saw-table gage .....	J. H. Hamlet .....	287,124	Oct. 23	1701	466	25	328
Saw-table. Portable .....	J. C. Leslie .....	279,098	June 5	600	163	23	2226
Saw-teeth. Device for dressing .....	S. H. Chase .....	272,530	Feb. 20	1195	333	23	663
Saw-teeth. Machine for swaging .....	J. Orm .....	272,465	Feb. 20	1107	313	23	648
Saw-teeth. Making insertible .....	W. Hawkins .....	280,617	July 3	334	93	24	59
Saw-tooth .....	R. W. Prosser .....	272,319	Feb. 13	906	254	23	610
Saw-tooth .....	E. Smith .....	289,576	Dec. 4	256	72	25	932
Saw-tooth .....	N. W. Spaulding. (Reissue) .....	10,312	Apr. 10	1219	333	23	1442
Saw-tooth. Insertible .....	E. T. Lippert .....	283,623	Aug. 21	1386	387	24	763
Saw-tooth. Insertible .....	J. O'Grady .....	286,478	Oct. 9	868	236	25	168
Saw-tooth. Insertible .....	W. B. Risdon .....	289,715	Dec. 4	436	122	25	962
Saw-tooth. Insertible .....	G. W. Stinebring .....	285,176	Sept. 18	1260	353	24	1134
Saw-tooth. Insertible .....	T. J. Thompson .....	286,091	Oct. 2	382	106	25	70
Saw-tooth. Insertible .....	W. Zerman .....	274,876	Mar. 27	2093	581	23	1217
Saw-tooth. Insertible diamond .....	E. Foerster .....	273,054	Feb. 27	1862	523	23	788
Saw-tooth swage .....	N. L. Gauo .....	280,598	July 3	312	87	24	56
Saws. Adjusting edger .....	S. Erb .....	289,819	Dec. 11	556	156	25	991
Saws. Bevel attachment for hand .....	E. Andrews .....	283,319	Aug. 14	1015	284	24	689
Saws. Cleansing .....	W. Bowker .....	279,698	June 19	1351	376	23	2367
Saws. Kerfing-gage for .....	W. C. Jones .....	286,018	Oct. 2	292	82	25	55
Saws. Machine for sharpening gin .....	A. P. Gathright .....	290,031	Dec. 11	821	{ 231 232 }	25	1038
Saws. Oscillating guide for gang .....	C. H. Weston .....	286,351	Oct. 9	725	194	25	142
Sawdust-conveyer .....	J. M. Elliott, Jr. ....	271,832	Feb. 6	287	79	23	492
Sawing and channeling machine .....	D. W. Williams .....	270,532	Jan. 9	867	252	23	180
Sawing and gaining machine .....	L. Gould .....	290,327	Dec. 18	1188	333	25	1112
Sawing clapboards or rift siding. Machine for .....	S. Babcock .....	273,701	Mar. 13	594	159	23	943
Sawing-machine .....	C. A. Dietrich .....	280,144	June 26	1883	529	23	2468
Sawing-machine .....	J. T. H. Drake .....	280,149	June 26	1888	531	23	2469
Sawing-machine .....	J. Hendershot .....	271,454	Jan. 30	2022	584	23	405
Sawing-machine .....	R. J. Henson .....	290,425	Dec. 18	1327	368	25	1135
Sawing-machine .....	W. E. Hill .....	276,401	Apr. 24	1970	{ 545 546 }	23	1587
Sawing-machine .....	S. Hirschy .....	290,051	Dec. 11	843	239	25	1042
Sawing-machine .....	H. M. Irwin .....	288,440	Nov. 13	826	224	25	659
Sawing-machine .....	G. McCoy .....	284,038	Aug. 28	1920	537	24	870
Sawing-machine .....	G. W. Merrill .....	279,967	June 26	1674	470	23	2430
Sawing machine .....	W. T. Moore and G. R. Jackson .....	286,548	Oct. 9	957	258	25	184
Sawing machine .....	W. T. Moore and G. R. Jackson .....	287,951	Nov. 6	204	59	25	543
Sawing-machine .....	H. K. Olsen .....	275,069	Apr. 3	248	69	23	1268
Sawing-machine .....	O. F. Stedman .....	287,975	Nov. 6	233	66	25	548
Sawing-machine .....	J. Vanston .....	274,419	Mar. 20	1509	415	23	1110
Sawing machine. Band .....	W. W. Carey .....	275,139	Apr. 3	341	94	23	1285
Sawing machine. Band .....	J. W. Smith .....	276,197	Apr. 24	1705	471	23	1542
Sawing-machine. Chain .....	F. L. Magaw .....	279,780	June 19	1438	{ 402 403 }	23	2383
Sawing machine. Circular .....	L. Gould .....	287,275	Oct. 23	1821	518	25	362
Sawing machine. Circular .....	G. Gowan .....	288,173	Nov. 6	468	130	25	589
Sawing machine. Clapboard .....	H. Taber .....	279,287	June 12	834	231	23	2276
Sawing machine. Crosscut .....	W. A. Doherty and C. G. Van Sickle .....	280,457	July 3	151	41	24	28
Sawing machine. Drag .....	A. A. Atwood .....	287,895	Nov. 6	133	39	25	531
Sawing machine. Gang .....	D. J. Murray .....	288,723	Nov. 20	1186	324	25	727
Sawing machine. Kindling-block .....	J. L. Seymour .....	290,711	Dec. 25	1710	471	25	1209
Sawing machine. Lath .....	A. Carrier .....	289,219	Nov. 27	1782	424	25	843
Sawing machine. Portable steam .....	E. N. Dunkel .....	284,620	Sept. 11	564	160	24	1006
Sawing machine. Scroll .....	A. McCreight .....	272,070	Feb. 13	604	164	23	556
Sawing machine. Slab .....	J. B. Lemieux .....	290,589	Dec. 18	1540	424	25	1173
Sawing machines. Feed mechanism for lath .....	J. A. Robb .....	288,493	Nov. 13	894	243	25	671
Sawing segment-blocks. Machine for .....	H. C. Crowell .....	275,807	Apr. 17	1235	{ 339 340 }	23	1453
Scaffold .....	W. A. Gillett .....	279,740	June 19	1396	390	23	2376
Scaffold and fire-escape .....	J. Klein .....	284,308	Sept. 4	127	52, 53	24	936
Scaffold-bracket .....	A. D. Hart .....	284,845	Sept. 11	846	238	24	1054
Scaffold. Mechanic's .....	L. T. Steele .....	277,953	May 22	1756	479	23	1947
Scaffold or mortar-board. Builder's .....	S. Dale .....	283,214	Aug. 14	886	247	24	665
Scaffold. Portable hanging .....	J. H. Hanavan .....	276,241	Apr. 24	1759	490	23	1552
Scaffold-support .....	T. J. Shaugnessy .....	290,487	Dec. 18	1406	388	25	1150
Scaffolds. Support for swinging or pendant .....	J. T. Churchill .....	288,977	Nov. 27	1492	413	25	792
Scaffolding. Roof .....	A. R. Manley .....	283,908	Aug. 28	1737	490	24	838
Scale .....	A. A. Houghton .....	280,377	July 3	46	12	24	10
Scale and indicator .....	C. D. Vernon .....	284,692	Sept. 11	658	185	24	1021
Scale. Automatic car .....	C. Lederer .....	283,619	Aug. 21	1381	386	24	762
Scale. Automatic grain .....	J. B. Stoner .....	289,784	Dec. 4	509	141	25	975
Scale. Automatic weighing .....	N. A. Jones .....	270,078	Jan. 2	292	87	23	59
Scale, bagger, and register. Combined grain .....	C. J. Leach and A. Olds .....	287,692	Oct. 30	2437	656	25	474
Scale. Beam .....	A. H. Emery .....	278,900	June 5	303	88	23	2175
Scale. Beam .....	A. H. Emery .....	278,901	June 5	306	88	23	2176
Scale-beam .....	A. R. English .....	279,548	June 19	1177	326	23	2337
Scale-beam .....	I. Rigdon .....	271,274	Jan. 30	1784	518	23	362
Scale-beams. Indicating-poise for .....	R. L. Hassell .....	274,493	Mar. 27	1631	{ 452 453 }	23	1137
Scale. Beer .....	P. Vaughan .....	290,153	Dec. 11	962	272	25	1065
Scale-board-rounding machine .....	L. H. Sparks .....	269,893	Jan. 2	84	25	23	18
Scale. Counter .....	D. Buoy .....	277,878	May 22	1672	456	23	1933
Scale. Counter .....	A. A. Houghton .....	276,180	Apr. 24	1684	465	23	1539
Scale for weighing diamonds, balance-screws of watches, &c. ....	F. F. Ide .....	272,699	Feb. 20	1405	394	23	701
Scale. Kitchen .....	T. D. Solomon .....	280,252	June 26	2011	565	23	2491
Scale-pan .....	G. H. Chatillon .....	271,790	Feb. 6	249	69	23	484
Scale-pen for weighing cattle .....	A. Borrer, Jr. ....	283,371	Aug. 21	1098	309	24	710



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. 5b	Vol.	Page.
Scale. Pendulum.....	A. Onslow.....	281,292	July 17	1188	{ 328 329 }	24	223
Scale. Platform.....	A. H. Emery.....	278,902	June 5	310	88, 89	23	2176
Scale. Platform.....	A. H. Emery.....	278,903	June 5	315	89	23	2177
Scale. Platform.....	A. H. Emery.....	278,904	June 5	318	90	23	2177
Scale. Platform.....	A. H. Emery.....	278,905	June 5	320	90	23	2178
Scale. Platform.....	F. Fairbanks.....	285,600	Sept. 25	1760	499	24	1231
Scale. Platform.....	C. C. Miller.....	271,726	Feb. 6	165	46	23	469
Scale. Postal.....	J. F. Miller.....	276,701	May 1	211	54, 55	23	1660
Scale. Railway.....	J. L. Merrill.....	286,465	Oct. 9	855	232	25	166
Scale. Spring.....	J. S. George.....	273,720	Mar. 13	613	165	23	946
Scale. Spring.....	J. F. Kingwill.....	282,645	Aug. 7	205	59	24	535
Scale. Spring-balance counter.....	F. W. Runge.....	289,450	Dec. 4	92	26, 27	25	903
Scale. Weighing.....	W. G. Collier.....	281,753	July 24	1783	{ 485 486 }	24	329
Scale. Weighing.....	W. C. Farnum.....	279,864	June 19	1541	431	23	2401
Scale. Weighing.....	F. I. Hitchcock.....	285,815	Oct. 2	41	13	25	9
Scale. Weighing.....	A. A. Houghton.....	270,221	Jan. 9	471	138	23	103
Scale. Weighing.....	F. Huebner.....	276,693	May 1	204	52	23	1659
Scale. Weighing.....	C. W. Wailey.....	281,586	July 17	1555	425	24	284
Scale-weight. Indicating.....	R. L. Hassell.....	274,494	Mar. 27	1634	{ 453 454 }	23	1137
Scale. Wheat and flour.....	G. M. Knight.....	277,292	May 8	975	262	23	1800
Scales. Scoop-balance attachment for weighing.....	A. Leas.....	287,136	Oct. 23	1714	469	25	331
Scarf.....	C. W. Manley.....	276,845	May 1	399	105	23	1696
Scarf.....	F. O. McCleary.....	278,444	May 29	2406	656	23	2069
Scarf and collar fastener.....	A. Waldberr.....	273,200	Feb. 27	2041	574	23	819
Scarf, &c., holder.....	J. Lockwood and W. A. Keys.....	285,281	Sept. 18	1374	358	24	1156
Scarf. Neck.....	C. H. Crossette.....	278,316	May 29	2236	613	23	2039
Scarf. Neck.....	I. Noar.....	278,588	May 29	2568	702	23	2098
Scarf. Neck.....	I. Noar.....	269,356	Nov. 27	1946	540	25	875
Scarf. Neck.....	B. Richter.....	284,484	Sept. 4	393	110	24	971
Scarf. Neck.....	C. E. Ward.....	288,387	Nov. 13	763	206	25	647
Scarf-shield.....	T. J. Flagg.....	288,169	Nov. 6	463	129	25	588
School-chair.....	O. C. Clark.....	275,021	Apr. 3	188	50	23	1257
School-indicator.....	G. Hogan.....	276,819	May 1	367	97	23	1690
Scissors.....	J. D. Frary.....	275,629	Apr. 10	1001	270	23	1404
Scissors-holder.....	M. A. Warne.....	287,745	Oct. 30	2511	676	25	487
Scoop.....	R. T. Pettesbone.....	282,363	July 31	2571	705	24	469
Scoop. Grocer's.....	A. Button.....	282,493	Aug. 7	16	4	24	504
Scoop. Lard or butter.....	J. Small and J. H. Caler.....	282,677	Aug. 7	241	70	24	541
Scoop. Weighing.....	I. L. Bevis.....	271,210	Jan. 30	1711	496	23	350
Scoop. Weighing.....	J. and H. Friedländer.....	273,979	Mar. 13	914	260	23	1003
Scourer: See Grain-scourer. Knife-scourer.							
Scouring, scratching, and buffing wheel.....	O. Brunelle.....	285,222	Sept. 18	1307	368	24	1143
Scouring wheat, &c. Machine for.....	J. T. Ewan.....	287,370	Oct. 23	2012	547	25	384
Scow. Deck dumping.....	G. Souther.....	273,178	Feb. 27	2016	567	23	815
Scow. Dumping.....	N. Barney.....	271,298	Jan. 30	1817	527	23	368
Scow. Dumping.....	M. F. Brainard.....	289,498	Dec. 4	162	44	25	914
Scow. Dumping.....	J. Smith and J. P. Rhodes.....	270,871	July 10	661	186	24	124
Scow. Dumping.....	A. Stierle.....	278,829	June 5	208	62	23	2158
Scraper and brush. Combined.....	O. Bushnell.....	272,119	Feb. 13	671	183	23	568
Scraper and elevator.....	T. H. Apple.....	289,331	Nov. 27	1918	533	25	870
Scraper. Boot.....	M. A. Collins.....	287,242	Oct. 23	1859	508	25	355
Scraper, cart, and dump. Combined road.....	A. S. Hughes.....	279,093	June 5	593	{ 161 162 }	23	2224
Scraper. Dirt.....	W. H. Deidrick.....	275,893	Apr. 17	1338	368	23	1471
Scraper. Dirt.....	A. A. Faulkner.....	290,410	Dec. 18	1291	362	25	1130
Scraper. Dirt.....	J. Porteous.....	275,075	Apr. 3	254	70	23	1269
Scraper. Dirt.....	J. Porteous.....	289,134	Nov. 27	1679	466	25	824
Scraper. Dirt and road.....	J. W. Hedges, J. S. and T. J. Gill.....	281,875	July 24	1942	531	24	357
Scraper. Earth.....	A. R. Byrkettt.....	273,253	Mar. 6	14	4	23	837
Scraper. Earth.....	A. R. Byrkettt. (Reissue).....	10,370	Aug. 21	1532	432	24	791
Scraper. Earth.....	W. Haslup.....	278,953	June 5	416	114	23	2194
Scraper. Earth.....	W. Haslup.....	284,418	Sept. 4	320	89	24	957
Scraper. Earth.....	E. D. Humphreys.....	273,538	Mar. 6	382	101	23	899
Scraper. Foot.....	C. B. Pnshee.....	256,329	Oct. 9	701	187	25	137
Scraper, leveler, and ditching-machine. Combined dirt.....	J. Johnson.....	283,113	Aug. 14	765	215	24	643
Scraper or excavator. Wheeled.....	W. E. Jacobs.....	289,841	Dec. 11	590	164	25	997
Scraper, plow, and cultivator. Combined.....	H. L. P. Pool.....	279,429	June 12	1032	286	23	2306
Scraper. Road.....	L. R. Brooks.....	284,604	Sept. 11	544	154	24	1002
Scraper. Road.....	J. W. Davis.....	285,581	Sept. 25	1735	490	24	1226
Scraper. Road.....	W. Doan.....	282,862	Aug. 7	465	131	24	582
Scraper. Road.....	W. Ellis, Jr.....	273,830	Mar. 13	766	207	23	973
Scraper. Road.....	J. Fleming.....	279,368	June 12	956	{ 265 266 }	23	2294
Scraper. Road.....	E. Hnber.....	283,607	Aug. 21	1369	353	24	760
Scraper. Road.....	L. Lamborn.....	290,246	Dec. 18	1081	302	25	1094
Scraper. Road.....	G. D. Matcham.....	284,647	Sept. 11	596	{ 167 168 }	24	1011
Scraper. Road.....	G. D. Matcham.....	289,012	Nov. 27	1529	{ 422 423 }	25	798
Scraper. Road.....	C. Mendenhall.....	278,991	June 5	458	126	23	2201
Scraper. Road.....	A. J. Nellis.....	277,771	May 15	1543	419	23	1904
Scraper. Road.....	J. H. Vorhes.....	283,835	Aug. 28	1653	466	24	823
Scraper. Road.....	A. Womack.....	282,141	July 31	2291	639	24	421
Scraper. Road.....	L. D. York. (Reissue).....	10,390	Oct. 2	472	129	25	88
Scraper. Shoe.....	S. C. Plotner.....	270,115	Jan. 2	331	97	23	67
Scraper. Sulky.....	P. Englehart.....	281,986	July 24	2076	569	24	380
Scraper. Sulky dirt.....	H. M. D. L. Babcox.....	277,826	May 15	1600	437	23	1914
Scraper. Wheeled.....	W. A. Stearns.....	282,681	Aug. 7	245	72	24	542
Scraper. Wheeled.....	L. A. Sweatt.....	276,303	Apr. 24	1836	511	23	1564

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Scraper. Wheeled dirt.....	J. R. Williams.....	286,246	Oct. 9	571	157	25	115
Scratch-gage.....	J. E. Sherman.....	290,807	Dec. 25	1835	507	25	1231
Screen:							
See Battery-screen. Grain-screen.							
Cockle-screen. Paper-pulp screen.							
Cranberry-screen. Thrashing-machine							
Fly-screen. screen.							
Gas-purifier screen. Ventilating-screen.							
Gas-purifying Window-screen.							
screen. Window and doorscreen.							
Screen.....	J. T. Crandle.....	290,666	Dec. 25	1642	452	25	1197
Screen.....	O. Harley.....	280,614	July 3	330	92	24	59
Screen-cleaning device.....	T. Holman.....	271,847	Feb. 6	318	87	23	497
Screen-frame.....	G. N. Joss.....	277,135	May 8	796	209	23	1768
Screening and sizing machine.....	J. Sutton.....	279,286	June 12	832	231	23	2276
Screening device for middlings, flour, &c. Cut-off } for	G. Cottrell.....	277,547	May 15	1278	{ 342 } { 343 }	23	1858
Screening-machine.....	G. Kaffenberger.....	276,596	May 1	67	19	23	1639
Screw.....	H. A. Harvey.....	288,798	Nov. 20	1271	348	25	744
Screw.....	W. Schilling.....	272,778	Feb. 20	1505	424	23	719
Screw. Coffin.....	G. Rogers.....	277,348	May 8	1039	278	23	1812
Screw-conveyer.....	T. K. Webster and J. Chivill.....	276,103	Apr. 17	1596	437	23	1514
Screw-conveyer coupling.....	J. Chivill.....	289,751	Dec. 4	477	135	25	970
Screw-conveyer coupling.....	T. K. Webster and J. Chivill.....	272,006	Feb. 6	517	139	23	329
Screw-cutting chuck.....	C. F. Stehmetz.....	283,679	Aug. 21	1456	410	24	777
Screw-cutting die.....	A. G. Brust.....	280,128	June 26	1865	526	23	2465
Screw-cutting die.....	J. Müller.....	271,652	Feb. 6	80	22	23	454
Screw-cutting die.....	E. J. Voegtlin.....	270,618	Jan. 16	976	282	23	207
Screw-cutting gage.....	J. Wyke.....	284,702	Sept. 11	670	188	24	1024
Screw-cutting head.....	I. Culver.....	274,281	Mar. 20	1332	367	23	1079
Screw-cutting indicator lathe attachment.....	J. F. Mershon.....	281,283	July 17	1176	325	24	221
Screw-cutting machine.....	A. J. Smart.....	288,188	Nov. 6	486	{ 135 } { 136 }	25	592
Screw-cutting machine.....	S. C. Smith.....	284,501	Sept. 4	418	118	24	975
Screw-cutting tool.....	J. G. Dalie.....	275,156	Apr. 3	360	99	23	1288
Screw-cutting tool.....	D. Houghton.....	272,139	Feb. 13	694	189	23	572
Screw-cutting tool.....	A. Nacke.....	279,495	June 12	1106	305	23	2318
Screw. Drive.....	T. J. Bray.....	289,333	Nov. 27	1921	534	25	871
Screw-driver.....	G. S. Allen and R. C. Ellrich.....	289,056	Nov. 27	1590	440	25	808
Screw-driver.....	A. Benson.....	277,202	May 8	870	231	23	1781
Screw-driver.....	F. J. Colvin.....	279,917	June 26	1610	452	23	2420
Screw-driver.....	M. B. Crawford.....	274,912	Apr. 3	24	7	23	1231
Screw-driver.....	W. Devereux.....	287,809	Nov. 6	22	8	25	511
Screw-driver.....	I. M. Furbish.....	277,561	May 15	1297	348	23	1660
Screw-driver.....	M. C. Henley.....	285,484	Sept. 25	1619	454	24	1204
Screw-driver.....	C. H. Mallett and Z. T. Furbish.....	275,235	Apr. 3	452	{ 125 } { 126 }	23	1303
Screw-driver.....	A. McLellan.....	280,845	July 10	633	178	24	118
Screw-driver.....	D. Nei.....	277,599	May 15	1340	361	23	1867
Screw-driver.....	C. H. Olson.....	278,261	May 22	2150	590	23	2015
Screw-driver and borer. Convertible.....	H. V. Smith.....	274,042	Mar. 13	1014	278	23	1016
Screw-driver attachment.....	C. W. Drake.....	290,218	Dec. 18	1049	295	25	1088
Screw-eyes. Making.....	E. A. Alpess.....	270,570	Jan. 16	919	265	23	197
Screw-grinding apparatus.....	H. A. Rowland.....	272,480	Feb. 20	1130	317	23	652
Screw-hook.....	J. C. Ernst.....	276,375	Apr. 24	1938	537	23	1582
Screw-jack.....	H. Binssse.....	283,851	Aug. 28	1670	471	24	826
Screw-jack.....	J. Heritage.....	279,753	June 19	1410	394	23	2378
Screw. Jack.....	H. Libby.....	286,717	Oct. 16	1183	319	25	230
Screw. Jack.....	B. F. Reeves.....	273,894	Mar. 13	841	229	23	986
Screw-joint for metal-pipe fittings.....	W. A. Miles.....	272,574	Feb. 20	1253	350	23	674
Screw-machine.....	G. Heyne.....	289,655	Dec. 4	351	{ 99 } { 100 }	25	949
Screw-machine.....	F. F. Motley.....	289,125	Nov. 27	1669	463	25	822
Screw machine. Metal.....	F. and A. B. Curtis.....	280,296	June 26	2064	{ 580 } { 581 }	23	2500
Screw machine. Metal.....	J. W. Lyon.....	276,438	Apr. 24	2013	558	23	1595
Screw machine. Metal.....	G. T. Reiss.....	273,313	Mar. 6	92	27	23	849
Screw machine. Metal.....	C. M. Spencer.....	275,431	Apr. 10	748	199	23	1362
Screw machine. Metal.....	H. H. Taylor.....	274,153	Mar. 20	1166	{ 321 } { 322 }	23	1049
Screw machine. Wood.....	E. Nugent.....	282,107	July 31	2232	{ 614 } { 615 }	24	412
Screw-nicking machine.....	C. Grotz.....	278,132	May 22	1980	{ 543 } { 544 }	23	1986
Screw. Pad.....	D. B. Cooley.....	276,135	Apr. 17	1629	449	23	1521
Screw-plate.....	J. M. Carpenter.....	290,857	Dec. 25	1891	522	25	1241
Screw-press.....	G. B. Boomer.....	283,463	Aug. 21	1205	{ 338 } { 339 }	24	729
Screw. Set.....	J. F. Wallensak.....	278,759	June 5	103	29	23	2141
Screw-ewaging machine.....	S. A. Davis and R. Blake.....	280,723	July 3	461	132	24	82
Screw-tap.....	C. R. C. French.....	270,216	Jan. 9	466	136	23	102
Screw-tap.....	C. R. C. French.....	275,815	Apr. 17	1245	343	23	1454
Screw-tap.....	J. C. Steber.....	284,510	Sept. 4	431	122	24	977
Screw-threading device.....	R. Hildwein.....	289,415	Dec. 4	50	14, 15	25	895
Screw-threading device.....	J. Miller.....	274,630	Mar. 27	1797	500	23	1167
Screw-threading machine.....	W. D. Forbes.....	270,407	Jan. 9	702	{ 207 } { 208 }	23	146
Screw-threading machine.....	W. D. Forbes.....	270,408	Jan. 9	703	208	23	147
Screw-threading machine.....	W. D. Forbes.....	270,409	Jan. 9	704	208	23	147
Screw-threads. Device for upsetting and restoring.....	M. Kepler.....	289,271	Nov. 27	1837	507	25	854
Screw-threads. Die for cutting.....	J. E. Woodbridge.....	269,981	Jan. 2	188	54	23	39
Screw-threads. Machine for ewaging.....	S. A. Davis and R. Blake.....	279,353	June 12	928	{ 259 } { 260 }	23	2290
Screw-threads. Stock for cutting.....	O. J. Kosiol.....	289,275	Nov. 27	1842	508	25	855



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthlv volume.		Official Gazette.	
				Spec.	Dr. E.	Vol.	Page.
Screw. Wood.....	I. F. Brown.....	281,831	July 24	1887	515	24	348
Screw. Wood.....	I. Cole.....	288,923	Nov. 20	1418	391	25	771
Screws. Machine for making wood.....	W. Rumble.....	283,420	Aug. 21	1150	{ 325 326 }	24	720
Screws. Machine for rolling the threads of wood.....	H. A. Harvey.....	284,633	Sept. 11	579	163	24	1008
Screws. Machine for threading sheet-metal.....	C. Hope.....	270,314	Jan. 9	574	169	23	122
Screws. Machine for threading the points of lag.....	H. E. Coy.....	276,671	May 1	163	42	23	1653
Scrubbing floors. Machine for.....	P. Gallagber.....	271,830	Feb. 6	296	81	23	493
Scrubbing machine. Floor.....	J. C. Garrett.....	282,713	Aug. 7	297	84	24	551
Scythe-snath fastening.....	F. S. Kretsinger and E. Stewart.....	280,486	July 3	189	50	24	35
Scythe-snath fastening.....	F. M. Swope.....	283,932	Aug. 28	1768	500	24	845
Scythe-snath nib-iron.....	A. Lane.....	283,406	Aug. 21	1154	321	24	717
Seal. Car.....	F. C. Gillmore.....	281,863	July 24	1928	527	24	355
Seal. Car.....	W. Scharnweber.....	280,086	June 26	1821	513	23	2457
Seal. Car.....	J. S. Wertz.....	286,514	Oct. 9	916	247	25	176
Seal-holding attachment for hasp-locks.....	A. Jous.....	288,641	Nov. 20	1072	295	25	709
Seal in traps of water-closets, urinals, wash-basins, } sinks, &c. Preserving the	J. P. Hyde.....	288,573	Nov. 13	985	{ 271 272 }	25	688
Seal-joint trap for bath-tubs, &c. Mercury.....	A. Edwards and S. J. Van Stavoren.....	270,034	Jan. 2	244	71	23	50
Seal-lock.....	D. A. Bolt.....	286,768	Oct. 16	1243	{ 336 337 }	25	241
Seal-lock.....	E. J. Brooks.....	285,384	Sept. 25	1502	423	24	1183
Seal-lock.....	J. W. Burd, Jr.....	289,973	Dec. 11	746	211	25	1025
Seal-lock.....	R. J. Cannon and J. M. Ward.....	276,666	May 1	155	40	23	1652
Seal-lock.....	C. Clarke.....	271,684	Feb. 6	120	33	23	460
Seal-lock.....	A. O. Dayton.....	275,026	Apr. 3	193	51	23	1258
Seal-lock.....	H. W. Earl.....	278,237	May 22	2100	578	23	2007
Seal-lock.....	J. Forbes and H. M. Williston.....	273,267	Mar. 6	28	9	23	839
Seal-lock.....	R. Frew.....	274,929	Apr. 3	57	15	23	1235
Seal-lock.....	S. A. Hosford.....	269,935	Jan. 2	131	39	23	27
Seal-lock.....	J. F. Inghram.....	289,417	Dec. 4	53	15, 16	25	896
Seal-lock.....	L. M. Junkin.....	275,496	Apr. 10	828	225	23	1376
Seal-lock.....	V. A. Krepps.....	287,299	Oct. 23	1927	527	25	368
Seal-lock.....	J. Menzies.....	280,649	July 3	373	104	24	66
Seal-lock.....	S. E. Nutting.....	278,450	May 29	2413	693	23	2070
Seal-lock.....	J. C. Rae.....	272,769	Feb. 20	1493	420	23	716
Seal-lock.....	W. W. Shallus.....	282,380	July 31	2589	711	24	472
Seal-lock.....	R. O. and S. Walker.....	283,836	Aug. 28	1654	466	24	823
Seal-lock.....	A. Warren.....	272,360	Feb. 13	959	267	23	618
Seal-lock.....	A. Warren.....	284,519	Sept. 4	441	125	24	979
Seal-lock for car-doors.....	W. H. Williams.....	282,019	July 24	2116	579	24	386
Seal-lock for car-doors.....	E. J. Brooks.....	285,219	Sept. 18	1303	367	24	1142
Seal-lock for car-doors.....	G. J. Hartman.....	284,632	Sept. 11	578	163	24	1008
Seal-lock for car-doors.....	V. A. Krepps.....	290,690	Dec. 25	1674	461	25	1202
Seal. Metallic.....	E. J. Brooks.....	278,866	June 5	265	76	23	2168
Seal. Metallic.....	E. J. Brooks.....	286,775	Oct. 16	1253	339	25	242
Seal. Metallic.....	P. A. Curtis.....	271,224	Jan. 30	1725	500	23	352
Seal press.....	R. H. Smith.....	286,496	Oct. 9	890	240	25	172
Seal-trap for lavatories, bath-tubs, &c. Mercury.....	A. Edwards.....	287,369	Oct. 23	2010	547	25	383
Seals. Instrument for forming metal.....	T. H. Malone and G. A. Whiting.....	276,058	Apr. 17	1530	421	23	1504
Seals to cars. Attaching.....	T. H. Malone and G. A. Whiting.....	282,205	July 31	2374	653	24	434
Seals. Tool for compressing.....	W. Johnson.....	278,434	May 29	2392	{ 632 633 }	23	2067
Sealing device for jars, &c.....	A. Luger.....	280,938	July 10	750	208	24	138
Sealing envelopes.....	H. A. Buttner.....	281,448	July 17	1391	382	24	257
Sealing fruit and other cans.....	J. Waterous.....	288,526	Nov. 13	932	254	25	677
Sealing fruit-cans, &c. Composition of matter to be used for	J. Waterous.....	288,525	Nov. 13	932	.....	25	677
Sealing packages and railway-cars. Combination im- plement for	T. E. Miller.....	270,092	Jan. 2	304	90	23	62
Seam-finishing machine.....	W. Y. Ober.....	285,061	Sept. 18	1116	{ 311 312 }	24	1109
Seaming irregular-shaped cans. Machine for.....	W. H. Atkinson.....	279,853	June 19	1526	427	23	2398
Seaming-machine.....	F. A. Walsh.....	271,668	Feb. 6	98	27	23	457
Seaming-machine.....	F. A. Walsh.....	277,962	May 22	1764	{ 481 482 }	23	1948
Seaming machine. Can.....	T. L. Smith and W. S. Doig.....	273,774	Mar. 13	698	188	23	961
Seaming machine. Double.....	P. J. and F. J. Illig.....	282,525	Aug. 7	63	18	24	511
Seaming machine. Sheet-metal.....	C. Wright.....	284,584	Sept. 4	519	{ 145 146 }	24	992
Seaming press.....	E. J. Dolan.....	286,283	Oct. 9	639	171	25	126
Seaming sheet-metal cans. Double.....	F. A. Walsh.....	272,500	Feb. 20	1156	324	23	657
Seaming sheet-metal cans. Machine for.....	E. Norton and J. G. Hodgson.....	272,972	Feb. 27	1763	{ 493 494 }	23	770
Seams. Machine for cutting and ripping.....	F. Basch.....	271,019	Jan. 23	1477	426	23	303
Seams of sheet-metal cans. Apparatus for applying flux to the	G. H. Perkins.....	270,109	Jan. 2	322	95	23	65
Seat:							
See Bicycle-seat.	Row-boat seat.						
Bracket-seat.	Shooting-seat.						
Car-seat.	Spring-seat.						
Carriage-seat.	Vehicle-seat.						
Carriage jump-seat.	Vehicle jump-seat.						
Chair-seat.	Vehicle shifting seat.						
Counter-seat.	Vehicle spring-seat.						
Folding seat.	Wagon-seat.						
Folding school-seat.	Window-washing seat.						
Infant's seat.	Wire seat.						
Life-saving seat.							
Seat.....	H. S. Hale.....	271,062	Jan. 23	1525	441	23	311
Seat.....	H. S. Hale.....	280,740	July 3	486	{ 137 138 }	24	86
Seat-back. Detachable and adjustable.....	L. Postawka.....	274,375	Mar. 20	1455	399	23	1100
Seat-lock.....	F. P. Monfort.....	274,809	Mar. 27	2006	558	23	1203

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Secondary batteries. Apparatus for charging and discharging	E. Weston	285,714	Sept. 25	1901	540	24	1256
Secondary batteries. Apparatus for charging and discharging	E. Weston and L. E. Curtis	289,328	Nov. 27	1914	532	25	869
Secondary battery. Planté's	S. L. Fox	285,807	Oct. 2	30	10	25	7
Secondary battery	E. Boettcher	277,445	May 15	1157	311	23	1838
Secondary battery	C. F. Brush	274,082	Mar. 13	1071	295	23	1026
Secondary battery	C. F. Brush	275,985	Apr. 17	1443	398	23	1491
Secondary battery	C. F. Brush	275,986	Apr. 17	1444	398	23	1491
Secondary battery	C. F. Brush	276,155	Apr. 24	1655	457	23	1534
Secondary battery	T. A. Edison	273,492	Mar. 6	321	87	23	889
Secondary battery	T. A. Edison	274,292	Mar. 20	1349	371	23	1081
Secondary battery	A. Haid	271,628	Feb. 6	58	16	23	450
Secondary battery	N. S. Keith	273,855	Mar. 13	892	217	23	979
Secondary battery	J. A. Maloney	271,880	Feb. 6	353	98	23	502
Secondary battery	A. J. Martin	274,802	Mar. 27	1998	555	23	1202
Secondary battery	C. P. Nézeraux	271,732	Feb. 6	173	47	23	470
Secondary battery	J. Pitkin	274,373	Mar. 20	1453	398	23	1100
Secondary battery	E. T. Starr	282,396	July 31	2608	716	24	476
Secondary battery	E. T. Starr	283,295	Aug. 14	926	275	24	684
Secondary battery	A. Tribe	284,343	Sept. 4	924	63	24	942
Secondary battery	C. J. Van Depoele	285,529	Sept. 25	1674	421	24	1215
Secondary battery	E. R. Whitney	277,394	May 8	1057	292	23	1820
Secondary-battery charging. Current-manipulator for	C. F. Brush	281,175	July 10	1027	287	24	158
Secondary-battery element	C. F. Brush	274,905	Apr. 3	17	4	23	1229
Secondary-battery element	C. F. Brush	276,348	Apr. 24	1905	529	23	1576
Secondary-battery indicator	E. Weston	282,428	July 31	2655	728	24	484
Secondary battery or electric accumulator	E. T. Starr	281,156	July 10	1004	281	24	184
Secondary-battery plate	C. H. Koyl	276,974	May 1	574	151	23	1724
Secondary electric battery	E. T. Starr	279,639	June 19	1507	422	23	2395
Secondary electric battery	C. J. Van Depoele	282,414	July 31	2633	421	24	480
Secondary or storage battery	E. T. and E. E. Starr	276,300	Apr. 24	1831	511	23	1564
Secondary or storage battery	E. T. and E. E. Starr	276,301	Apr. 24	1834	511	23	1564
Secondary or storage battery	E. T. and E. E. Starr	284,577	Sept. 4	510	143	24	990
Secretary	J. H. Elward	275,616	Apr. 10	985	266	23	1402
Secretary	J. P. Pardue	279,004	June 5	475	130	23	2204
Sectional boat	D. W. Case	274,171	Mar. 20	1193	328	23	1054
Sectional boiler	D. Renshaw	274,825	Mar. 27	2024	563	23	1207
Sectional safety-boiler	E. J. Moore	284,468	Sept. 4	374	104	24	967
Sectional safety-boiler	E. J. Moore	289,850	Dec. 11	602	167	25	999
Sediments or precipitates. Apparatus for depositing and collecting	G. Bacher	277,191	May 8	858	228	23	1779
Seed and fertilizer dropper. Combined	G. E. S. Phillips	284,892	Sept. 11	893	252	24	1063
Seed-bar tooth	G. D. Rowell	287,171	Oct. 23	1761	483	25	339
Seed-cleaner	J. Grube	271,839	Feb. 6	310	84	23	495
Seed-corn hanger	C. G. Reynolds	285,159	Sept. 18	1238	348	24	1130
Seed-drill	J. M. Allen	281,602	July 17	1578	431	24	288
Seed-drill	J. C. Center	284,378	Sept. 4	264	74	24	949
Seed-drill	E. C. Ellwood	289,520	Dec. 4	185	52	25	919
Seed-drill and broadcast scatterer. Combined	W. Coulthard and J. Larsen	285,234	Sept. 18	1321	373	24	1146
Seed-drill and fertilizer-distributor	R. Platman	271,736	Feb. 6	179	48, 49	23	471
Seed drill and fertilizer-distributor. Combined cotton-	W. W. Harris	289,771	Dec. 4	492	137	25	972
Seed-drill and rolling cutter. Combined	T. A. Frakes and M. G. Reiners	272,228	Feb. 13	798	222	23	590
Seed-drill. Garden	A. H. Sherwood	277,620	May 15	1367	368	23	1872
Seed-dropper	S. Dement, S. D. and J. A. Palmer	288,317	Nov. 13	655	181	25	629
Seed huller and separator. Cotton-	J. S. Zerbe and A. J. White	289,365	Nov. 27	1960	546	25	877
Seed huller. Cotton-	P. McDermott	281,902	July 24	1978	542	24	363
Seed linter. Cotton-	F. S. Strong and F. C. Mann	290,279	Dec. 18	125	316	25	1101
Seed. Machine for cleaning flax-	L. Morgan	282,211	July 31	2380	655	24	435
Seed mills. Feed mechanism for cotton-	C. J. Hooper	288,809	Nov. 20	1283	352	25	746
Seed. Process of and apparatus for treating cotton-	T. Taylor	276,305	Apr. 24	1840	512	23	1565
Seed separator. Cockle-	G. Adams and M. M. Jenkins	271,392	Jan. 30	1941	562	23	390
Seed stripper. Clover-	H. H. Spears	278,286	May 22	2180	600	23	2020
Seed. Treating cotton-	T. Taylor	289,041	Nov. 27	1571	433	25	805
Seed. Treatment of cotton-	J. F. O'Shaughnessy	286,553	Oct. 9	965	434	25	186
Seeds from cucumbers, &c. Process of and apparatus for separating	W. H. Jennings	283,787	Aug. 28	1602	452	24	815
Seeder	R. S. Carr	274,460	Mar. 27	1573	431	23	1128
Seeder	F. Koht	274,343	Mar. 20	1417	388	23	1093
Seeder and cultivator	J. E. Henris	272,046	Feb. 13	574	155	23	551
Seeder and fertilizer-distributor	E. D. Mayers	269,869	Jan. 2	56	17	23	13
Seeder and fertilizer-distributor. Combined	B. Kuhns. (Reissue)	10,323	May 8	1143	308	23	1829
Seeder and harrow. Combined	D. Clinton	286,263	Oct. 9	592	162	25	118
Seeder. Check-row	H. Farmer	274,580	Mar. 27	1741	483	23	1156
Seeder. Hand broadcast-	C. P. Yoder and C. C. Carmien	277,861	May 15	1645	448	23	1922
Seeder, harrow, and roller. Combined	A. P. Grover	286,427	Oct. 9	814	221	25	158
Seeding and cultivating machine. Combined	W. Dickinson	282,614	Aug. 7	166	50	24	530
Seeding device	C. F. Hauss, Jr.	281,269	July 17	1164	322	24	219
Seeding device	C. F. Hauss, Jr.	281,270	July 17	1165	322	24	219
Seeding-machine	G. W. Ballard	281,331	July 17	1242	344	24	232
Seeding-machine	B. C. Bradley	270,627	Jan. 16	984	284	23	209
Seeding-machine	J. M. Lindsey	287,035	Oct. 23	1591	438	25	307
Seeding-machine	D. E. McSherry and A. G. Myers	280,387	July 3	60	16	24	13
Seeding-machine	E. D. Mead	289,296	Nov. 27	1871	516	25	861
Seeding-machine	A. Mekenney	280,059	June 26	1787	501	23	2450
Seeding-machine	A. Miller	288,471	Nov. 13	869	235	25	667
Seeding-machine	T. T. Miller	273,755	Mar. 13	666	178	23	956
Seeding-machine	U. M. Powell	273,146	Feb. 27	1980	557	23	809



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Seeding-machine .....	J. H. Purdy and C. T. Welch .....	288,661	Nov. 20	1100	302	25	714
Seeding-machine .....	S. G. Randall .....	284,060	Aug. 28	1942	543	24	874
Seeding-machine .....	J. L. Riter .....	274,518	Mar. 27	1668	463	23	1143
Seeding-machine .....	J. R. Rude and H. G. Swope .....	285,845	Oct. 2	78	23, 24	25	16
Seeding-machine cleaner attachment .....	S. C. Mendenhall .....	280,210	June 26	1954	550	23	2481
Seeding-machine, cultivator, and harrow .....	C. A. Geiger .....	270,414	Jan. 9	709	210	23	148
Seeding-machine fertilizer attachment .....	J. P. Fulgham .....	271,622	Feb. 6	47	12, 13	23	449
Seeding-machine, Grain .....	J. M. Westcott .....	271,961	Feb. 6	453	124	23	520
Seeding-machines. Boot and adjustable point for .....	J. F. Keller .....	269,944	Jan. 2	147	43	23	30
Seine purse-block .....	G. Merchant, Jr. ....	285,650	Nov. 20	1088	298	25	712
Self-bailing boat .....	F. Vaughan .....	270,519	Jan. 9	851	248	23	176
Self-closing gate .....	T. G. Goff .....	284,836	Sept. 11	833	233	24	1052
Self-feeding and smoke-consuming furnace .....	L. W. Sutcliffe .....	274,990	Apr. 3	135	38	23	1249
Semaphore-signals. Apparatus for operating .....	W. W. McLellan .....	285,497	Sept. 25	1635	460	24	1207
Separating and collecting the component substances in animal and vegetable matter.	J. A. Mathieu .....	276,256	Apr. 24	1776	494	23	1555
Separating bodies of different specific gravities. Apparatus for .....	J. W. Decastro and T. H. Müller .....	273,037	Feb. 27	1844	516	23	784
Separating bodies of different specific gravities. Apparatus for .....	J. W. Decastro and T. H. Müller .....	273,038	Feb. 27	1845	517	23	785
Separating bodies of different specific gravities. Apparatus for .....	T. H. Müller and J. W. Decastro .....	273,127	Feb. 27	1952	547	23	803
Separating bodies of different specific gravities. Apparatus for .....	T. H. Müller and J. W. Decastro .....	273,129	Feb. 27	1956	548	23	804
Separating solid and liquid matters. Centrifugal machine for .....	M. C. A. Ruffin .....	289,565	Dec. 4	244	550	25	930
Separating solid matter from liquids. Apparatus for. Separator:	O. L. F. Browne .....	283,373	Aug. 21	1099	69	24	710
See Coffee-separator. Ore-separator.							
Cotton-separator. Ore and mineral separator.							
Centrifugal separator. Pea-separator.							
Gold-separator. Seed-separator.							
Grain-separator. Starch-separator.							
Grain and seed separator. Steam-engine separator.							
Magnetic separator. Thrashing-machine separator.							
Match-splint separator. Thrashing-machine grain-separator.							
Nut-separator.							
Separator .....	W. O. Gunckel .....	282,719	Aug. 7	305	86	24	553
Separator and purifier for meal, &c .....	G. W. Wilson .....	281,655	July 17	1648	449	24	299
Service-box. Cast-lead .....	E. W. Meyer .....	281,712	July 24	1728	469	24	319
Service-pipe box .....	J. T. Cahill and L. Mangold .....	279,703	June 19	1356	378	23	2369
Settee and lounge. Combined .....	E. S. Amrock .....	271,762	Feb. 6	213	59	23	477
Settee. Cot .....	S. W. Shaw .....	284,680	Sept. 11	641	181	24	1018
Settee, cot, and tent. Convertible .....	E. S. Amrock .....	287,078	Oct. 23	1645	452	25	317
Settee. Invalid .....	J. Rodgers .....	283,515	Aug. 21	1266	354	24	740
Setting-instrument .....	G. W. Prentice .....	275,702	Apr. 10	1086	296	23	1420
Sewage, &c. Apparatus for filtering and purifying .....	B. F. Woods .....	272,997	Feb. 27	1792	501	23	775
Sewed. Device for holding material to be .....	E. J. Moore .....	287,044	Oct. 23	1601	440	25	309
Sewer .....	R. T. Bryant and D. Tostevin .....	273,945	Mar. 13	907	248	23	997
Sewer and water trap .....	E. Lawson .....	274,204	Mar. 20	1227	337	23	1061
Sewer cap and joint .....	A. Monteth .....	278,723	June 5	62	19	23	2135
Sewer-flushing apparatus .....	W. H. Vibbard .....	272,992	Feb. 27	1785	500	23	773
Sewer-flushing device .....	E. Z. Collings and C. F. Pike .....	275,803	Apr. 17	1232	337	23	1452
Sewer-gas and destroying germs. Apparatus for eradicating .....	F. H. Hubbard .....	274,332	Mar. 20	1402	385	23	1090
Sewer-gas in water-closets. Apparatus for absorbing .....	C. F. Pike .....	271,359	Jan. 30	1903	550	23	383
Sewer-gas trap .....	A. Blatchly .....	276,217	Apr. 24	1729	478	23	1547
Sewer-gate .....	S. Johnson .....	289,107	Nov. 27	1648	457	25	818
Sewer-john .....	S. Johnson .....	289,108	Nov. 27	1649	458	25	819
Sewer-inlet .....	E. Z. Collings and C. F. Pike .....	274,465	Mar. 27	1577	433	23	1129
Sewer-inlet .....	E. Z. Collings and C. F. Pike .....	274,466	Mar. 27	1578	433	23	1129
Sewer-inlet .....	E. Z. Collings and C. F. Pike .....	275,802	Apr. 17	1231	337	23	1452
Sewer or stretch trap .....	L. D. Craig .....	270,876	Jan. 16	1291	373	23	267
Sewer-trap .....	J. Bodine .....	287,413	Oct. 30	2068	562	25	401
Sewer-trap .....	W. W. Lemmon .....	280,193	June 26	1931	543	23	2477
Sewer-trap .....	L. A. Pellier .....	290,603	Dec. 18	1564	430	25	1177
Sewer-trap .....	G. A. Reich .....	278,045	May 22	1869	511	23	1967
Sewer-trap .....	H. C. Stewart .....	274,149	Mar. 20	1162	320	23	1048
Sewers. Backwater-gate for .....	J. S. Tibbals .....	285,180	Sept. 18	1263	355	24	1134
Sewers. Cleaning .....	J. T. Dongne .....	287,811	Nov. 6	25	8, 9	25	512
Sewering and draining towns .....	G. E. Waring, Jr. ....	278,839	June 5	226	66, 67	23	2162
Sewing and dressing case .....	J. Rothschild .....	272,981	Feb. 27	1775	497	23	771
Sewing and trimming machine .....	S. Borton and C. H. Wilcox .....	275,981	Apr. 17	1435	396	23	1489
Sewing bands to knitted work. Machine for .....	S. L. Otis .....	279,003	June 5	472	130	23	2204
Sewing-horse. Saddler's .....	J. T. Ward .....	284,097	Aug. 28	1992	555	24	883
Sewing-machine .....	H. P. Bailey and A. A. Hurd .....	286,988	Oct. 23	1527	421	25	295
Sewing-machine .....	C. H. Bayley .....	275,117	Apr. 3	311	87	23	1279
Sewing-machine .....	J. Bond, Jr. ....	288,765	Nov. 20	1234	338	25	736
Sewing-machine .....	J. Boppel .....	281,008	July 10	824	229	24	153
Sewing-machine .....	G. W. Burgess .....	277,217	May 8	885	235	23	1783
Sewing-machine .....	J. F. Cannon and W. C. Von Buchwald.	288,008	Nov. 6	281	80	25	555
Sewing-machine .....	W. S. Carlisle .....	270,540	Jan. 9	876	254	23	181
Sewing-machine .....	C. Chabot .....	280,577	July 3	287	79, 80	24	52
Sewing-machine .....	H. Charnbury .....	276,560	May 1	17	5	23	1630
Sewing-machine .....	H. M. Darling and A. Kitzmiller .....	278,687	June 5	14	4	23	2127
Sewing-machine .....	J. A. Döring .....	284,190	Sept. 4	38	10, 11	24	911

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Sewing-machine.....	W. C. French.....	276,798	May 1	344	92	23	1686
Sewing-machine.....	M. Gandy.....	282,625	Aug. 7	182	53	24	532
Sewing-machine.....	G. D. Garvie.....	271,978	Feb. 6	484	131	23	524
Sewing-machine.....	J. R. Hebert.....	290,424	Dec. 18	1326	367	25	1135
Sewing-machine.....	O. J. Holden and L. Griswold.....	272,050	Feb. 13	579	156 157	23	552
Sewing-machine.....	T. S. Huntington.....	276,537	Apr. 24	2129	595	23	1616
Sewing-machine.....	C. T. Jones.....	285,136	Sept. 18	1211	341	24	1125
Sewing-machine.....	J. Keith.....	273,854	Mar. 13	796	216 217	23	979
Sewing-machine.....	E. Kohler.....	270,814	Jan. 16	1222	353	23	254
Sewing-machine.....	A. Lambert.....	277,747	May 15	1510	409 410	23	1898
Sewing-machine.....	R. Leavitt.....	285,417	Sept. 25	1542	435 436	24	1191
Sewing-machine.....	S. Y. Love.....	285,359	Sept. 18	1465	412	24	1171
Sewing-machine.....	R. W. Lundy.....	276,056	Apr. 17	1528	420	23	1504
Sewing-machine.....	T. A. Macaulay.....	272,844	Feb. 20	1604	449	23	736
Sewing-machine.....	T. A. Macaulay.....	276,842	May 1	396	105	23	1695
Sewing-machine.....	T. A. Macaulay. (Reissue).....	10,317	Apr. 24	2150	508	23	1618
Sewing-machine.....	L. C. McAllister.....	278,809	June 5	176	51, 52	23	2153
Sewing-machine.....	H. McDonald.....	270,192	Jan. 2	428	124	23	87
Sewing-machine.....	J. H. Merrill.....	273,754	Mar. 13	664	178	23	956
Sewing-machine.....	L. B. Miller and P. Diehl.....	274,359	Mar. 20	1433	393	23	1096
Sewing-machine.....	L. B. Miller and P. Diehl.....	275,402	Apr. 10	708	189	23	1356
Sewing-machine.....	D. Mills.....	272,740	Feb. 20	1455	409 409	23	710
Sewing-machine.....	R. S. Norton.....	270,244	Jan. 9	495	146	23	107
Sewing-machine.....	C. H. Palmer.....	271,908	Feb. 6	391	107	23	509
Sewing-machine.....	G. M. Palmer.....	270,104	Jan. 2	318	94	23	65
Sewing-machine.....	M. H. Pearson.....	278,592	May 29	2572	702 703 704	23	2098
Sewing-machine.....	M. H. Pearson.....	279,500	June 12	1112	307	23	2319
Sewing-machine.....	J. W. Post.....	281,296	July 17	1192	330	24	224
Sewing-machine.....	J. W. Post.....	287,576	Oct. 30	2277	617 618	25	443
Sewing-machine.....	J. B. Price.....	270,984	Jan. 23	1437	414	23	296
Sewing-machine.....	D. H. Rogan.....	284,065	Aug. 28	1951	544 545	24	876
Sewing-machine.....	S. R. Sargent.....	284,071	Aug. 28	1960	546	24	877
Sewing-machine.....	S. R. Sargent.....	287,867	Nov. 6	93	28	25	524
Sewing-machine.....	S. R. Sargent.....	287,868	Nov. 6	95	29	25	524
Sewing-machine.....	S. R. Sargent.....	287,869	Nov. 6	97	29	25	525
Sewing-machine.....	J. P. Scott.....	283,669	Aug. 21	1439	402 403 404	24	774
Sewing-machine.....	J. B. Secor.....	282,674	Aug. 7	237	69	24	541
Sewing-machine.....	J. Sigwalt, Jr.....	275,427	Apr. 10	738	196 197	23	1361
Sewing-machine.....	M. P. Smith.....	280,409	July 3	85	23	24	18
Sewing-machine.....	E. T. Thomas.....	276,503	Apr. 24	2093	581 582	23	1609
Sewing-machine.....	E. T. Thomas.....	277,084	May 8	728	190	23	1756
Sewing-machine.....	E. T. Thomas.....	281,649	July 17	1634	446	24	298
Sewing-machine.....	E. T. Thomas.....	287,339	Oct. 23	1972	538	25	377
Sewing-machine.....	E. T. Thomas. (Reissue).....	10,269	Jan. 9	915	263 264 282	23	188
Sewing-machine.....	C. E. Tibbles.....	274,056	Mar. 13	1031	283 284 285	23	1019
Sewing-machine.....	C. E. Tibbles.....	274,057	Mar. 13	1035	284 285	23	1019
Sewing-machine.....	J. Tripp.....	282,406	July 31	2620	720	24	478
Sewing-machine.....	J. Tripp.....	282,407	July 31	2621	720	24	478
Sewing-machine.....	J. Tripp.....	282,408	July 31	2623	720	24	478
Sewing-machine.....	J. Tripp.....	282,409	July 31	2624	721	24	479
Sewing-machine.....	T. D. Tully.....	280,773	July 3	543	151	24	96
Sewing-machine.....	O. R. Van Vechten.....	272,104	Feb. 13	653	178	23	565
Sewing-machine.....	C. Vernay and F. Roux.....	279,464	June 12	1067	295 296	23	2313
Sewing-machine.....	C. Von Rein.....	274,381	Mar. 20	1460	400	23	1101
Sewing-machine.....	W. Wendell.....	286,662	Oct. 16	1108	298	25	217
Sewing-machine.....	J. J. Wheat.....	285,536	Sept. 25	1681	473	24	1216
Sewing-machine.....	J. F. Winchell.....	290,162	Dec. 11	970	274	25	1066
Sewing-machine.....	R. Whitehill.....	279,621	June 19	1255	348	23	2351
Sewing-machine.....	J. H. Whitney.....	275,966	Apr. 17	1418	391	23	1486
Sewing-machine.....	C. H. Wilcox and C. Carleton.....	276,112	Apr. 17	1600	442	23	1516
Sewing-machine.....	C. A. Wood.....	283,449	Aug. 21	1189	334	24	727
Sewing-machine.....	C. Wuterich and G. V. Sheffield.....	276,653	May 1	133	35, 36	23	1650
Sewing-machine attachment.....	O. M. Bonney and N. D. Lamoreux.....	286,994	Oct. 23	1536	423	25	296
Sewing-machine attachment.....	P. A. Jones.....	275,048	Apr. 3	217	59	23	1263
Sewing-machine attachment.....	W. A. Macleod.....	283,799	Aug. 28	1613	454	24	817
Sewing-machine attachment.....	E. Massicot.....	273,571	Mar. 6	432	116	23	908
Sewing-machine attachment.....	G. D. McCredy.....	287,948	Nov. 6	201	58	25	542
Sewing-machine attachment.....	J. S. Sackett.....	284,069	Aug. 28	1958	546	24	877
Sewing-machine attachment.....	J. H. Cutten.....	275,365	Apr. 10	654	175	23	1346
Sewing-machine-attachment clamp.....	E. F. Angell and A. Spear.....	279,516	June 19	1138	315	23	2331
Sewing-machine attachment for sewing on buttons.....	G. M. Morris.....	289,686	Dec. 4	389	111 112	25	955
Sewing-machine attachment for channeling leather.....	E. Ward.....	275,794	Apr. 10	1206	330	23	1440
Sewing-machine-attachment holder.....	E. T. Thomas.....	273,635	Mar. 6	506	136	23	921
Sewing-machine-attachment holder.....	E. T. Thomas.....	277,063	May 8	727	190	23	1756
Sewing-machine attachments. Clamp for.....	G. A. Brady.....	277,108	May 8	756	199	23	1761



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Sewing-machine back-stop .....	C. A. Van Allen .....	287,484	Oct. 30	2156	586	25	419
Sewing-machine. Bag .....	H. P. Garland .....	283,095	Aug. 14	739	207	24	639
Sewing-machine. Bag .....	C. W. Weiss .....	290,952	Dec. 25	2011	{ 554 555 }	{ 25 25 }	1261
Sewing-machine binder .....	G. M. Morris .....	274,634	Mar. 27	1801	501	23	1167
Sewing-machine binder and folder combined .....	J. S. Sackett .....	290,479	Dec. 18	1337	386	25	1148
Sewing-machine binder and hemmer attachment .....	W. R. Parsons .....	290,797	Dec. 25	1819	502	25	1229
Sewing-machine binder attachment .....	E. H. Craig and F. Henry .....	275,889	Apr. 17	1335	367	23	1471
Sewing-machine binding attachment .....	W. Pretty, Jr. ....	273,602	Mar. 6	467	126	23	914
Sewing-machine bobbin-winder .....	C. A. Dearborn .....	274,088	Mar. 13	1079	297	23	1027
Sewing-machine bobbin-winder .....	W. H. Newton .....	270,831	Jan. 16	1241	358	23	257
Sewing-machine bobbin-winder .....	C. E. Russell .....	280,961	July 10	774	215	24	142
Sewing-machine bobbin-winder .....	C. B. Thompson .....	282,412	July 31	2629	722	24	479
Sewing-machine. Book .....	D. M. Smyth .....	274,986	Apr. 3	130	36	23	1248
Sewing-machine. Boot and shoe .....	C. Brown .....	272,409	Feb. 20	1041	{ 291 292 }	{ 23 23 }	637
Sewing-machine braid-guide .....	A. Snow .....	284,080	Aug. 28	1971	549	24	879
Sewing-machine braiding attachment .....	E. H. Alexander .....	281,225	July 17	1105	205	24	209
Sewing-machine braiding attachment .....	W. R. Parsons .....	290,465	Dec. 18	1377	381	25	1145
Sewing-machine. Button-hole .....	C. M. Banks .....	287,217	Oct. 23	1823	{ 499 500 }	{ 25 25 }	349
Sewing-machine. Button-hole .....	C. Beuttel and P. P. Braüch .....	271,405	Jan. 30	1960	566	23	394
Sewing-machine. Button-hole .....	F. W. Cross .....	279,349	June 12	923	{ 257 258 }	{ 23 23 }	2290
Sewing-machine. Button-hole .....	P. Diehl .....	272,126	Feb. 13	680	{ 185 186 }	{ 23 23 }	569
Sewing-machine. Button-hole .....	J. W. Furbush .....	276,387	Apr. 24	1953	541	23	1585
Sewing-machine. Button-hole .....	D. W. G. Humphrey .....	273,087	Feb. 27	1896	{ 532 533 }	{ 23 23 }	793
Sewing-machine. Button-hole .....	J. W. Lufkin .....	277,755	May 15	1521	{ 412 413 }	{ 23 23 }	1900
Sewing-machine. Button-hole .....	W. Raenchole .....	277,928	May 22	1726	471	23	1942
Sewing-machine. Button-hole .....	F. E. Schmidt .....	272,160	Feb. 13	715	{ 196 197 }	{ 23 23 }	575
Sewing-machine. Button-hole .....	F. E. Schmidt .....	273,318	Mar. 6	97	29	23	850
Sewing-machine. Button-hole .....	J. J. Sullivan and H. D. Baker .....	271,666	Feb. 6	95	26	23	457
Sewing-machine. Button-hole .....	J. J. Sullivan and H. D. Baker .....	279,890	June 19	1570	440	23	2407
Sewing-machine. Button-hole .....	T. Welch and G. Corbion, Jr .....	272,108	Feb. 13	658	{ 179 180 }	{ 23 23 }	565
Sewing-machine button-hole attachment .....	C. M. Banks .....	286,989	Oct. 23	1530	{ 421 422 }	{ 25 25 }	295
Sewing-machine button-hole attachment .....	J. W. Blodgett .....	279,320	June 12	877	{ 244 245 }	{ 23 23 }	2282
Sewing-machine button-hole attachment .....	J. W. Cameron .....	272,527	Feb. 20	1186	{ 331 332 }	{ 23 23 }	662
Sewing-machine button-hole attachment .....	P. Diehl .....	270,290	Jan. 9	548	162	23	117
Sewing-machine button-hole attachment .....	J. P. Hallenbeck .....	273,727	Mar. 13	620	{ 167 168 }	{ 23 23 }	948
Sewing-machine button-hole attachment .....	J. P. Hallenbeck .....	275,200	Apr. 3	409	{ 112 113 }	{ 23 23 }	1296
Sewing-machine button-hole attachment .....	J. P. Hallenbeck .....	277,128	May 8	784	206	23	1766
Sewing-machine button-hole attachment .....	H. C. Hartley and J. L. Rodgers .....	279,563	June 19	1194	330	23	2340
Sewing-machine button-hole attachment .....	W. Raudel and R. Sims .....	276,709	May 1	226	57, 58	23	1663
Sewing-machine button-sewing attachment .....	E. T. Thomas .....	281,650	July 17	1635	447	24	298
Sewing-machine. Carpet .....	B. Refsum .....	271,515	Jan. 30	2106	606	23	420
Sewing-machine case or cabinet .....	G. A. Lovell .....	279,875	June 19	1554	435	23	2404
Sewing-machine clamp. Button-hole .....	F. Egge .....	271,323	Jan. 30	1850	537	23	373
Sewing-machine cover and chair. Combined .....	W. R. Flynn .....	278,117	May 22	1954	535	23	1982
Sewing-machine crank .....	L. C. Mason .....	283,001	Aug. 14	630	178	24	619
Sewing-machine cutting mechanism. Button-hole .....	D. W. G. Humphrey .....	273,088	Feb. 27	1902	{ 533 534 }	{ 23 23 }	794
Sewing-machine driving attachment .....	W. R. Somers .....	273,627	Mar. 6	496	133	23	919
Sewing-machine driving mechanism .....	J. C. Landes .....	288,643	Nov. 20	1074	295	25	709
Sewing-machine embroidering attachment .....	G. W. Baker .....	274,548	Mar. 27	1701	472	23	1149
Sewing-machine eyelet-hole attachment .....	C. E. Randall .....	270,696	Jan. 16	1081	310	23	227
Sewing-machine fan attachment .....	L. J. Church .....	278,683	June 5	9	3	23	2126
Sewing-machine fan attachment .....	J. M. Gleason .....	285,479	Sept. 25	1614	453	24	1203
Sewing-machine fanning attachment .....	J. H. Tabony .....	271,542	Jan. 30	2135	614	23	424
Sewing-machine feed .....	A. Lobdell .....	276,253	Apr. 24	1771	493	23	1554
Sewing-machine feed mechanism .....	M. J. Ferren .....	270,185	Jan. 2	419	122	23	65
Sewing-machine feeding mechanism .....	G. R. Peare .....	272,761	Feb. 20	1482	{ 417 418 }	{ 23 23 }	714
Sewing-machine fly-wheels. Clutch for .....	J. D. Hughes .....	270,672	Jan. 16	1049	300	23	221
Sewing-machine folding and binding attachment .....	W. Pretty, Jr. ....	273,890	Mar. 13	840	228	23	986
Sewing-machine for sewing carpet, &c. ....	G. Gowing .....	287,276	Oct. 23	1892	{ 518 519 }	{ 25 25 }	362
Sewing-machine gage .....	R. S. Norton .....	280,758	July 3	516	145	24	91
Sewing-machine. Glove .....	W. Lüdeke .....	275,506	Apr. 10	839	{ 227 228 }	{ 23 23 }	1377
Sewing-machine. Glove .....	B. Schmitt .....	270,343	Jan. 9	615	{ 180 181 }	{ 23 23 }	130
Sewing-machine. Glove and fur .....	W. Lüdeke .....	288,949	Nov. 20	1451	400	25	777
Sewing-machine guide .....	J. H. Bea, Jr. ....	272,847	Feb. 27	1615	{ 451 452 }	{ 23 23 }	745
Sewing-machine guide .....	W. P. Miller .....	271,728	Feb. 6	170	46	23	470
Sewing-machine guide .....	G. Patek .....	271,354	Jan. 30	1898	549	23	382
Sewing-machine guide .....	N. B. Williams .....	272,503	Feb. 20	1160	325	23	657
Sewing-machine. Hat .....	W. F. Beardslee .....	279,523	June 19	1146	{ 317 318 }	{ 23 23 }	2332
Sewing-machine. Hat .....	V. Moeslein .....	275,067	Apr. 3	246	68	23	1268
Sewing-machine. Heavy-fabric .....	J. H. Morley .....	270,971	Jan. 23	1420	{ 409 410 411 }	{ 23 23 }	293
Sewing-machine hemstitching attachment .....	W. E. Donnelly .....	288,036	Nov. 6	311	88	25	561
Sewing-machine jack .....	H. P. Stimson .....	272,390	Feb. 13	1007	282	23	626

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. E.	Vol.	Page.
Sewing-machine motor .....	J. A. Arthur .....	283,742	Aug. 28	1540	436	24	804
Sewing-machine motor .....	J. M. Cayce .....	288,620	Nov. 20	1047	288 289	25	705
Sewing-machine motor .....	D. L. Miller .....	270,458	Jan. 9		225	23	159
Sewing-machine needle .....	H. Berwick .....	278,857	June 5	253	73	23	2166
Sewing-machine needle .....	H. M. Jenkins .....	286,014	Oct. 2	289	81	25	54
Sewing-machine needle .....	F. W. Ostrom .....	270,247	Jan. 9	498	147	23	108
Sewing-machine needle .....	J. W. Packard .....	279,498	June 12	1111	306	23	2319
Sewing-machine needle .....	H. G. Suplee .....	277,629	May 15	1378	372	23	1874
Sewing-machine needle attachment .....	J. F. Winchell .....	290,161	Dec. 11	969	274	25	1066
Sewing-machine needle-bar cover .....	W. Carr .....	284,538	Sept. 4	462	131	24	983
Sewing-machine needle-clamp .....	M. W. Simkins .....	279,607	June 19	1241	344	23	2349
Sewing-machine needle-clamp and thread-cutter. Combined .....	W. F. Fuessenich .....	284,124	Aug. 28	2030	565	24	889
Sewing-machine needle-clamp and thread-guide .....	J. H. Osborn .....	284,657	Sept. 11	606	171	24	1013
Sewing-machine needle-threader .....	F. Pommer .....	292,116	July 31	2257	619 620	24	415
Sewing-machine needle-threading attachment .....	W. L. Spencer .....	282,233	July 31	2406	662	24	440
Sewing-machine needles. Machine for making .....	J. J. M. Chanvet .....	273,027	Feb. 27	1829	512 513	23	781
Sewing-machine presser-foot .....	H. C. Goodrich .....	270,947	Jan. 23	1387	401	23	288
Sewing-machine presser-foot .....	A. W. Johnson .....	282,642	Aug. 7	202	59	24	535
Sewing-machine presser-foot .....	J. H. Parkhill .....	282,113	July 31	2254	618	24	415
Sewing-machine presser-foot .....	E. T. Thomas .....	285,937	Oct. 2	205	58	25	40
Sewing-machine presser-foot and gage .....	E. A. Wellman .....	288,529	Nov. 13	935	255	25	678
Sewing-machine quilting attachment .....	H. T. Davis .....	271,690	Feb. 6	125	35	23	461
Sewing-machine quilting attachment .....	H. T. Davis .....	289,395	Dec. 4	27	9	25	892
Sewing-machine quilting attachment .....	A. Heartsill .....	272,688	Feb. 20	1391	390 391	23	698
Sewing-machine quilting attachment .....	O. C. Pope .....	271,920	Feb. 6	409	111	23	512
Sewing-machine quilting attachment .....	B. O. Prator .....	288,660	Nov. 20	1099	301	25	714
Sewing-machine quilting-frame .....	J. E. Beatty .....	276,337	Apr. 24	1894	525	23	1574
Sewing-machine ripping attachment .....	W. A. Alrich .....	281,330	July 17	1241	344	24	232
Sewing-machine ruffler .....	G. W. Baker .....	271,679	Feb. 6	110	30	23	459
Sewing-machine ruffler .....	E. T. Thomas and H. L. Brevoort .....	270,512	Jan. 9	842	245	23	174
Sewing-machine ruffler .....	E. S. Yentzer .....	274,077	Mar. 13	1063	293 294	23	1024
Sewing-machine ruffling and plaiting attachment .....	L. Onderdonk .....	272,309	Feb. 13	889	249 250	23	607
Sewing-machine ruffling attachment .....	W. S. Carlisle .....	282,843	Aug. 7	441	125	24	578
Sewing-machine ruffling attachment .....	T. B. Garretson .....	272,423	Feb. 20	1060	298	23	640
Sewing-machine ruffling attachment .....	H. C. Goodrich .....	284,628	Sept. 11	572	162	24	1007
Sewing-machine ruffling attachment .....	J. M. Griest .....	280,926	July 10	729	204	24	134
Sewing-machine ruffling attachment .....	C. Grotz .....	272,427	Feb. 20	1064	300	23	641
Sewing-machine ruffling attachment .....	G. W. McCaslin .....	271,890	Feb. 6	366	101	23	505
Sewing-machine ruffling attachment .....	L. B. Miller and P. Diehl .....	272,300	Feb. 13	881	247	23	606
Sewing-machine ruffling attachment .....	J. S. Sackett .....	270,558	Jan. 9	900	260	23	185
Sewing-machine ruffling attachment .....	J. S. Sackett .....	287,174	Oct. 23	1765	484	25	340
Sewing-machine ruffling attachment .....	J. S. Sackett .....	290,477	Dec. 18	1393	385	25	1148
Sewing-machine ruffling attachment .....	J. S. Sackett .....	290,478	Dec. 18	1394	385	25	1148
Sewing-machine ruffling or gathering attachment .....	R. M. Cox .....	270,751	Jan. 16	1149	329	23	239
Sewing-machine. Running-stitch .....	J. Heberling .....	284,300	Sept. 4	177	50	24	934
Sewing-machine. Shoe .....	J. C. Hoadley .....	273,531	Mar. 6	372	99	23	898
Sewing-machine shuttle .....	S. B. Bartholomew .....	269,998	Jan. 2	206	59	23	43
Sewing-machine shuttle .....	G. A. Brady .....	277,873	May 22	1667	455	23	1932
Sewing-machine shuttle .....	W. Brown .....	278,303	May 22	2212	607	23	2026
Sewing-machine shuttle .....	G. W. Burgess .....	278,503	May 29	2477	675	23	2082
Sewing-machine shuttle .....	E. Chavers .....	281,453	July 17	1398	384	24	258
Sewing-machine shuttle .....	R. Leavitt .....	285,418	Sept. 25	1547	436	24	1191
Sewing-machine shuttle .....	O. L. Smith .....	276,489	Apr. 24	2076	576	23	1606
Sewing-machine shuttle .....	E. T. Thomas .....	287,887	Nov. 6	119	35	25	528
Sewing-machine shuttle .....	G. H. Thomas .....	273,781	Mar. 13	707	191	23	963
Sewing-machine shuttle .....	J. Tripp .....	276,731	May 1	263	67	23	1669
Sewing-machine shuttle .....	T. F. Ungemach .....	271,552	Jan. 30	2148	618	23	426
Sewing-machine shuttle .....	T. Whitehead .....	279,208	June 12	743	204	23	2260
Sewing-machine shuttle .....	R. Whitehill .....	279,625	June 19	1262	349	23	2353
Sewing-machine shuttle-bobbins. Machine for wind- ing .....	H. D. Smith .....	282,580	Aug. 7	126	38	24	522
Sewing-machine shuttle-carrier .....	W. Shaw .....	276,485	Apr. 24	2071	575	23	1605
Sewing-machine shuttle-carrier .....	A. Tracy .....	270,617	Jan. 16	975	282	23	207
Sewing-machine shuttle-holder .....	L. B. Miller and P. Diehl .....	283,636	Aug. 21	1401	392	24	766
Sewing-machine shuttle-movement .....	J. A. Johm .....	282,729	Aug. 7	314	89	24	555
Sewing-machine shuttle-movement .....	J. J. Wheat .....	285,537	Sept. 25	1681	473 474	24	1216
Sewing-machine shuttle. Rotary .....	W. Lonsdale .....	273,747	Mar. 13	653	174	23	954
Sewing-machine side-drawer case .....	T. H. Stewart .....	277,955	May 22	1758	479	23	1947
Sewing-machine. Single-thread .....	E. Thimonnier, Fils, and C. Vernay .....	287,592	Oct. 30	2306	624 625	25	448
Sewing-machine. Sole .....	G. McKay and J. C. Hoadley .....	272,735	Feb. 20	1450	407	23	709
Sewing-machine spool holder and unwinder .....	T. R. Nichols .....	280,504	July 3	208	54	24	37
Sewing-machine spool-stand .....	E. Cornely .....	279,919	June 26	1612	453	23	2420
Sewing-machine stand .....	W. R. Curtis .....	285,019	Sept. 18	1068	208	24	1101
Sewing-machine stand .....	J. H. Osborn .....	282,559	Aug. 7	106	32	24	518
Sewing-machine stand and treadle .....	R. Whitehill .....	279,622	June 19	1259	349	23	2352
Sewing-machine stop-motion. Button-hole .....	A. Felber .....	275,622	Apr. 10	992	268	23	1403
Sewing-machine. Straw-braid .....	F. Blackburn .....	279,855	June 19	1531	428	23	2399
Sewing-machine table .....	C. B. Rathbun .....	271,362	Jan. 30	1909	552	23	384
Sewing-machine table and cover .....	J. J. Wheat .....	285,534	Sept. 25	1679	472	24	1215
Sewing-machine tension .....	G. A. Brady .....	277,449	May 15	1161	312	23	1839
Sewing-machine tension .....	J. B. Secor .....	286,336	Oct. 9	708	189	25	138
Sewing-machine tension. Automatic .....	R. W. Whitney .....	277,094	May 8	738	193	23	1758
Sewing-machine tension device .....	W. S. Clark, S. R. Farrington, and T. Sheard .....	278,096	May 22	1927	529	23	1977
Sewing-machine tension device .....	I. W. Glazier .....	270,188	Jan. 2	424	123	23	86
Sewing-machine tension device .....	H. Holden, Jr .....	277,281	May 8	956	257	23	1797



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Sewing-machine tension device.	O. J. Holden and L. Griswold.	272,051	Feb. 13	582	157	23	553
Sewing-machine tension device.	J. Tripp.	282,410	July 31	2626	721	24	479
Sewing-machine-tension liberator.	J. J. Wheat.	285,535	Sept. 25	1680	473	24	1216
Sewing-machine-tension-release.	T. A. Macaulay.	273,562	Mar. 6	418	112	23	905
Sewing-machine thread-controlling device.	C. H. Wilcox and G. H. Noble.	276,113	Apr. 17	1603	442	23	1517
Sewing-machine thread-cutter.	E. M. Staples.	280,970	July 10	784	217	24	144
Sewing-machine thread-cutter.	J. Valero.	287,197	Oct. 23	1797	493	25	345
Sewing-machine thread-delivery attachment.	D. C. Morgan and C. H. French.	285,148	Sept. 18	1227	344	24	1128
Sewing-machine treadle.	C. M. Fairbanks.	269,925	Jan. 2	122	36	23	25
Sewing-machine treadle.	J. H. Osborn.	281,392	July 17	1314	363	24	245
Sewing-machine treadle.	S. C. Tatum, Jr.	276,502	Apr. 24	2093	581	23	1609
Sewing-machine treadle.	C. E. Tibbles.	274,058	Mar. 13	1039	286	23	1020
Sewing-machine treadle.	J. D. Weed.	273,921	Mar. 13	878	238	23	992
Sewing-machine treadle.	T. C. Woodward and C. M. Fairbanks.	270,920	Jan. 23	1353	390	23	283
Sewing-machine trimmer.	G. H. Lawrence.	290,895	Dec. 25	1938	534	25	1249
Sewing-machine trimmer.	T. S. Parker.	270,465	Jan. 9	774	227	23	160
Sewing-machine trimmer.	T. S. Parker.	270,466	Jan. 9	776	227	23	161
Sewing-machine trimmer.	A. Warren.	278,300	May 22	2208	606	23	2026
Sewing-machine trimming attachment.	C. H. Bayley.	273,936	Mar. 13	898	245	23	995
Sewing-machine trimming attachment.	G. Davidson.	284,394	Sept. 4	289	81	24	953
Sewing-machine trimming attachment.	G. M. Morris.	276,860	May 1	419	112	23	1700
Sewing-machine trimming attachment.	W. A. Neely.	274,095	Mar. 13	1087	299	23	1028
Sewing-machine trimming attachment.	T. S. Parker.	270,467	Jan. 9	778	228	23	161
Sewing-machine trimming attachment.	T. C. Robinson.	277,787	May 15	1557	424	23	1907
Sewing-machine trimming attachment.	T. C. Robinson.	278,825	June 5	203	59	23	2158
Sewing-machine trimming attachment.	T. C. Robinson.	286,153	Oct. 2	456	124	25	85
Sewing-machine trimming attachment.	A. E. Wallace and J. H. Griffin.	271,805	Feb. 20	1539	433	23	725
Sewing-machine trimming mechanism.	C. H. Bayley.	272,519	Feb. 20	1178	329	23	660
Sewing-machine trimming mechanism.	W. A. Neely.	286,146	Oct. 2	447	121	25	83
					122		
Sewing-machine trimming mechanism.	T. C. Robinson.	286,164	Oct. 2	467	128	25	87
					129		
Sewing-machine tuck-creaser.	H. C. Goodrich.	275,820	Apr. 17	1249	344	23	1455
Sewing-machine tuck-marker.	J. S. Sackett.	290,480	Dec. 18	1397	386	25	1148
Sewing-machine tucker attachment.	A. A. Fisher and A. Hart.	278,422	May 29	2376	649	23	2063
Sewing-machine tucking attachment.	W. F. Kientoff.	290,065	Dec. 11	857	244	25	1045
Sewing-machine. Vertical-feed.	E. D. Fellows.	280,731	July 3	473	134	24	84
Sewing-machine. Vertical-feed.	E. D. Fellows.	280,732	July 3	475	135	24	84
Sewing-machine. Vertical-feed.	E. D. Fellows.	282,873	Aug. 7	477	134	24	585
Sewing-machine. Vertical-feed.	E. D. Fellows.	282,874	Aug. 7	479	134	24	585
Sewing-machine. Wax-thread.	S. W. Wardwell, Jr.	270,710	Jan. 16	1097	314	23	229
Sewing-machine welt-guide.	D. A. Sutherland.	282,798	Aug. 7	388	109	24	568
					110		
Sewing-machine welt-guide.	C. Turner.	273,915	Mar. 13	869	236	23	991
Sewing-machines. Automatic tension device for.	E. Murphy.	290,345	Dec. 18	1209	338	25	1116
Sewing-machines. Clamp-guide for button-hole.	J. Bolton and A. D. Pentz.	277,106	May 8	752	198	23	1760
Sewing-machines. Cloth cover for.	A. L. Oliver.	276,270	Apr. 24	1791	498	23	1557
Sewing-machines. Lamp-supporting bracket for.	M. E. Smith.	274,984	Apr. 3	129	36	23	1248
Sewing-machines. Mechanism for operating.	S. F. Lewis.	279,959	June 26	1665	468	23	2429
Sewing-machines, &c. Motor for.	A. L. Bevans.	289,958	Dec. 11	725	205	25	1020
Sewing-machines. Presser-foot for straw-braid.	E. Wiseman.	285,333	Sept. 18	1431	404	24	1166
Sewing-machines. Stripping device for wax-thread.	S. W. Wardwell, Jr.	270,709	Jan. 16	1097	314	23	229
Sewing on heads. Mechanism for.	T. K. Keith.	271,473	Jan. 30	2053	591	23	410
Sewing on buttons. Machine for.	L. J. Driscoll.	290,981	Dec. 25	2060	567	25	1268
Sewing strands of braid. Machine for.	M. H. Ryder.	287,393	Oct. 23	2040	554	25	388
					555		
Shackle. Spring.	T. W. and H. K. Porter.	285,071	Sept. 18	1128	315	24	1111
Shade-fastening spring.	W. Nack.	289,925	Dec. 11	691	193	25	1014
Shade-holder.	O. N. Perkins.	286,063	Oct. 2	350	98	25	64
Shade-holder and making the same.	G. E. Somers and S. G. Stoddard.	285,172	Sept. 18	1255	352	24	1133
Shade-holder. Glass.	W. B. Stewartson.	273,184	Feb. 27	2021	568	23	816
Shade ornament.	W. A. Hull and R. Hoadley.	286,135	Oct. 2	435	119	25	81
Shade-pull.	C. F. Pease.	280,507	July 3	212	55	24	38
Shade-pull.	L. G. Turner.	280,334	June 26	2116	593	23	2509
Shade-ring clamp.	A. D. Wooding.	273,420	Mar. 6	231	62	23	873
Shade-roller.	D. H. Eugle.	284,543	Sept. 4	465	132	24	983
Shade-roller.	C. F. Shonrds.	275,531	Apr. 10	872	236	23	1383
Shade-roller. Spring.	D. E. Kempster.	286,308	Oct. 9	669	179	25	131
Shade-roller. Spring.	J. M. Osgood.	280,229	June 26	1981	557	23	2485
Shade-roller. Spring.	D. Willis.	273,657	Mar. 6	531	143	23	925
Shade-rollers. Swinging bracket for.	G. Lockhart.	272,449	Feb. 20	1088	307	23	645
Shade. Spring-balance.	J. A. Fillmore.	281,480	July 17	1434	392	24	264
Shade-support.	J. Brannen.	285,964	Oct. 2	234	66	25	45
Shaft.	C. E. Gibbs.	285,810	Oct. 2	36	12	25	9
Shaft and tongue for vehicles. Convertible.	J. C. Ott.	290,462	Dec. 18	1375	380	25	1144
Shaft attachment for vehicles.	G. W. Prior.	287,468	Oct. 30	2133	579	25	415
Shaft-bearings in mills. Apparatus for keeping cool the.	F. O. Matthiessen.	270,237	Jan. 9	488	144	23	105
Shaft-bending device.	J. W. Dann.	283,382	Aug. 21	1109	313	24	712
Shaft-carrier.	W. Royer.	279,883	June 19	1563	437	23	2405
Shaft-casing.	W. F. Hutchinson.	276,589	May 1	59	17	23	1638
Shaft-coupler.	F. O. Deschamps.	269,836	Jan. 2	21	7	23	7
Shaft-coupler.	F. O. Deschamps.	270,287	Jan. 9	546	161	23	117
Shaft-coupling.	C. Barnes.	275,877	Apr. 17	1323	364	23	1468
Shaft, &c. coupling.	J. Birch.	281,436	July 17	1367	377	24	253
Shaft-coupling.	A. Fanst.	287,651	Oct. 30	2385	643	25	463
Shaft-coupling.	W. J. F. Liddell.	274,795	Mar. 27	1991	553	23	1201
Shaft-coupling.	A. Loehner.	274,796	Mar. 27	1992	554	23	1201
Shaft-coupling.	W. Vielhaber.	288,746	Nov. 20	1213	332	25	733
Shaft-coupling.	J. J. Wheeler.	283,940	Aug. 28	1781	503	24	847
Shaft-coupling.	A. Wood.	289,329	Nov. 27	1917	532	25	870
Shaft-coupling.	G. H. Zschech.	284,704	Sept. 11	672	189	24	1024
Shaft-coupling. Universal.	J. B. Powell.	288,855	Nov. 20	1339	367	25	756
Shaft-hanger.	H. C. Crowell.	272,861	Feb. 27	1630	456	23	748

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Shaft-hanger.....	H. C. Crowell.....	278,404	May 29	2354	643	23	2060
Shaft-hanger.....	W. J. F. Liddell.....	274,794	Mar. 27	1990	553	23	1201
Shaft-hanger.....	R. Whitehill.....	279,624	June 19	1261	349	23	2352
Shaft-loop.....	H. J. Frost, Jr.....	273,505	Mar. 6	333	90	23	891
Shaft-loop.....	J. Wagner.....	270,161	Jan. 2	395	114	23	80
Shaft or pole iron for vehicles.....	R. S. Merrill.....	289,015	Nov. 27	1532	423	25	798
Shaft-press.....	J. C. Bach.....	290,834	Dec. 25	1864	515	25	1236
Shaft-support.....	G. W. Blair.....	279,076	June 5	568	156	23	2221
Shaft-support. Vehicle.....	J. J. Ellsworth.....	280,459	July 3	157	43	24	29
Shaft-support. Vehicle.....	D. L. Laughlin.....	288,071	Nov. 6	348	97	25	567
Shaft-support. Vehicle.....	J. Martin and A. S. Flint.....	282,545	Aug. 7	83	24	24	514
Shaft. Vehicle.....	W. H. Scraper.....	290,936	Dec. 25	1991	549	25	1258
Shaft. Wagon.....	W. H. Barrett.....	277,440	May 15	1152	309	23	1837
Shafts. Attaching wheels to.....	H. E. Scotchmer.....	284,678	Sept. 11	639	180	24	1018
Shafts. Sleigh.....	F. P. Thompson.....	281,162	July 10	1012	283	24	186
Shafts. Sulky.....	M. Payne.....	270,638	Jan. 16	1251	360	23	259
Shafting.....	T. A. Edison.....	271,614	Feb. 6	37	9	23	447
Shafting-collar.....	F. I. Pearce.....	272,974	Feb. 27	1767	495	23	770
Shafting. Combined bracket and adjustable box-bearing for.....	L. B. Kohnle and W. B. Hamilton.....	284,564	Sept. 4	489	138	24	987
Shafting-coupling.....	J. Killip.....	280,188	June 26	1924	541	23	2475
Shafting-hanger.....	P. Cramer.....	281,343	July 17	1255	349	24	234
Shafting. Variable coupling-joint for.....	W. Johnston.....	276,420	Apr. 24	1992	552	23	1591
Shaker for mixed beverages.....	W. H. Murphy.....	271,350	Jan. 30	1892	548	23	381
Sham-holder.....	W. H. H. Cram and G. S. Tompkins.....	284,119	Aug. 28	2024	563	24	888
Sharpener for knives, &c.....	A. W. Sperry.....	290,367	Dec. 18	1235	348	25	1121
Sharpening-stone.....	G. E. Harris.....	290,579	Dec. 18	1531	.....	25	1171
Shaving and splitting machine. Lap.....	D. A. Dixon.....	274,921	Apr. 3	45	11	23	1233
Shavings and dust feeder. Pneumatic.....	H. C. Baer.....	277,192	Mar. 8	859	228	23	1779
Shawl-strap.....	M. Rubin.....	289,564	Dec. 4	243	68	25	930
Sheaf-carrier.....	J. W. Elliott.....	284,400	Sept. 4	294	83	24	953
Sheaf-carrier.....	I. B. Gage.....	282,303	July 31	2491	684	24	455
Shearing, punching, and riveting machine.....	W. A. Palmer.....	284,054	Aug. 28	1936	541	24	873
Shears: <i>See</i> Animal-shears.      Slotting-shears. Coupon-shears.      Tailor's shears. Pruning-shears.      Wick-trimming shears. Sliding shears.							
Shears.....	J. Yokum, Jr.....	283,056	Aug. 14	696	195	24	631
Shears for desecrating cloth and for other purposes.....	F. Basch.....	276,754	May 1	295	75	23	1676
Sheave-case.....	G. S. and C. H. Haley.....	282,454	July 31	2689	738	24	489
Sheave-wheel.....	E. B. Martindale.....	286,322	Oct. 9	693	184	25	136
Sheave-wheel.....	E. B. Martindale.....	286,323	Oct. 9	694	185	25	136
Sheep-dip.....	P. M. Carpenter.....	279,705	June 19	1359	.....	23	2369
Sheep-wash.....	J. Q. Dnnlap.....	273,972	Mar. 13	938	.....	23	1002
Sheet and plate roll.....	I. W. Cooper.....	271,605	Feb. 6	26	7	23	445
Sheet-delivery apparatus.....	L. C. Crowell.....	277,548	May 15	1280	{ 343 344 345 466 467 36 37 38 39 40 41 42 }	23	1858
Sheet-delivery apparatus.....	L. C. Crowell.....	281,754	July 24	1785	{ 343 344 345 466 467 36 37 38 39 40 41 42 }	24	329
Sheet feeding and registering apparatus.....	L. C. Crowell.....	278,777	June 5	125	{ 38 39 40 41 42 }	23	2145
Sheet feeding and registering apparatus.....	L. C. Crowell.....	278,778	June 5	136	{ 40 41 42 }	23	2146
Sheet-metal articles. Forming.....	H. Grom. (Reissue).....	10,356	July 10	1104	304	24	202
Sheet-metal box.....	E. J. Hancock.....	283,238	Aug. 14	915	255	24	670
Sheet-metal box.....	J. B. Rohrman.....	284,981	Sept. 11	1002	282	24	1084
Sheet-metal can.....	E. P. Follett.....	277,255	May 8	929	249	23	1792
Sheet-metal can.....	L. E. Fuller and J. H. Macauley.....	273,060	Feb. 27	1867	524	23	788
Sheet-metal can.....	E. Norton and J. G. Hodgson.....	275,936	Apr. 17	1356	381	23	1480
Sheet-metal can.....	J. S. Rice.....	278,271	May 22	2159	{ 593 594 }	23	2017
Sheet-metal can.....	A. Stewart.....	290,135	Dec. 11	941	267	25	1061
Sheet-metal can.....	F. A. Walsh.....	273,783	Mar. 13	710	191	23	964
Sheet-metal cans. Mechanism for making.....	S. S. Getchell.....	290,325	Dec. 18	1186	332	25	1111
Sheet-metal-cutting machine.....	E. M. Wilbor.....	285,091	Sept. 18	1153	322	24	1115
Sheet-metal-cutting machine.....	F. C. Wilson and Z. H. Bools.....	279,899	June 19	1581	443	23	2408
Sheet-metal fabric.....	A. Loeb.....	271,086	Jan. 23	1560	449	23	316
Sheet-metal fastener.....	G. W. Trapagan.....	290,290	Dec. 18	1139	320	25	1103
Sheet-metal fenders. Manufacture of.....	G. Russell.....	286,489	Oct. 9	882	239	25	171
Sheet-metal fenders. Manufacture of.....	G. Russell.....	286,490	Oct. 9	883	239	25	171
Sheet-metal joint for oil-cans, &c.....	J. K. Chace.....	274,271	Mar. 20	1319	364	23	1077
Sheet-metal machine.....	W. E. Jones.....	283,575	Nov. 13	989	275	25	629
Sheet-metal. Machine for notching.....	W. T. Armstrong.....	280,996	July 10	809	225	24	150
Sheet metal. Machine for wiring.....	F. C. Wilson and Z. H. Bools.....	277,180	May 8	846	{ 224 225 }	23	1777
Sheet-metal pan.....	A. Cox.....	275,806	Apr. 17	1234	338	23	1453
Sheet-metal-perforating machine.....	J. W. Hyatt.....	283,488	Aug. 21	1239	348	24	735
Sheet-metal pipe.....	W. Austin.....	290,659	Dec. 25	1633	449	25	1195
Sheet-metal pipe.....	L. F. Betts. (Reissue).....	10,339	June 12	1133	314	23	2323
Sheet-metal pipe.....	L. J. Mueller.....	279,494	June 12	1105	304	23	2318
Sheet-metal-pipe joint.....	C. Recht.....	277,427	May 8	1127	303	23	1896
Sheet-metal-pipe sections. Construction of.....	J. B. Root.....	283,924	Aug. 28	1757	496	24	842
Sheet-metal pipes. Apparatus for marking angular cuts in.....	W. H. Clark.....	279,336	June 12	906	253	23	2287
Sheet-metal plates. Apparatus for tempering and flattening.....	E. Andrews.....	284,938	Sept. 11	954	268	24	1074
Sheet-metal press.....	E. J. Dolan.....	271,044	Jan. 23	1503	{ 433 434 }	23	306



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Sheet-metal press .....	J. M. Seymour .....	290,275	Dec. 18	1120	315	25	1100
Sheet-metal scrap. Apparatus for grinding .....	J. Dodge .....	288,625	Nov. 20	1054	290	25	706
Sheet-metal-shearing machine .....	G. H. Perkins .....	276,625	May 1	98	26, 27	23	1644
Sheet-metal-shearing machine .....	C. Wais .....	271,956	Feb. 6	448	123	23	519
Sheet-metal spinning machinery .....	J. Chaumont .....	286,115	Oct. 2	412	113	25	70
Sheet-metal-vessel top .....	H. B. Dewey .....	278,319	May 29	2241	615	23	2040
Sheet-metal tubes. Machine for spirally corrugating .....	F. R. Grout .....	286,293	Oct. 9	654	174	25	129
Sheet-metal vessel .....	W. M. Conway .....	287,243	Oct. 23	1859	509	25	355
Sheet-metal-vessel handles. Attachment of .....	E. Monhot .....	282,007	July 24	2097	575	24	383
Sheet-metal vessels. Attaching handles to .....	G. W. Knapp .....	271,571	Feb. 6	344	95	23	501
Sheet-metal-working tool .....	C. Hugo .....	271,638	Feb. 6	67	18	23	452
Shelf-support .....	E. E. Cassell .....	278,506	May 29	2480	676	23	2082
Shell .....	B. B. Hotchkiss .....	272,052	Feb. 13	583	157	23	553
Shell. Explosive .....	H. Gruson and A. Hellhoff .....	287,924	Nov. 6	168	48	25	537
Shell-extractor .....	J. McDermott .....	290,255	Dec. 18	1090	304	25	1095
Shell extractor. Broken .....	W. Pratt .....	290,239	June 26	1996	561	23	2488
Shell for blasting. Safety .....	R. B. F. Reed and G. Freund .....	273,156	Feb. 27	1989	560	23	810
Shell. Time .....	T. J. Armistead .....	259,492	Dec. 4	153	42	25	913
Shells. Machine for breaking loaded .....	A. J. Simpson .....	290,606	Dec. 18	1567	431	25	1177
Sheller: See Coconut-sheller. Corn-sheller.							
Shelves. Hanging book .....	M. S. Drake .....	275,027	Apr. 3	195	51	23	1258
Shelving. Adjustable and portable .....	B. F. Roberts .....	277,510	May 15	1231	332	23	1850
Shelving. Store .....	J. A. Guest .....	274,488	Mar. 27	1626	451	23	1136
Shelving. Store .....	T. A. Harris .....	273,069	Feb. 27	1876	527	23	790
Shepherd's crook .....	C. H. Dana .....	281,243	July 17	1132	311	24	213
Shepherd's crook .....	E. E. Deland .....	275,161	Apr. 3	364	100	23	1289
Shifting-rail .....	O. C. Coggins .....	274,174	Mar. 20	1196	329	23	1055
Shifting-rail .....	A. F. Shuler .....	281,146	July 10	995	278	24	183
Shingle-bunch band .....	H. W. Carey .....	286,386	Oct. 9	762	206	25	149
Shingle-machine .....	J. P. Bowling .....	272,638	Feb. 20	1334	374	23	688
Shingle-machine .....	J. P. Bowling .....	272,639	Feb. 20	1335	375	23	689
Shingle-machine .....	W. A. Bradley .....	271,407	Jan. 30	1962	567	23	394
Shingle-machine .....	J. R. M. Crawford .....	280,354	July 3	19	5	24	5
Shingle-machine .....	J. P. Ferrenburg .....	290,222	Dec. 18	1055	296	25	1089
Shingle-machine .....	A. Fraser .....	270,297	Jan. 9	557	164	23	119
Shingle-machine .....	P. R. Houpe .....	276,412	Apr. 24	1984	550	23	1589
Shingle-machine .....	C. J. Weld .....	273,650	Mar. 6	524	141	23	924
Shingle-planing mill. Rotary .....	S. M. King .....	281,520	July 17	1478	406	24	273
Shingle. Roofing .....	H. A. Jones .....	279,487	June 12	1097	303	23	2317
Shingle-sawing machine .....	W. H. Gray .....	278,128	May 22	1974	541	23	1985
Shingle-sawing machine .....	O. C. Hanson .....	289,094	Nov. 27	1633	452	25	815
Shingle-sawing machine .....	M. Marcon .....	285,051	Sept. 18	1105	308	24	1107
Shingle-sawing machine .....	W. J. Perkins .....	272,316	Feb. 13	901	252	23	609
Shingle-sawing machine .....	W. J. Perkins .....	287,462	Oct. 30	2127	577	25	413
Shingle-sawing machine .....	H. Wright .....	290,164	Dec. 11	972	274	25	1067
Shingles. Bunching .....	A. L. Munson .....	285,152	Sept. 18	1231	345	24	1128
Shingling-bracket .....	P. W. Ryan .....	285,164	Sept. 18	1243	349	24	1131
Ship. Buoyant propeller .....	J. Lowe .....	271,203	Jan. 23	1699	490	23	338
Ships' bottoms. Composition for preventing fouling of .....	N. B. Denny .....	274,988	Mar. 27	2107	491	23	1219
Ships' bottoms. Sheathing for .....	B. L. Thomson .....	272,352	Feb. 13	946	262	23	616
Ships' engines. Mechanism for supplying water to .....	D. Halpin .....	274,761	Mar. 27	1952	543	23	1194
Ships' gang-platforms. Elevator attachment to .....	H. N. Pharr .....	288,109	Nov. 6	397	112	25	576
Ships' logs. Rotator for .....	G. W. Merrill .....	272,146	Feb. 13	700	192	23	573
Ships and the rate of currents. Electric log or apparatus for ascertaining the speed of .....	R. M. Lowne .....	272,724	Feb. 20	1435	403	23	706
Ships. Construction of .....	A. P. Bliven .....	271,213	Jan. 30	1714	496	23	350
Ships. Construction of .....	M. Marzan .....	274,624	Mar. 27	1790	498	23	1165
Ships, &c. Device for increasing the speed of .....	M. C. McDonald .....	280,646	July 3	370	103	24	65
Ships. Spring-buffer for .....	C. McAllister .....	281,280	July 17	1174	324	24	220
Shipping-can .....	W. S. Laumaster .....	286,831	Oct. 16	1322	360	25	255
Shipping-can .....	F. Westerbeck .....	282,690	Aug. 7	259	75	24	544
Shipping-case .....	O. F. Silcott .....	271,283	Jan. 30	1800	522	23	365
Shirt .....	Z. Baner .....	273,502	Mar. 13	729	197	23	967
Shirt .....	A. F. Baum .....	283,190	Aug. 14	856	239	24	659
Shirt .....	A. Borchardt .....	280,712	July 3	448	128	24	80
Shirt .....	G. H. Cleveland .....	286,781	Oct. 16	1260	341	25	243
Shirt .....	R. Cluett .....	271,574	Jan. 30	2171	625	23	430
Shirt .....	R. Cluett .....	277,006	May 8	619	162	23	1738
Shirt .....	C. N. Davis .....	274,919	Apr. 3	44	11	23	1233
Shirt .....	C. N. Davis .....	277,553	May 15	1290	346	23	1859
Shirt .....	G. A. Dubreuil .....	273,826	Mar. 13	762	206	23	973
Shirt .....	C. Falkenberg and J. Lederer .....	270,039	Jan. 2	251	73	23	51
Shirt .....	C. F. Glenn .....	275,191	Apr. 3	397	109	23	1295
Shirt .....	W. L. Hall .....	270,663	Jan. 16	1036	297	23	219
Shirt .....	W. L. Hall .....	276,509	May 1	357	95	23	1689
Shirt .....	A. E. Hayden .....	284,634	Sept. 11	580	163	24	1008
Shirt .....	W. E. Hubbard .....	272,696	Feb. 20	1401	393	23	700
Shirt .....	R. H. Hutchinson .....	286,011	Oct. 2	284	80	25	54
Shirt .....	T. Kimball .....	277,744	May 15	1503	407	23	1896
Shirt .....	A. Lang and H. B. Ott .....	289,069	Dec. 11	862	245	25	1046
Shirt .....	L. Lemos .....	285,046	Sept. 18	1099	308	24	1106
Shirt .....	H. Lynch and F. L. Sheldon .....	270,087	Jan. 2	301	89	23	61
Shirt .....	I. Schner .....	274,520	Mar. 27	1670	463	23	1143
Shirt .....	J. B. See .....	273,168	Feb. 27	2005	564	23	812
Shirt .....	I. Sperling .....	273,906	Mar. 13	858	232	23	959
Shirt .....	S. Stark .....	282,234	July 31	2408	662	24	440

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'E.	Vol.	Page.
Shirt.....	W. H. H. Tracy.....	270,264	Jan. 9	517	152	23	111
Shirt.....	S. Wallach.....	277,524	May 15	1249	336	23	1353
Shirt.....	S. Weil.....	279,467	June 12	1071	296	23	2313
Shirt.....	M. O. West.....	272,810	Feb. 20	1544	434	23	766
Shirt.....	J. S. Williams.....	277,527	May 15	1255	337	23	1354
Shirt.....	J. C. Woodman.....	271,150	Jan. 23	1673	451	23	334
Shirt-band shaper.....	C. H. Kenyon.....	290,062	Dec. 11	855	243	25	1044
Shirt-bosom.....	W. H. Norris.....	289,778	Dec. 4	502	139	25	973
Shirt-bosom.....	J. Lochman.....	280,636	July 19	621	174	24	116
Shirt-bosom.....	S. Stark.....	285,699	Sept. 25	1877	535	24	1252
Shirt-bosoms. Machine for cutting.....	E. Schott.....	271,925	Feb. 6	417	113	23	513
Shirt-collar and necktie. Combined.....	C. Gerber.....	276,023	Apr. 17	1491	410	23	1498
Shirt-waist.....	W. H. Gallup and L. Churchill.....	289,639	Dec. 4	331	92, 93	25	946
Shirt-waist.....	W. H. Gallup and L. Churchill.....	289,640	Dec. 4	333	93	25	946
Shirts. Making.....	C. A. Gilbert.....	276,532	Apr. 24	2132	593	23	1615
Shoal-indicator for ships.....	B. H. Schonhoff.....	275,864	Apr. 17	1304	353	23	1464
Shoal-water. Device for indicating.....	F. E. Forster.....	282,620	Aug. 7	174	52	24	531
Shock-compressor.....	A. Gorrell.....	285,255	Sept. 18	1345	379	24	1150
Shock-hauler.....	B. H. Tripp.....	282,806	Aug. 7	396	112	24	570
Shoddy-picker.....	C. S. Dodge.....	237,108	Oct. 23	1685	461	25	326
Shoe.....	J. S. Bokenkotter.....	281,007	July 10	823	229	24	152
Shoe.....	G. F. Chase.....	274,721	Mar. 27	1902	531	23	1185
Shoe.....	J. C. Daggett.....	289,812	Dec. 11	550	154	25	989
Shoe.....	M. Dillon.....	283,082	Aug. 14	724	203	24	636
Shoe.....	F. E. Farwell.....	275,813	Apr. 17	1243	342	23	1454
Shoe.....	P. Foley.....	282,184	July 31	2350	647	24	429
Shoe.....	R. Grist and D. Patin.....	286,129	Oct. 2	430	117	25	79
Shoe.....	J. L. Joyce.....	282,901	Aug. 7	509	143	24	590
Shoe.....	C. Jo Loomis.....	290,249	Dec. 18	1083	303	25	1094
Shoe.....	W. Rogers.....	284,066	Aug. 28	1953	545	24	876
Shoe.....	M. Smith.....	275,430	Apr. 10	747	198	23	1362
Shoe.....	E. L. Sprague.....	283,035	Aug. 14	670	188	24	626
Shoe.....	F. Toll and W. Weber.....	281,739	July 24	1766	480	24	325
Shoe.....	R. H. Wadlow.....	281,166	July 10	1017	285	24	186
Shoe and glove fastening.....	W. H. Seymour.....	282,675	Aug. 7	238	69	24	541
Shoe-button fasteners. Machinery for applying.....	M. M. Zellers.....	282,830	Aug. 7	422	119 120	24	575
Shoe-button-fly scallops. Machine for cutting.....	A. Morris.....	281,113	July 10	950	266	24	175
Shoe-calk.....	H. W. De Courtenay.....	285,582	Sept. 25	1736	490	24	1226
Shoe-clasp.....	J. L. Thomson.....	272,101	Feb. 13	651	177	23	564
Shoe-clasp.....	J. L. Thomson.....	280,533	July 3	236	64	24	42
Shoe-clasp.....	J. L. Thomson.....	280,534	July 3	238	64	24	43
Shoe-clasp.....	J. L. Thomson.....	282,241	July 31	2416	664	24	442
Shoe. Cork-soled.....	J. B. Mackel.....	282,284	Feb. 13	867	242	23	603
Shoe-cover.....	J. K. Miller.....	282,915	Aug. 7	521	146	24	593
Shoe-fastener.....	F. J. Mix.....	281,909	July 24	1986	544	24	365
Shoe-fastener.....	E. H. Train.....	275,295	Apr. 3	525	144	23	1315
Shoe-fastening.....	C. H. Barr.....	290,625	Dec. 18	1589	437	25	1180
Shoe-fastening.....	S. A. Milton.....	273,124	Feb. 27	1948	547	23	803
Shoe for the hoofs of animals.....	E. S. Thurber.....	274,852	Mar. 27	2053	572	23	1211
Shoe-heel-beading machine.....	C. J. Weinman.....	284,349	Sept. 4	233	65	24	943
Shoe-heeling machine.....	M. V. Ethridge.....	271,617	Feb. 6	40	10	23	447
Shoe-holding jack.....	F. S. Strong.....	282,128	July 31	2278	625	24	418
Shoe-horn.....	E. Noppel.....	288,474	Nov. 13	872	236	25	667
Shoe horn and jack.....	M. Gysin and E. Huber.....	271,704	Feb. 6	141	39	23	464
Shoe-last.....	G. S. Nethercut.....	285,649	Sept. 25	1815	517	24	1241
Shoe-last attachment.....	C. E. Goss.....	279,377	June 12	968	268	23	2296
Shoe-maker's tool.....	W. F. Larkin.....	285,279	Sept. 18	1372	387	24	1156
Shoe. Mud.....	S. T. Carroll.....	288,406	Nov. 13	787	213	25	652
Shoe-nail clincher.....	J. F. Koenig.....	288,244	Nov. 13	565	157	25	615
Shoe-sole-cutting machine.....	S. M. Hoyer.....	282,523	Aug. 7	59	17	24	510
Shoe-sole-trimming machine.....	B. L. Dean.....	282,857	Aug. 7	459	130	24	551
Shoe-soleing machine.....	J. Westwood.....	273,207	Feb. 27	2051	577	23	821
Shoe-tip.....	L. Loeser.....	271,342	Jan. 30	1873	543	23	377
Shoe-tip blanks. Machine for forming.....	M. A. Holton.....	271,848	Feb. 6	318	88	23	497
Shoe-tying machine.....	A. W. Weeks.....	274,236	Mar. 20	1277	352 353	23	1069
Shoe-uppers. Die for cutting.....	B. W. Geary.....	279,375	June 12	963	267	23	2296
Shoe-uppers. Making seamless open-bottom.....	N. Moulton.....	278,305	May 22	2217	607	23	2027
Shoe-vamps. Apparatus for marking.....	M. J. Ferren.....	287,264	Oct. 23	1879	515	25	359
Shoes. Device for marking the location of buttons for.....	J. H. Fotens.....	279,735	June 19	1391	388	23	2375
Shoes, &c. Fastener for.....	I. J. Saunders.....	282,571	Aug. 7	118	35	24	521
Shoes. Machine for attaching buttons to.....	P. H. Sweet, Jr. (Reissne).....	10,373	Aug. 21	1534	433	24	792
Shoes. Manufacture of.....	F. Kearney.....	286,204	Oct. 9	519	143	25	106
Shoes or gaiters. Manufacture of.....	O. E. Mellenny.....	272,452	Feb. 20	1093	308	23	646
Shoes. Toe-piece for rubber.....	J. L. Thomson.....	272,601	Feb. 20	1285	358	23	679
Shoes. Tool for attaching buttons to.....	J. H. Goodfellow.....	288,229	Nov. 13	542	150	25	611
Shoe-maker's bench.....	T. Mullins.....	278,254	May 22	2132	587	23	2013
Shoe-maker's last.....	M. J. Dunn.....	286,794	Oct. 16	1276	345	25	246
Shooting-seat.....	H. F. Beaumont.....	272,019	Feb. 13	543	147	23	546
Shot-case.....	L. M. Bedell.....	285,454	Sept. 25	1588	446	24	1198
Shot-case. Revolving.....	H. Westphal.....	280,979	July 10	793	220 221	24	146
Shot-holder.....	J. C. Turner.....	277,384	May 8	1075	289	23	1818
Shot-machine.....	E. Shiver.....	271,374	Jan. 30	1922	556	23	386
Shovel: See Breaking-down shovel. Cultivator-shovel. Grain-shovel.	Sifting-shovel. Snow-shovel. Steam-shovel. Wooden shovel.						
Shovel.....	C. K. Edwards.....	283,086	Aug. 14	728	204	24	637
Shovel and ash-sifter. Combined.....	E. Frary.....	287,116	Oct. 23	1694	464	25	327
Shovel-straps. Machine for punching.....	W. P. T. Jope and W. M. Johnston.....	276,249	Apr. 24	1766	492	23	1553



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				Spec.	Dr'g.	Vol.	Page.
Shovels by power. Device for operating.....	W. D. Rinehart.....	284,485	Sept. 4	394	{ 110 111 }	24	971
Shovels. Making.....	E. A. Barnes.....	284,710	Sept. 11	681	192	24	1026
Show and storage case.....	D. R. Reynolds.....	274,032	Mar. 13	1005	275	23	1014
Show-box.....	C. E. Scott.....	277,515	May 15	1236	333	23	1851
Show box and card.....	L. Sonn.....	271,936	Feb. 6	427	116	23	515
Show-box cover.....	A. C. Rhodes.....	278,743	June 5	85	25	23	2138
Show-case.....	G. W. Clous.....	272,209	Feb. 13	774	214	23	586
Show-case.....	J. W. Fawkes.....	279,366	June 12	954	265	23	2294
Show-case.....	G. G. Buford.....	283,374	Aug. 21	1101	310	24	710
Show-case and counter.....	E. Jones.....	272,703	Feb. 20	1411	395	23	702
Show-case and separator. Combined.....	J. G. Stevens and E. E. Meeker.....	275,283	Apr. 3	509	140	23	1313
Show-case. Revolving.....	W. I. Gardiner.....	273,834	Mar. 13	769	208	23	974
Show-case. Screw.....	M. K. Barnes.....	289,799	Dec. 11	532	149	25	986
Show-stand.....	J. Danner.....	274,087	Mar. 13	1078	297	23	1027
Show-stand.....	L. I. Heilbrun.....	284,202	Sept. 4	58	16	24	914
Show-stand.....	B. Leger.....	271,719	Feb. 6	158	44	23	468
Show-stand.....	C. G. Udell.....	290,371	Dec. 18	1239	349	25	1122
Shrinkage-gage.....	H. S. Brown.....	271,411	Jan. 30	1966	568	23	395
Shutter.....	I. Paine.....	282,663	Aug. 7	225	66	24	539
Shutter and fastening therefor.....	J. Cooper.....	276,563	May 1	23	7	23	1631
Shutter-bower.....	W. Butterfield.....	285,795	Oct. 2	17	5	25	5
Shutter-bower.....	J. B. Dunwoody, Jr.....	275,167	Apr. 3	369	102	23	1290
Shutter-bower and fastener.....	J. V. Fort.....	287,816	Nov. 6	32	10	25	513
Shutter-fastener.....	P. Keffler.....	286,828	Oct. 16	1319	360	25	254
Shutter-fastener.....	S. Poole.....	287,158	Oct. 23	1744	477	25	336
Shutter-fastener.....	L. Schlechte.....	273,164	Feb. 27	2001	563	23	812
Shutter-fastener. Automatic.....	T. J. Dotts.....	273,265	Mar. 6	26	8	23	839
Shutter. Fire-proof.....	J. T. Cowles.....	288,212	Nov. 13	521	145	25	608
Shutter. Fire-proof.....	R. P. Manly.....	281,198	July 10	1064	293	24	195
Shutter. Flexible jointed.....	J. P. Recker.....	277,608	May 15	1352	364	23	1869
Shutter. Iron.....	N. A. Foss.....	270,047	Jan. 2	258	74	23	53
Shutter opener. Window.....	J. J. Donahoe and P. J. Finn.....	270,027	Jan. 2	237	68	23	49
Shutter. Window.....	C. T. Cochel.....	287,906	Nov. 6	145	43	25	533
Shutter. Window.....	C. E. Weber.....	271,384	Jan. 30	1934	559	23	389
Shutter. Window.....	J. Wrightsman.....	277,971	May 22	1778	485	23	1951
Shutter-worker.....	W. L. Belt.....	283,194	Aug. 14	862	241	24	660
Shutter-worker.....	H. M. Chamberlin.....	284,722	Sept. 11	697	195	24	1028
Shutter-worker.....	R. G. Dudley.....	285,347	Sept. 18	1449	408	24	1168
Shutter-worker.....	J. W. Harrison.....	270,310	Jan. 9	571	168	23	122
Shutter-worker.....	H. J. Hunsicker.....	281,630	July 17	1614	442	24	294
Shutter-worker.....	W. A. C. Murphy and J. T. Johnston.....	278,585	May 29	2565	701	23	2097
Shutter-worker and blind-slat operator. Combined.....	A. C. Wyckoff.....	281,748	July 24	1775	463	24	327
Sickle-grinder.....	D. Beal.....	277,663	May 15	1415	382	23	1881
Side-bar spring.....	W. S. Ingraham.....	270,070	Jan. 2	284	84	23	58
Sido spring.....	J. Taylor.....	286,089	Oct. 2	380	105	25	69
Sidewalk-light.....	C. R. Wilson.....	283,652	Aug. 14	691	194	24	630
Siding-bracket.....	E. K. Chamberlin.....	273,257	Mar. 6	18	5	23	837
Sieve. Adjustable.....	S. Woodard.....	276,950	May 1	544	142	23	1719
Sieve. Coal.....	J. P. Lipps.....	272,278	Feb. 13	861	241	23	602
Sieve. Grain.....	J. G. W. Putnam.....	287,161	Oct. 23	1746	478	25	337
Sifter.....	S. McClure.....	271,497	Jan. 30	2083	599	23	416
Sifter. Ash.....	A. L. Henry.....	281,364	July 17	1283	355	24	239
Sifter. Ash.....	U. E. Dodge.....	279,724	June 19	1380	385	23	2373
Sifter. Ash.....	J. Pons.....	282,924	Aug. 7	530	150	24	595
Sifter. Ash.....	J. H. Porter.....	286,484	Oct. 9	875	237	25	170
Sifter. Coal and ash.....	R. S. Van Zandt.....	271,751	Feb. 6	201	56	23	475
Sifter. Coal and ash.....	C. H. Ferguson and A. Baker.....	289,820	Dec. 11	558	156	25	991
Sifter. Flour.....	W. S. Hewson.....	284,847	Sept. 11	848	238	24	1055
Sifter. Flour.....	J. Henninger.....	277,278	May 8	954	256	23	1797
Sifting apparatus.....	J. E. Welling.....	284,581	Sept. 4	516	144	24	991
Sifting machine. Flour.....	E. Fuchs.....	282,300	July 31	2469	683	24	454
Sifting shovel. Ash.....	H. E. L. Bauermeister.....	278,852	June 5	246	71	23	2165
Sign.....	L. S. Brown.....	281,012	July 10	831	231	24	154
Sign.....	J. Brown, Jr.....	276,558	May 1	16	5	23	1629
Sign.....	M. D. Jones.....	283,115	Aug. 14	767	216	24	644
Sign.....	J. C. Lake.....	280,192	June 26	1931	543	23	2477
Sign.....	N. Newman.....	283,647	Aug. 21	1413	396	24	769
Sign.....	A. D. Smith.....	284,339	Sept. 4	219	62	24	941
Sign for street-cars. Traveling.....	T. H. Bowles.....	288,615	Nov. 20	1039	286	25	704
Sign. Illuminated decorative.....	J. H. Lonch.....	281,536	July 17	1494	411	24	275
Sign. Lamp.....	J. S. Thomas.....	274,411	Mar. 20	1497	413	23	1108
Sign. Luminous.....	G. H. Babcock.....	284,163	Sept. 4	3	1	24	905
Signal:							
See Alarm-signal. Railway fog-signal.							
Car-signal. Railway-switch signal.							
Car and vessels signal. Railway time-signal.							
Electrical signal. Railway-track signal.							
Express-signal. Railway-train signal.							
Fog-signal. Telegraph and semaphore signal.							
Head-light signal. Telephone time-signal.							
Nautical signal. Time-signal.							
Railway-signal. Torpedo-signal.							
Railway-crossing signal. Train-order signal.							
Signal.....	J. H. Bacon.....	273,218	Feb. 27	2069	581	23	824
Signal and messenger call-box. District.....	E. W. Applegate.....	279,689	June 19	1266	{ 351 352 }	23	2353
Signal apparatus.....	A. G. Commings.....	272,122	Feb. 13	674	184	23	568
Signal apparatus. District.....	G. C. Wilson.....	290,302	Dec. 18	1152	323	25	1105
Signal-light. Marine.....	G. T. Parry.....	290,918	Dec. 25	1967	542	25	1254
Signal-light. Percussion.....	C. E. Masten.....	277,498	May 15	1220	328	24	1848
Signaling apparatus. Automatic.....	F. B. Wood.....	275,005	Apr. 3	154	43	23	1252
Signaling apparatus. Individual.....	J. H. Cary.....	278,221	May 22	2092	576	23	2005

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Silk and thread polishing machine . . . . .	W. R. Landfear . . . . .	281,705	July 24	1720	467	24	318
Silk preparatory to dyeing and weaving. Treating . . . . .	J. Rubelin . . . . .	270,557	Jan. 9	899	195	23	185
Silk-tester . . . . .	D. D. MacKay and B. A. Armstrong . . . . .	280,491	July 3	195	51	24	36
Silk-throwing machine . . . . .	J. E. Tynan . . . . .	275,548	Apr. 10	893	{ 241 242 }	23	1387
Single-tree . . . . .	J. F. McDaniel . . . . .	279,410	June 12	1009	280	23	2303
Single-tree attachment . . . . .	A. L. New . . . . .	285,503	Sept. 25	1642	462	24	1209
Single-tree clip . . . . .	A. F. Spohr . . . . .	284,772	Sept. 11	759	211	24	1039
Sink . . . . .	G. F. Coomber . . . . .	287,246	Oct. 23	1861	509	25	356
Sink . . . . .	W. W. Elliott and W. J. Towne . . . . .	275,755	Apr. 10	1160	318	23	1432
Sink . . . . .	J. A. Talpey . . . . .	273,780	Mar. 13	707	191	23	963
Sink-cleaner . . . . .	C. R. Turner . . . . .	285,771	Sept. 25	1983	561	24	1268
Sink. Portable . . . . .	J. Luther . . . . .	274,952	Apr. 3	88	24	23	1240
Sink-trap . . . . .	J. MacDonald . . . . .	279,655	June 19	1298	361	23	2359
Sink-trap and safety-pocket. Combined . . . . .	S. W. Babbitt . . . . .	286,759	Oct. 16	1232	333	25	238
Siphon . . . . .	C. Frey . . . . .	273,058	Feb. 27	1865	524	23	788
Siphon . . . . .	C. E. Sherman . . . . .	275,330	Apr. 10	871	235	23	1383
Siphon for vessels . . . . .	F. J. Flocker . . . . .	290,561	Dec. 18	1507	416	25	1167
Siren for signaling . . . . .	F. H. Holmes . . . . .	281,070	July 10	900	{ 250 251 252 }	24	166
Sirup. Apparatus for the manufacture of corn- . . . . .	S. C. Granger . . . . .	271,235	Jan. 30	1737	503	23	354
Size composition . . . . .	R. Parke and H. Goldberg . . . . .	283,652	Aug. 21	1417	24	770	
Sizing and filling for cotton cloth and other fabrics . . . . .	P. Richter . . . . .	278,183	May 22	2041	23	1997	
Skate . . . . .	E. H. Barney . . . . .	274,253	Mar. 20	1299	357	23	1073
Skate . . . . .	E. H. Barney . . . . .	274,254	Mar. 20	1300	358	23	1073
Skate . . . . .	J. A. Dodge . . . . .	286,792	Oct. 16	1272	344	25	246
Skate . . . . .	P. J. Doherty . . . . .	279,359	June 12	935	261	23	2291
Skate . . . . .	R. C. Hindley . . . . .	286,199	Oct. 9	513	{ 141 142 }	25	105
Skate . . . . .	R. C. Hindley . . . . .	287,933	Nov. 6	180	51	25	539
Skate . . . . .	A. S. Hunter. (Reissue) . . . . .	10,293	Mar. 6	589	157	23	935
Skate . . . . .	H. C. Pomeroy . . . . .	282,922	Aug. 7	528	149	24	594
Skate . . . . .	C. E. Purdy . . . . .	279,105	June 5	618	168	23	2228
Skate. Roller . . . . .	O. Arnold . . . . .	287,607	Oct. 30	2331	630	25	452
Skate. Roller . . . . .	L. J. Baker . . . . .	280,338	July 3	1	1	24	3
Skate. Roller . . . . .	G. D. Burton . . . . .	271,785	Feb. 6	243	68	23	483
Skate. Roller . . . . .	G. D. Burton . . . . .	279,220	June 12	756	208	23	2262
Skate. Roller . . . . .	G. D. Burton . . . . .	282,156	July 31	2307	633	24	423
Skate. Roller . . . . .	R. H. Coombs . . . . .	284,187	Sept. 4	35	9	24	910
Skate. Roller . . . . .	T. Day . . . . .	279,138	June 12	671	184	23	2248
Skate. Roller . . . . .	M. F. Evans . . . . .	285,599	Sept. 25	1759	499	24	1231
Skate. Roller . . . . .	J. S. Gallaber . . . . .	287,820	Nov. 6	36	11	25	514
Skate. Roller . . . . .	W. P. Gregg . . . . .	275,482	Apr. 10	812	230	23	1373
Skate. Roller . . . . .	J. J. Henry . . . . .	284,009	Aug. 28	1889	529	24	865
Skate. Roller . . . . .	W. B. Higgins . . . . .	280,821	July 10	603	168	24	113
Skate. Roller . . . . .	S. Hipkiss . . . . .	289,099	Nov. 27	1640	454	25	817
Skate. Roller . . . . .	A. L. Kitselman . . . . .	279,489	June 12	1098	303	23	2317
Skate. Roller . . . . .	A. J. Lutz . . . . .	277,911	May 22	1707	466	23	1940
Skate. Roller . . . . .	T. L. Melone . . . . .	272,298	Feb. 13	878	246	23	605
Skate. Roller . . . . .	W. J. Morris . . . . .	283,915	Aug. 28	1744	492	24	840
Skate. Roller . . . . .	A. Peeler . . . . .	291,000	Dec. 25	2084	374	25	1272
Skate. Roller . . . . .	E. C. Phillips . . . . .	280,236	June 26	1992	560	23	2487
Skate. Roller . . . . .	C. A. Stoddard . . . . .	288,508	Nov. 13	913	249	25	674
Skate-roller . . . . .	E. F. Ballou . . . . .	285,783	Oct. 2	6	2	25	4
Skate-roller . . . . .	E. W. Otis . . . . .	285,836	Oct. 2	65	20	25	14
Skate roller. Parlor . . . . .	E. B. Mansfield . . . . .	278,666	May 29	2670	730	23	2115
Skate roller. Parlor . . . . .	E. B. Mansfield . . . . .	279,406	June 12	1005	278	23	2302
Skates. Roll for roller . . . . .	G. F. Rice . . . . .	287,861	Nov. 6	83	25	25	322
Skating-rinks and other purposes. Compound for . . . . .	H. Lumbye and A. De Bevoise . . . . .	277,043	May 8	668	23	1746	
Skeins of silk. Method of and appliance for locking separate . . . . .	J. and J. Nightingale . . . . .	287,705	Oct. 30	2456	661	25	477
Skid . . . . .	F. N. Godfrey . . . . .	271,837	Feb. 6	307	84	23	495
Skid . . . . .	S. Halvossen . . . . .	282,311	July 31	2499	686	24	456
Skid . . . . .	W. C. Harley . . . . .	276,685	May 1	195	50	23	1657
Skid . . . . .	S. Taylor . . . . .	288,276	Nov. 13	607	166	25	621
Skidding-machine . . . . .	H. Butler . . . . .	288,306	Nov. 13	639	175	25	627
Skimmer for evaporating-pans . . . . .	J. W. Babbitt . . . . .	278,074	May 22	1898	520	23	1972
Skin-puncturing device or recussitator . . . . .	W. Bennett . . . . .	273,702	Mar. 13	595	160	23	944
Skins. Apparatus for removing the water-hair from seal and other . . . . .	J. W. Sutton . . . . .	276,925	May 1	497	130	23	1712
Skins. Preparing . . . . .	A. Hesthal . . . . .	282,316	July 31	2506	24	457	
Skins. Tawing . . . . .	F. E. Dietsch . . . . .	287,255	Oct. 23	1869	25	358	
Skirt-protector . . . . .	G. A. Blanchard . . . . .	275,014	Apr. 3	171	46	23	1255
Skirt-protector . . . . .	M. E. Knight and H. M. Macfarland . . . . .	282,646	Aug. 7	206	60	24	536
Skirt-protector . . . . .	C. P. Nicolson . . . . .	289,020	Nov. 27	1544	426	25	800
Skittle-square or game-board . . . . .	J. Jotten . . . . .	284,306	Sept. 4	185	52	24	965
Skiving-machine . . . . .	W. S. Fitzgerald . . . . .	287,813	Nov. 6	28	9	25	512
Skiving-machine . . . . .	M. H. Merriam . . . . .	270,966	Jan. 23	1415	407	23	292
Sky or vault light roof and roof-pavement . . . . .	T. Hyatt . . . . .	273,559	Sept. 4	484	136	24	986
Skylight . . . . .	A. and G. Bickelhaupt . . . . .	274,247	Mar. 6	5	2	23	835
Skylight . . . . .	A. and G. Bickelhaupt . . . . .	273,248	Mar. 6	7	2, 3	23	836
Skylight . . . . .	J. Ehrhardt . . . . .	283,332	Aug. 14	1036	291	24	693
Skylight . . . . .	G. Hayes . . . . .	280,036	June 26	1763	495	23	2446
Skylight . . . . .	P. H. Jackson . . . . .	282,641	Aug. 7	201	58	24	535
Skylight . . . . .	J. McIntyre . . . . .	283,913	Aug. 28	1742	492	24	839
Skylight . . . . .	J. C. Ryan . . . . .	286,558	Oct. 9	972	261	25	187
Skylight-bar. Metallic . . . . .	G. Hayes . . . . .	282,191	July 31	2359	649	24	431
Skylight-bars, window-sash bars, and moldings. Machine for the manufacture of . . . . .	G. Hayes . . . . .	289,096	Nov. 27	1636	{ 452 453 }	25	816
Skylight-frame . . . . .	J. L. Cox . . . . .	272,859	Feb. 27	1629	456	23	748
Skylight. Metallic . . . . .	G. Hayes . . . . .	277,485	May 15	1203	323	23	1846
Skylight. Metallic . . . . .	G. Hayes . . . . .	280,034	June 26	1762	495	23	2446
Skylight. Ventilating . . . . .	C. L. Williams . . . . .	288,535	Nov. 13	940	257	25	679



*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Skylights. Device for opening and closing	J. H. Rose	270,340	Jan. 9	611	179	23	129
Slag for paving, &c. Molding and treating	J. Stickie	289,939	Dec. 11	702		25	1016
Slag for railways and roadways. Preparing	C. Diebold	281,248	July 17	1137		24	214
Slag. Treating blast-furnace	A. D. Elbers	278,002	May 22	1821		23	1958
Slate and blackboard cleaner	W. W. Armington	282,148	July 31	2298	631	24	422
Slate and window cleaner	J. B. Deeds and W. Mack	287,254	Oct. 23	1869	511	25	358
Slate-cleaner	O. Bushnell	284,537	Sept. 4	461	131	24	982
Slate-cleaner	C. E. Ramago	277,341	May 8	1031	277	23	1810
Slate. Folding	W. Stuckie	279,457	June 12	1060	293	23	2312
Slate-frame	C. Nelson	281,785	July 24	1829	499	24	337
Slate-frame	C. Nelson	281,786	July 24	1830	500	24	337
Slate-frame	R. F. Walsh	270,163	Jan. 2	397	114	23	81
Slate frame. School	D. Scrymgeour	277,164	May 8	829	219	23	1774
Slate-frames. Machine for forming muffling-strips for	C. Nelson	281,787	July 24	1831	500	24	338
Slate-frames. Pad to protect the corners of	P. Wardell	285,326	Sept. 18	1425	402	24	1165
Slate. Muffled school	G. Gray	286,196	Oct. 9	510	141	25	105
Slate. Noiseless	J. Ridge	278,744	June 5	86	25	23	2138
Slate. School	J. D. Emack	288,698	Nov. 20	1146	315	25	721
Slate. School	I. Lancaster	290,691	Dec. 25	1676	462	25	1202
Slate. School	A. Maggio	279,656	June 19	1299	361	23	2359
Slate. School	J. Medor	283,267	Aug. 14	956	266	24	678
Slate. School	G. W. Pecan	270,470	Jan. 9	782	229	23	162
Slate. School	C. F. Rapp	289,711	Dec. 4	433	121	25	962
Slate. School	J. B. Walsh	277,387	May 8	1081	290	23	1819
Slate-wiper	D. F. Walbridge	270,708	Jan. 16	1006	314	23	229
Slates. Abacus attachment for school	H. Stewart	271,749	Feb. 6	106	55	23	474
Slaughter-houses. Treating tank-waters of	B. Terne	282,411	July 31	2628	721	24	479
Sled	J. Ames	281,171	July 10	1022	286	24	157
Sled	W. Exner	284,196	Sept. 4	50	14	24	913
Sled	H. Keller	281,372	July 17	1291	357	24	241
Sled	F. C. Klipstein	279,256	June 12	797	221	23	2270
Sled	H. H. Miller	287,700	Oct. 30	2451	660	25	476
Sled attachment. Logging	J. Donalds	289,815	Dec. 11	532	154	25	989
Sled. Bob	W. F. Richmond	290,112	Dec. 11	912	259	25	1056
Sled-brake	E. Fisher	280,165	June 26	1902	535	23	2471
Sled-brake	N. Parker	277,775	May 15	1547	420	23	1905
Sled-brake	O. Pelkey	280,508	July 3	212	55	24	38
Sled. Hand	J. T. Pope	279,430	June 12	1033	286	23	2307
Sled-propeller	L. A. Fuller	282,302	July 31	2490	684	24	454
Sled-propeller	D. R. Ivett	282,897	Aug. 7	506	142	24	590
Sled-shoe	J. S. Roberts	275,945	Apr. 17	1395	334	23	1481
Sleeve-adjuster	C. C. Shelby	273,770	Mar. 13	693	186	23	961
Sleeve-supporter	C. D. Ford	280,167	June 26	1903	536	23	2472
Sleigh	J. A. Chapman	283,325	Aug. 14	1021	286	24	690
Sleigh	W. A. Compton	286,784	Oct. 16	1263	342	25	244
Sleigh	G. W. Dearborn	282,963	Aug. 14	578	163	24	610
Sleigh	L. Debolt, Jr.	272,532	Feb. 20	1196	334	23	664
Sleigh	M. J. Ferguson	278,326	May 29	2255	618	23	2042
Sleigh	C. Harrigan	278,662	May 29	2666	729	23	2114
Sleigh	C. Mette	280,499	July 3	202	53	24	37
Sleigh	A. M. Mitchell	278,447	May 29	2410	657	23	2070
Sleigh	G. E. Watson	282,611	Aug. 7	401	113	24	571
Sleigh. Bob	T. B. Weller	290,295	Dec. 18	1145	321	25	1104
Sleigh draft-bar	J. P. Thompson	270,514	Jan. 9	845	246	23	175
Sleigh. Folding	F. Meinecke	278,990	June 5	457	125	23	2201
Sleigh. Logging	A. Hansen	271,843	Feb. 6	312	86	23	496
Sleigh-runner	M. C. Wright	280,989	July 10	803	223	24	148
Sleigh-shoe	O. J. Baldwin	286,371	Oct. 9	747	200	25	146
Sliding gate	S. J. Miller	281,908	July 24	1955	544	24	365
Sliding gate	F. Obenchain	283,648	Aug. 21	1414	396	24	769
Sliding gate	W. R. White	282,140	July 31	2290	628 } 629	24	420
Sliding shears	J. M. Ross	272,388	Feb. 13	1006	282	23	626
Slop-jar mat	A. I. Griggs	273,726	Mar. 13	619	166	23	947
Slotting-shears	C. W. Crane	287,249	Oct. 23	1263	510	25	356
Snice or flood gate	F. G. M. Stoney	282,400	July 31	2614	718	24	477
Smelting-furnace	E. Cartwright	286,777	Oct. 16	1255	339	25	242
Smelting-furnace	S. G. Sackett	278,279	May 22	2168	597	23	2018
Smelting furnace. Copper	J. B. F. Herreshoff	273,840	Mar. 13	777	211	23	975
Smelting refractory ores	J. Campbell	290,629	Dec. 18	1595	438	25	1181
Smoke and cinder conductor	W. A. Brown and J. F. Smith	276,664	May 1	154	39	23	1652
Smoke and cinder conveyer	L. C. Johnson	290,586	Dec. 18	1538	423	25	1172
Smoke and flame outlet for buildings	C. A. Willard	282,822	Aug. 7	414	117	24	574
Smoke and gas consuming furnace	G. Farr	272,035	Feb. 13	559	152	23	549
Smoke and spark conveyer	O. S. Tavshanjian	281,581	July 17	1548	424	24	284
Smoke blower and burner combined	J. Shepard	289,863	Dec. 11	615	171	25	1001
Smoke-burning attachment for stoves, &c.	W. H. Richardson	281,399	July 17	1324	366	24	246
Smoke-burning furnace	J. Ritchie	271,989	Feb. 6	498	134	23	526
Smoke-consumer and auxiliary generator for locomotives	E. Livermore	274,451	Mar. 20	1560	427	23	1118
Smoke-consuming and water-heating furnace	E. Livermore	274,450	Mar. 20	1557	427	23	1118
Smoke-consuming device	W. P. Hall	283,600	Aug. 21	1363	381	24	759
Smoke-consuming furnace	G. Blackburn	277,978	May 22	1786	487	23	1952
Smoke-consuming furnace	G. W. Davison	288,554	Nov. 13	962	265	25	683
Smoke-consuming furnace	P. W. Frain	285,887	Oct. 2	137	89	25	27
Smoke-consuming furnace	P. W. Frain	289,343	Nov. 27	1931	536	25	872
Smoke-consuming furnace	H. R. Wolfe	272,930	Feb. 27	1718	480	23	762
Smoke-consuming furnace	C. Zacharias	275,451	Apr. 10	771	206	23	1366
Smoke-consuming furnace for locomotives	E. L. Brady	271,027	Jan. 23	1483	427	23	304
Smoke-consuming furnaces. Steam-jet for	S. Parker	283,809	Aug. 28	1626	457	24	819
Smoke-stack	J. Ritchie	276,716	May 1	240	61	23	1666
Smoking device. Attachment for tobacco	J. A. Barry	281,430	July 17	1361	375	24	252
Smoking-pipe	J. Cole	273,709	Mar. 13	603	162	23	945

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. E.	Vol.	Page.
Smoking-tube	C. B. Loveless	273,294	Mar. 6	65	19	23	845
Smoking-tube	E. A. Smith	281,573	July 17	1538	421	24	282
Smut-machine	P. V. Hennick	276,584	May 1	54	15	23	1637
Snap. Harness	L. Flagg	281,857	July 24	1921	525	24	353
Snap. Harness	J. A. Park	270,105	Jan. 2	318	94	23	65
Snap-hook	F. C. Ayres	274,694	Mar. 27	1876	523	23	1181
Snap-hook	I. F. Bassford and M. Mahan	285,956	Oct. 2	227	64	25	43
Snap-hook	T. Beecher	282,257	July 31	2433	669	24	445
Snap-hook	W. Bellairs	279,477	June 12	1088	300	23	2315
Snap-hook	O. Benson	286,253	Oct. 9	582	160	25	117
Snap-hook	A. M. Blake	280,283	June 26	2046	575	23	2497
Snap-hook	W. L. and A. C. Brown	283,464	Aug. 21	1206	339	24	730
Snap-hook	L. T. Bulley and D. W. Burnham	280,792	July 10	573	160	24	108
Snap-hook	L. Chapman	286,530	Oct. 9	936	252	25	181
Snap-hook	L. C. Chase	288,774	Nov. 20	1242	341	25	738
Snap-hook	J. Gibbons	276,965	May 1	564	147	23	1723
Snap-hook	J. Gibbons	283,337	Aug. 14	1040	292	24	694
Snap-hook	G. D. Mosher	283,720	Aug. 21	1507	425	24	786
Snap-hook	H. S. Pullman	275,266	Apr. 3	488	136	23	1309
Snap-hook	D. G. Sheridan	271,372	Jan. 30	1920	555	23	386
Snap-hook	H. Straw	275,537	Apr. 10	879	237	23	1384
Snap-hook	S. E. Thompson	278,469	May 29	2436	664	23	2074
Snap-hook	R. B. Whitzel	287,397	Oct. 23	2045	556	25	390
Snatch-block	J. Cochran	279,916	June 26	1609	452	23	2420
Snatch-block	G. A. Ford	271,620	Feb. 6	44	11	23	448
Snatch-block	Z. W. More and M. H. Tarbox	288,252	Nov. 13	572	159	25	616
Snow-banks. Depositing torpedoes in	G. A. Gunther	281,495	July 17	1448	396	24	267
Snow-banks. Device for depositing torpedoes in	G. A. Gunther	275,039	Apr. 3	208	56	23	1261
Snow. Device for clearing railway-cuts of	W. C. Rice	284,900	Sept. 11	901	{ 254 255 }	24	1065
Snow-excavator	D. P. Bier and H. E. Rolph	286,895	Oct. 16	1405	386	25	268
Snow from sidewalks, &c. Device for removing	W. J. Mehary	275,684	Apr. 10	1067	291	23	1417
Snow. Machine for forming roads and paths upon bodies of	A. A. Smith	286,969	Oct. 16	1497	{ 411 412 }	25	284
Snow-melting apparatus	M. Hannan	281,500	July 17	1453	398	24	268
Snow-plow	W. H. H. Baker	281,954	July 24	2036	557	24	374
Snow-plow	J. N. Briggs	285,383	Sept. 25	1501	422	24	1183
Snow-plow	J. A. Chisholm	286,779	Oct. 16	1258	340	25	243
Snow-plow	E. C. Dawson	281,031	July 10	856	238	24	158
Snow-plow	G. A. Gunther	276,395	Apr. 24	1965	544	23	1586
Snow-plow	G. A. Gunther	281,496	July 17	1449	396	24	267
Snow-plow	G. A. Gunther	281,497	July 17	1450	397	24	268
Snow-plow	L. Morgan	283,011	Aug. 14	640	181	24	621
Snow-plow	J. Phillips	286,634	Oct. 16	1077	{ 289 290 }	25	211
Snow-plow	F. Snedigar	280,528	July 3	232	61	24	42
Snow-plow	H. A. Webber	275,301	Apr. 3	534	{ 145 146 }	23	1316
Snow-plow. Railway	J. Q. Day	282,281	July 31	2478	677	24	449
Snow-remover	F. W. Menze	275,401	Apr. 10	707	189	23	1356
Snow-scraper	R. E. Patten	289,131	Nov. 27	1677	465	25	824
Snow-shovel	M. Howland	288,812	Nov. 20	1287	353	25	746
Snow-shovel. Steam	W. A. Woods	278,382	May 29	2330	637	23	2055
Soap	C. A. Breyer	269,823	Jan. 2	3	.....	23	3
Soap	C. J. Everett	276,376	Apr. 24	1938	.....	23	1582
Soap	T. A. Kasey	283,403	Aug. 21	1131	.....	24	717
Soap	W. H. Townsend	281,607	July 24	1859	.....	24	343
Soap	G. A. Whisley	282,145	July 31	2295	630	24	421
Soap	C. Zimmerling	286,568	Oct. 9	986	265	25	189
Soap alkali. Producing a perfumed	T. S. Harrison	282,633	Aug. 7	193	.....	24	534
Soap and extractive matter from cotton-seed oil, &c. Manufacture of	J. Longmore	290,079	Dec. 11	876	.....	25	1048
Soap compound	J. K. Alpaugh	269,820	Jan. 2	1	.....	23	3
Soap compound	C. E. Hore	275,212	Apr. 3	427	.....	23	1299
Soap from fats and oils. Making	H. Heckel	273,075	Feb. 27	1882	.....	23	791
Soap. Hard	J. J. Johnston	273,235	Feb. 27	2092	.....	23	827
Soap. Healing	J. J. Johnston	273,236	Feb. 27	2093	.....	23	827
Soap-holder	J. McAnespey	280,053	June 26	1783	500	23	2449
Soap, &c. Machine for cutting	W. D. Smith	273,176	Feb. 27	2013	566	23	614
Soap. Manufacture of	H. De Castro	288,412	Nov. 13	793	215	25	654
Soap. Manufacture and preparation of potash	W. J. Menzies	286,049	Oct. 2	332	.....	25	61
Soap. Manufacture of	O. Liebreich	281,089	July 10	921	.....	24	170
Soap. Medicated	J. J. Dillard	287,642	Oct. 30	2371	.....	25	460
Soap-plotting machine	J. Atkiss	276,326	Apr. 24	1881	522	23	1571
Soap-powder and process of making the same	J. K. Alpaugh	282,032	July 31	2133	.....	24	395
Soap. Process of and apparatus for manufacturing	M. B. Sherwood, Jr., and G. C. Farnsworth	271,281	Jan. 30	1792	520	23	364
Soap remelting and crutching apparatus	H. W. Dopp	285,736	Sept. 25	1933	{ 547 548 }	24	1261
Soap sheets. Making	H. Buczkowski	273,946	Mar. 13	908	248	23	997
Soap. Toilet	J. J. Johnston	273,239	Feb. 27	2096	.....	23	828
Soaps. Manufacture of medicated and antiseptic	W. J. Menzies	286,048	Oct. 2	331	.....	25	61
Soaping and dyeing textile fabrics. Apparatus for	J. Gibson, Jr., and J. Platt	278,125	May 22	1970	{ 540 541 }	23	1984
Sock or stocking. Felted woolen	W. H. Davis and A. A. Hawley	287,808	Nov. 6	21	7	25	511
Socket-wrench	A. P. Seales	284,076	Aug. 28	1967	548	24	878
Socket-wrench	H. Wheeler	269,902	Jan. 2	95	28	23	20
Sod-cutter	A. Test	272,496	Feb. 20	1152	324	23	656
Sod-cutter	A. Test	286,652	Oct. 16	1097	295	25	215
Sod-cutter. Sulky	F. A. Blanchard	274,706	Mar. 27	1888	526	23	1183
Soda. Apparatus for manufacturing bicarbonate of	J. Gandolfo	279,145	June 12	682	187	23	2249
Soda-ash. Purifying	E. H. Russell	271,366	Jan. 30	1916	.....	23	385
Soda. Grinding caustic	F. P. Harned	286,132	Oct. 2	432	.....	25	80
Soda-lime. Making	C. B. Dudley	272,127	Feb. 13	682	.....	23	570



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Soda. Manufacture of bicarbonate of.....	E. Carey, H. Gaskell, Jr., and F. Hurter.	276,990	May 1	592	156	23	1727
Soda. Manufacture of bicarbonate of.....	H. Gaskell, Jr., and F. Hurter	276,020	Apr. 17	1484	409	23	1497
Soda. Manufacture of bichromate of.....	E. P. Potter and W. H. Higgin.	279,431	June 12	1033		23	2307
Soda. Treatment of caustic.....	E. Kirk	275,498	Apr. 10	831		23	1377
Soda-water apparatus.....	J. Matthews	289,777	Dec. 4	501	139	25	973
Soda-water apparatus. Gas-chamber in.....	C. A. Prentiss	288,487	Nov. 13	889	242	25	670
Soda-water apparatus. Mixer or agitator for.....	A. D. Puffer	269,959	Jan. 2	161	47	23	34
Soda-water apparatus. Portable.....	B. F. Bailey and G. H. Griffen	283,060	Aug. 14	700	196	24	631
Sodium carbonate. Making.....	C. Knab	287,551	Oct. 30	2240		25	436
Sofa.....	C. J. Bruschke	277,454	May 15	1168	314	23	1840
Sofa and bath-tub. Combined.....	C. A. Baker	277,438	May 15	1151	309	23	1837
Sofa and lounge. Combined.....	W. F. Woodman and J. C. Johansen.	276,123	Apr. 17	1615	445	23	1519
Soil and waste pipe.....	J. Barrett	277,106	May 8	863	229	23	1779
Soil for crops. Machine for preparing the.....	C. H. Knapp	275,773	Apr. 10	1183	325	23	1436
Solar heat. Apparatus for storing and distributing.....	W. Calver	290,851	Dec. 25	1884	520	25	1240
Solar heaters. Water-lens for.....	W. Calver	290,852	Dec. 25	1886	520	25	1240
Solder. Apparatus for and process of making comminuted	E. Small	282,579	Aug. 7	126	37	24	532
Solder. Comminuted soft.....	E. Small	280,967	July 10	780		24	143
Solder-cutting machine.....	G. T. Pillings.	288,482	Nov. 13	884	240	25	669
Soldering and bottoming machine. Combined can.....	J. S. McCormick.	270,452	Jan. 9	760	223	23	157
Soldering apparatus. Can.....	J. D. Schafer	283,821	Aug. 28	1638	461	24	821
Soldering cans.....	E. Norton	274,362	Mar. 20	1438	395	23	1097
Soldering-copper.....	R. James	284,856	Sept. 11	857	241	24	1056
Soldering cylindrical articles of tinware.....	A. J. Duncan	271,319	Jan. 30	1844	536	23	373
Soldering device.....	F. F. Ellis	279,234	June 12	771	213	23	2265
Soldering eaves-troughs.....	J. Geiger	271,057	Jan. 23	1518	437	23	309
Sole-edge-finishing tool.....	E. B. Stimpson	270,148	Jan. 2	380	110	23	77
Soldering-furnace. Vapor-burning.....	G. W. Billings	287,901	Nov. 6	141	41	25	532
Soldering-iron.....	J. C. Covert	283,575	Aug. 21	1338	373	24	754
Soldering-iron.....	J. Gibbons	278,932	June 5	392	107	23	2190
Soldering-iron.....	A. P. Olmstead	277,601	May 15	1342	361	23	1867
Soldering-iron. Electrical.....	C. T. Hughes	287,380	Oct. 23	2023	550	25	386
Soldering machine. Can.....	L. W. Counselman	277,011	May 8	625	163	23	1739
Soldering machine. Can.....	I. H. Cox	278,100	May 22	1933	530	23	1978
Soldering machine. Can.....	J. J., Jr., and E. J. Glackin	278,329	May 29	2258	618	23	2042
Soldering machine. Can.....	J. G. Jones	283,713	Aug. 21	1500	423	24	785
Soldering machine. Can.....	G. H. Perkins	288,363	Nov. 13	720	197	25	641
Soldering machine. Can.....	G. T. Pillings.	288,481	Nov. 13	882	239	25	669
Soldering machine. Can.....	H. W. Sweitzer	281,648	July 17	1633	446	24	297
Soldering tin cans. Machine for.....	J. J. Johnston	276,823	May 1	373	99	23	1691
Soldering tool. Can.....	H. Klein	284,641	Sept. 11	586	165	24	1010
Sole and heel edge burnishing machine.....	W. Gordon	286,128	Oct. 2	428	117	25	79
Sole and upper protector.....	J. G. Whittier	289,736	Dec. 4	459	129	25	967
Sole channeling and trimming machine.....	C. T. Stetson	288,377	Nov. 13	746	203	25	645
Sole-channeling machine.....	C. Chabot	280,576	July 3	284	78	24	51
Sole-fastening. Metal.....	M. E. Estabrook	280,022	June 26	1745	490	23	2443
Sole flanging and upsetting apparatus.....	H. M. Haynes	286,926	Oct. 16	1442	396	25	275
Sole. In.....	J. Jenkins	280,627	July 3	347	96	24	61
Sole. In.....	O. Long	283,407	Aug. 21	1135	321	24	717
Sole leveling or molding machine.....	D. S. Smith and A. Eppler, Jr.	285,314	Sept. 18	1410	399	24	1162
Sole or heel burnishing machine.....	H. Bond	276,345	Apr. 24	1902	528	23	1575
Sole-protector.....	W. Gordon	276,803	May 1	350	93	23	1687
Sole-protector. Metallic.....	S. M. Street	281,209	July 10	1080	297	24	198
Sole-rounding machine.....	D. F. Hartford	274,939	Apr. 3	70	19	23	1237
Sole trimming and channeling machine.....	J. H. Wiegand	277,395	May 8	1088	292	23	1820
Soles or heels. Apparatus for and method of cutting elastic	L. T. Tongas	277,085	May 8	729	191	23	1757
Sorghum-evaporator.....	P. S. Ewins	284,123	Aug. 28	2028	565	24	889
Sorghum evaporator and rotary skimmer.....	F. L. Howland	270,545	Jan. 9	883	256	23	182
Sorghum. Separating the sediments, &c., from the saccharine juice of.....	J. K. Vanderburgh	275,963	Apr. 17	1414	390	23	1485
Sound-transmitting apparatus.....	J. H. Rogers	287,169	Oct. 23	1758	482	25	339
Sower attachment. Seed.....	W. T. Armstrong	280,437	July 3	126	34	24	23
Sower. Broadcast hand seed.....	T. B. Clark	275,590	Apr. 10	939	255	23	1395
Sower, fertilizer, harrow, and roller. Combined seed.....	T. R. Crane	276,361	Apr. 24	1913	532	23	1579
Sower. Phosphate.....	W. H. Cornford, Jr.	279,135	June 12	668	184	23	2247
Sower. Seed.....	M. Gibbs	275,633	Apr. 10	1004	271	83	1405
Sowing machine. Wheat.....	C. C. Carter	284,376	Sept. 4	262	73	24	948
Spacing-instrument.....	J. O. Madison	287,145	Oct. 23	1727	473	25	333
Spade.....	M. and S. Shinabery	285,693	Sept. 25	1871	533	24	1251
Spade. Ditching.....	E. Kirkpatrick and S. Copron	272,266	Feb. 13	847	236	23	599
Spade, fork, &c.....	C. McAllister	275,723	Apr. 10	1195	328	23	1438
Spark-arrester.....	D. Groesbeck, J. A. Sterling, C. A. Ball, and D. P. Wright.	270,424	Jan. 9	723	213	23	151
Spark-arrester.....	R. M. Howling	281,766	July 24	1803	492	24	333
Spark-arrester.....	G. D. Hunter	285,899	Oct. 2	153	43	25	30
Spark-arrester.....	F. W. Levering	270,445	Jan. 9	752	220	23	156
Spark-arrester.....	W. A. Maloney	284,646	Sept. 11	593	167	24	1011
Spark-arrester.....	J. Meier	288,832	Nov. 20	1312	360	25	751
Spark-arrester.....	H. Millholland	271,255	Jan. 30	1761	510	23	358
Spark-arrester.....	A. Mitchell	280,064	June 26	1794	504	23	2451
Spark-arrester.....	T. Patterson	271,910	Feb. 6	393	108	23	510
Spark-arrester.....	J. C. Printup	288,488	Nov. 13	890	242	25	670
Spark-arrester.....	G. Saltsman	279,021	June 5	497	135	23	2208
Spark-arrester.....	N. Shoptaugh	282,933	Aug. 7	539	152	24	596
Spark-arrester.....	H. M. Smith	285,849	Oct. 2	86	26	25	18

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Spark-arrester .....	H. M. Smith .....	288,195	Nov. 6	495	138	25	594
Spark-arrester .....	L. G. Smock and C. H. Dill .....	289,158	Nov. 27	1708	475	25	829
Spark-arrester .....	A. and F. L. Waterman .....	274,867	Mar. 27	2082	578	23	1215
Spark-arrester. Locomotive .....	D. Groesbeck .....	270,423	Jan. 9	719	212	23	150
Spark-arrester. Locomotive .....	T. J. McMinn .....	280,206	June 26	1948	547	23	2479
Spark-arresting circuit and device. Electric .....	H. L. Bailey .....	284,354	Sept. 4	239	67	24	944
Spark-conductor. Locomotive .....	C. C. Baum .....	282,484	Aug. 7	6	2	24	502
Spark-conductor. Locomotive .....	F. B. Wells .....	283,839	Aug. 28	1658	468	24	824
Spark-ejector for locomotives .....	J. K. Taylor .....	281,160	July 10	1010	282	24	185
Spark-extinguisher .....	G. D. Hunter .....	285,000	Oct. 2	156	44	25	31
Speaking-tube .....	E. N. Gaillard .....	285,120	Sept. 18	1188	333	24	1192
Speaking-tube .....	H. C. Strong .....	285,887	Nov. 20	1376	379	25	763
Speaking-tube apparatus .....	G. J. Quinsler .....	277,508	May 15	1230	331	23	1850
Speaking-tube attachment .....	F. Gould .....	272,541	Feb. 20	1204	336	23	665
Speaking-tube mouth-piece .....	M. Heidelmeier .....	280,374	July 3	42	12	24	10
Speaking-tubes. Electrical indicator for .....	J. Capron .....	283,073	Aug. 14	713	200	24	634
Spectacle-case .....	J. O. Watts .....	275,795	Apr. 10	1207	331	23	1440
Spectacle-case and pencil-holder .....	J. A. Pattee and J. B. Seovell .....	287,460	Oct. 30	2124	577	25	412
Spectacle-cleaner .....	J. S. Birch .....	270,885	Jan. 23	1309	378	23	275
Spectacles .....	J. L. Borsch .....	272,521	Feb. 20	1180	330	23	661
Spectacles and eyeglasses .....	C. F. Beers .....	271,771	Feb. 6	222	62	23	479
Spectacles and eyeglasses .....	T. A. Willson and G. W. Meigs .....	289,740	Dec. 4	463	130	25	967
Speculum and vaginal irrigator .....	G. W. Lutz .....	277,042	May 8	667	174	23	1746
Speculum. Anal .....	A. B. Botsford .....	282,950	Aug. 14	566	160	24	608
Speculum and dilator .....	N. S. Hubbell .....	281,880	July 24	1948	532	24	358
Speed-accelerator .....	J. Schofield .....	282,228	July 31	2399	660	24	439
Speed-changing device .....	T. J. Perrett .....	272,763	Feb. 20	1486	418	23	715
Speed-changing mechanism .....	B. B. Powell .....	276,463	Apr. 24	2046	569	23	1601
Speed-indicator .....	T. Ackley .....	273,423	Mar. 6	233	63	23	874
Speed-indicator .....	T. Blanchard .....	282,487	Aug. 7	9	3	24	502
Speed-indicator .....	C. H. Fowler .....	282,067	July 31	2181	599	24	404
Speed-indicator. Alarm .....	C. J. Langenbach .....	275,222	Apr. 3	436	120	23	1301
Speed-indicator. Magnetic .....	E. Weston .....	277,179	May 8	845	223	23	1777
Speed mechanism. Change .....	T. J. Perrett .....	284,476	Sept. 4	382	106	24	969
Speed-recorder .....	J. C. Henry .....	270,431	Jan. 9	736	216	23	153
Speed-regulator .....	J. Ericsson .....	288,699	Nov. 20	1147	316	25	722
Speed-regulator .....	H. F. Hodges .....	271,245	Jan. 30	1747	505	23	356
Speed-regulator .....	J. C. S. Labaw .....	287,134	Oct. 23	1712	469	25	331
Speeder .....	A. A. Davis .....	272,216	Feb. 13	779	216	23	587
Speeding device. Mechanical .....	A. Wood .....	286,890	Oct. 16	1397	384	25	267
Sphygmograph .....	A. M. Edwards .....	286,795	Oct. 16	1277	345	25	247
Spigot .....	G. W. Evans .....	287,427	Oct. 30	2084	566	25	404
Spigot. Self-closing .....	F. Mayer .....	272,732	Feb. 20	1447	406	23	708
Spigots, &c. Device for holding .....	G. Drummond, Jr .....	285,590	Sept. 25	1747	495	24	1228
Spike .....	W. H. Bailey .....	285,373	Sept. 25	1487	419	24	1181
Spike .....	H. W. Fowler .....	272,676	Feb. 20	1377	387	23	696
Spike .....	J. T. Nulty .....	277,921	May 22	1717	469	23	1941
Spike .....	W. H. Perry .....	270,840	Jan. 16	1253	361	23	259
Spike .....	H. T. Russell .....	278,604	May 29	2590	707	23	2101
Spike .....	W. Taylor .....	278,628	May 29	2627	717	23	2107
Spike .....	A. Wakeman, Jr .....	276,511	Apr. 24	2104	585	23	1611
Spike-extractor .....	J. Ebbert .....	290,011	Dec. 11	798	224	25	1034
Spike-extractor .....	A. P. Prout .....	271,268	Jan. 30	1777	516	23	361
Spike-extractor .....	A. P. Prout .....	276,877	May 1	440	117	23	1704
Spike-machine .....	J. H. Shepherd .....	283,674	Aug. 21	1448	406	24	776
Spike-machine .....	G. H. Waring .....	272,994	Feb. 27	1787	501	23	774
Spike-making machine .....	H. Greer .....	285,355	Sept. 18	1460	411	24	1170
Spike-puller .....	K. J. Duggan .....	285,242	Sept. 18	1331	375	24	1147
Spikes and bolts. Machine for making .....	W. Taylor .....	278,629	May 29	2628	718	23	2107
Spindle:					719		
See Bobbin-spindle. Spinning-frame spindle.							
Loom-shuttle spindle.							
Spindle and support or bearing therefor .....	J. R. Gray .....	287,279	Oct. 23	1899	519	25	364
Spindle and support therefor .....	D. H. Rice .....	275,519	Apr. 10	858	232	23	1381
Spindle-bearing .....	J. Booth .....	272,942	Feb. 27	1733	484	23	764
Spindle-bearing .....	C. G. Buttrick and T. B. Flanders .....	285,461	Sept. 25	1595	448	24	1200
Spindle-bearing .....	W. T. Carroll .....	290,397	Dec. 18	1276	358	25	1128
Spindle-bearing .....	H. P. Chase .....	285,968	Oct. 2	238	67	25	45
Spindle-bolster .....	C. G. Buttrick and T. B. Flanders .....	289,971	Dec. 11	742	210	25	1024
Spindle bolster and step combined .....	T. Watson .....	279,680	June 19	1332	370	23	2364
Spindle for spooling-machines, &c .....	P. Laffin .....	282,331	July 31	2531	694	24	461
Spinning and drawing frames. Drawing-roller for .....	G. Hill .....	270,432	Jan. 9	740	217	23	153
Spinning and rope-making machinery. Capstan or drawing-off device for .....	P. Motiron .....	281,388	July 17	1307	362	24	244
Spinning and twisting frames and traveler therefor. Ring for .....	R. White .....	290,377	Dec. 18	1249	351	25	1123
Spinning and twisting frames. Belt-shipper for .....	G. Layng .....	290,779	Dec. 25	1795	495	25	1225
Spinning and twisting machines. Stop-motion for .....	W. G. Hendee .....	279,870	June 19	1549	433	23	2403
Spinning, doubling, and twisting silk. Machine for .....	F. Seymour and A. Bannigan .....	282,123	July 31	2268	622	24	417
Spinning fibers. Machine for .....	S. Tweedale .....	283,045	Aug. 14	683	191	24	628
Spinning frame. Cap .....	T. Hall and J. Newton .....	284,549	Sept. 4	471	134	24	984
Spinning-frame flier .....	H. B. Frost .....	277,262	May 8	935	251	23	1793
Spinning-frame kink-catcher .....	F. Broadbent .....	280,567	July 3	275	75	24	50
Spinning-frame ring .....	C. L. L. Emery .....	288,932	Nov. 20	1431	394	25	773
Spinning frame. Ring .....	J. Schütt and J. Warnholtz .....	289,147	Nov. 27	1695	470	25	827
Spinning frame. Ring .....	M. E. Sullivan .....	278,197	May 22	2061	567	23	2001
Spinning-frame spindles. Bearing for .....	G. E. Taft and H. F. Woodmancy .....	284,775	Sept. 11	762	212	24	1039
Spinning-frame-spindle bearing .....	G. B. McCracken and S. Hamer .....	277,312	May 8	998	268	23	1804
Spinning-frame-spindle bolster .....	J. R. Gray .....	289,084	Nov. 27	1622	449	25	814



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &	Vol.	Page.
Spinning-frame spindle. Ring.....	J. R. Gray.....	288,230	Nov. 13	544	150	25	612
Spinning-frame spindle. Ring.....	J. R. Gray.....	289,344	Nov. 27	1932	537	25	872
Spinning-frame thread-guard. Ring.....	J. E. Prest.....	279,798	June 19	1457	408	23	2387
Spinning frames. Traveler for ring.....	J. B. Rolland.....	275,946	Apr. 17	1396	385	23	1481
Spinning frames. Yarn-tension device for ring.....	W. M. Robinson.....	283,663	Aug. 21	1429	400	24	772
Spinning-machine.....	H. C. Leonard.....	282,203	July 31	2371	652	24	433
Spinning-machine, &c.....	T. Watson.....	279,681	June 19	1333	371	23	2364
Spinning-machine flier.....	C. E. Gleason.....	288,052	Nov. 6	330	93	25	564
Spinning-machine nipper-head.....	E. S. Ormsby.....	286,727	Oct. 16	1195	322	25	232
Spinning machine. Silk.....	C. Fletcher.....	286,802	Oct. 16	1285	{ 347 348 }	25	248
Spinning-machine spindle.....	G. H. Allen.....	288,912	Nov. 20	1407	387	25	769
Spinning-machine spindle and flier.....	J., Jr., and V. Royle.....	271,521	Jan. 30	2111	607	23	421
Spinning-machine spindle-bearing.....	J. Birkenhead. (Reissue).....	10,288	Feb. 20	1605	449	23	736
Spinning-machine thread-guard.....	M. Prescott.....	285,072	Sept. 18	1129	315	24	1112
Spinning-machine thread-guide.....	H. P. Chase.....	275,020	Apr. 3	187	50	23	1257
Spinning-machine thread-guide.....	T. D. Wilmarth.....	270,169	Jan. 2	403	{ 116 117 }	23	82
Spinning machines. Bobbin for silk.....	G. P. Van Riper.....	278,673	May 29	2680	734	23	2117
Spinning machines. Saddle for top-rolls of.....	J. P. McGuinness.....	284,040	Aug. 23	1922	538	24	871
Spinning machines. Yarn-catcher and guide-eye for.....	H. P. Chase.....	270,179	Jan. 2	412	120	23	84
Spinning-mule.....	S. W. Burch and J. Gilson.....	290,742	Dec. 25	1751	484	25	1217
Spinning-mule.....	S. Jackson.....	273,997	Mar. 13	964	265	23	1007
Spinning-mule.....	S. Mock.....	288,841	Nov. 20	1321	{ 362 363 }	25	752
Spinning-mules. Feed-winding regulator for.....	E. H. Gilbert and T. H. Greenwood.....	271,447	Jan. 30	2014	581	23	404
Spinning-ring.....	J. Booth.....	272,941	Feb. 27	1731	484	23	764
Spinning-ring.....	W. K. Evans.....	272,868	Feb. 27	1642	459	23	750
Spinning-ring.....	W. P. Husband.....	273,090	Feb. 27	1913	536	23	796
Spinning-ring.....	G. Jaquith.....	280,626	July 3	346	96	24	61
Spinning-ring holders. Die for forming.....	J. L. Parker.....	275,938	Apr. 17	1388	382	23	1480
Spinning-spindle bearing.....	W. T. Carroll.....	272,522	Feb. 20	1190	332	23	603
Spiral-spring post.....	W. P. Shattuck.....	289,033	Nov. 27	1560	430	25	803
Spiral springs. Machine for making.....	O. S. and W. S. Foster.....	280,923	July 10	721	202	24	133
Spiral wire springs. Machine for making.....	H. S. Hall.....	287,827	Nov. 6	45	13, 14	25	515
Spirally-coiled wire spring.....	E. P. Fowler.....	283,880	Aug. 28	1705	481	24	832
Spirit-cisterns. Try-box and indicator for.....	J. Gnadinger, Jr.....	270,416	Jan. 9	711	210	23	148
Spirits. Process of and apparatus for rectifying.....	J. H. Thierman.....	284,087	Aug. 28	1979	551	24	880
Spittoon.....	J. Bassenmir.....	272,518	Feb. 20	1177	329	23	660
Spittoon.....	C. Bencus.....	279,633	June 19	1274	354	23	2355
Spittoon.....	S. Burnison.....	285,566	Sept. 25	1714	484	24	1222
Spittoon.....	W. H. Earls.....	271,820	Feb. 6	286	78	23	491
Spittoon.....	C. Gordon.....	287,534	Oct. 30	2214	601	25	431
Spittoon. Dental.....	E. B. Bliss.....	274,105	Mar. 20	1107	{ 305 306 }	23	1039
Spittoon for railway-cars, &c.....	G. D. Burton.....	272,206	Feb. 13	771	213	23	585
Spittoon-holder.....	W. E. Burk.....	286,113	Oct. 2	410	112	25	75
Spittoon-holder. Automatic.....	B. H. Haskins.....	286,299	Oct. 9	660	176	25	130
Splice.....	F. Grinnell.....	277,478	May 15	1195	321	23	1845
Spint.....	R. Le Baron.....	282,650	Aug. 7	210	61	24	536
Spint-cutting machine.....	C. A. Lee.....	290,439	Dec. 18	1342	372	25	1138
Spints. Machine for coupling butt-joints of.....	H. A. Kimball.....	276,142	Apr. 17	1637	451	23	1523
Split switch.....	J. H. Crowley and B. M. Temple.....	277,684	May 15	1439	388	23	1885
Spoke-extractor.....	R. N. Caughell.....	277,991	May 22	1807	493	23	1956
Spoke sanding and polishing machine. Carriage.....	S. T. Kennan.....	286,707	Oct. 16	1170	315	25	227
Spokeshave.....	A. S. Haynes.....	273,073	Feb. 27	1881	528	23	791
Spokeshave.....	G. B. Smith.....	259,453	Dec. 4	100	29	25	904
Spoke-socket.....	T. Fowler.....	286,192	Oct. 9	506	139	25	104
Spoke-socket.....	P. Lincoln.....	282,538	Aug. 7	75	22	24	513
Spoke-socket.....	C. E. Merrifield.....	272,571	Feb. 20	1251	349	23	674
Spoke socket for wheels.....	S. Carr.....	284,153	Sept. 4	32	8	24	910
Spoke-tenoning and felly-boring machine.....	H. J. Miller.....	278,995	June 5	463	127	23	2202
Spoke-tenoning and tapering machine.....	O. Allen.....	279,117	June 12	644	176	23	2243
Spoke-tenoning and throating machine.....	W. H. Doane and G. W. Bugbee.....	276,009	Apr. 17	1469	405	23	1495
Spoke-tenoning machine.....	G. H. A. Hackstadt.....	282,515	Aug. 7	45	14	24	508
Spoke-throating machine.....	P. Murphy.....	284,972	Sept. 11	993	280	24	1082
Spokes from wheel-hubs. Device for drawing out.....	S. S. Tallman.....	288,511	Nov. 13	916	250	25	675
Spokes, harrow-teeth, &c. Blank for.....	M. McDowell.....	283,410	Aug. 21	1138	322	24	718
Spool and bobbin.....	J. L. Cheney.....	290,534	Dec. 18	1474	407	25	1161
Spool-blanks and braid-roll blanks. Device for feed- ing.....	I. Dimock.....	278,320	May 29	2242	615	23	2040
Spool-case.....	H. A. Blanchard.....	276,344	Apr. 24	1901	527	23	1575
Spool or bobbin.....	C. Elihu.....	287,426	Oct. 30	2063	566	25	404
Spool turning and boring machine.....	J. W. Murray.....	280,755	July 3	512	144	24	91
Spooling-machine bobbin-holder.....	A. T. Atherton.....	270,721	Jan. 16	1111	{ 317 318 }	23	232
Spooling-machine bobbin-holder.....	J. M. Curtice.....	278,406	May 29	2356	644	23	2060
Spooling-machine thread-guide.....	R. Atherton and J. Newby.....	278,487	May 29	2455	669	23	2078
Spoon.....	E. Aldom.....	275,112	Apr. 3	302	83	23	1278
Spoon.....	H. J. Meyer.....	283,634	Aug. 21	1399	392	24	766
Spoon.....	D. G. Williams.....	280,985	July 10	800	222	24	147
Spoon and fork.....	E. Tolman.....	285,769	Sept. 25	1979	561	24	1268
Spoon and vial holder. Medicine.....	S. Pelkey.....	277,924	May 22	1721	470	23	1941
Spoon and sugar-tongs. Combined.....	J. Badger.....	274,695	Mar. 27	1877	523	23	1181
Spoon. Medicine.....	J. Moffitt.....	285,054	Sept. 18	1110	309	24	1108
Spoon-rest.....	M. A. Maeder.....	277,304	May 8	987	265	23	1802
Spoons and forks. Manufacture of.....	L. F. Dunn.....	280,918	July 10	714	{ 200 201 }	24	132
Spout and strainer.....	J. Cochran.....	283,207	Aug. 14	878	245	24	663
Spout. Sap.....	C. D. Brown.....	287,414	Oct. 30	2069	562	25	402
Spout. Sap.....	P. E. Fox.....	283,593	Aug. 21	1356	379	24	758
Spout. Sap.....	A. E. Hungerford.....	286,443	Oct. 9	833	226	25	162
Spout. Sap.....	M. J. Stark.....	279,284	June 12	829	230	23	2275

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Spring:							
See Bed-spring.	Door-spring.						
Bed-bottom spring.	Elliptic spring.						
Bicycle-spring.	Piston-head spring.						
Bird-cage spring.	Platform-spring.						
Blind and door spring.	Shade-fastening spring.						
Buggy-bow spring.	Side spring.						
Car-spring.	Side-bar spring.						
Carriage-spring.	Spirally-coiled wire spring.						
Cart-spring.	Sulky-spring.						
Chair-spring.	Vehicle-spring.						
Clock and watch spring.	Vehicle bolster-spring.						
Coat-spring.	Vehicle-seat spring.						
Corset-spring.	Vehicle side spring.						
Cultivator-spring.	Wagon-spring.						
Cushion-spring.	Wagon-bolster spring.						
	Watch-case spring.						
Spring .....	W. Buckley .....	274,715	Mar. 27	1895	{ 528 529 }	{ 23 24 }	1184
Spring and brace .....	R. S. Hunzeker .....	284,636	Sept. 11	583	164	24	1009
Spring bending and forming machine .....	C. Lewis .....	286,318	Oct. 9	689	183	25	135
Spring-bending machine .....	J. Fowler .....	276,678	May 1	186	48	23	1656
Spring equalizer. Platform .....	J. Elfrink .....	282,972	Aug. 14	588	166	24	612
Spring fabric .....	L. W. Boynton .....	284,717	Sept. 11	692	194	24	1027
Spring-motor .....	T. D. Faulkner .....	273,047	Feb. 27	1853	519	23	786
Spring-motor .....	J. Fearn .....	272,830	Feb. 20	1567	441	23	730
Spring-motor .....	G. W. Fitts .....	271,232	Jan. 30	1734	502	23	354
Spring-motor .....	G. F. Godley and H. B. Whittaker .....	278,427	May 29	2383	{ 650 651 }	{ 23 24 }	2065
Spring-motor .....	G. Jiencke .....	273,365	Mar. 6	165	46	23	862
Spring-motor .....	W. H. Neff .....	283,642	Aug. 21	1407	394	24	767
Spring-motor .....	B. B. Powell and J. I. Atkins .....	275,410	Apr. 10	717	191	23	1358
Spring-motor .....	D. Shive .....	279,227	June 19	1496	418	23	2393
Spring-motor for vehicles .....	D. M. Pfautz .....	282,919	Aug. 7	524	148	24	593
Spring-pin .....	W. H. Fox .....	270,410	Jan. 9	704	209	23	147
Spring plates. Machine for bending the eyes of elliptic .....	J. S. Pessenger .....	285,922	Oct. 2	184	53	25	36
Spring-roller .....	W. S. Laycock .....	271,339	Jan. 30	1870	542	23	377
Spring-roller. Balanced .....	J. H. Russ .....	277,429	May 8	1131	305	23	1827
Spring-rollers. Stop for .....	O. D. Woodbury .....	285,772	Sept. 25	1984	561	24	1269
Spring-seat .....	W. H. Bate .....	288,608	Nov. 13	1031	283	25	696
Spring-setting machine .....	J. Creagan .....	285,235	Sept. 18	1325	373	24	1146
Spring-shackle .....	C. W. Saladee .....	277,162	May 8	828	218	23	1774
Spring-shackle-link .....	J. D. Robertson .....	290,271	Dec. 18	1116	314	25	1099
Spring-shackle. Vehicle .....	W. J. Moran .....	281,547	July 17	1505	413	24	277
Spring-testing machine .....	W. Harby .....	277,898	May 22	1694	462	23	1937
Spring-washer for locking nuts .....	T. M. Erwin .....	279,088	June 5	585	160	23	2223
Springs. Attaching .....	J. P. Knobloch .....	273,695	Mar. 6	584	155	23	934
Springs. Crank-plate for bolster .....	J. Smith .....	287,335	Oct. 23	1969	537	25	376
Springs. Die for bending eyes for elliptical .....	D. P. Clark .....	285,231	Sept. 18	1318	371	24	1145
Springs. Machine for coiling and tempering .....	G. Stites .....	280,529	July 3	233	{ 61 62 63 }	{ 24 25 26 }	42
Springs. Machine for forming .....	C. F. Shoemaker and E. J. Hess .....	272,912	Feb. 27	1697	475	23	758
Springs. Saddle for vehicle .....	J. P. Callan .....	280,910	July 10	704	198	24	131
Springs. Shaped bar for .....	R. Vose .....	285,324	Sept. 18	1422	402	24	1164
Sprinkler:							
See Lawn-sprinkler.	Water-sprinkler.						
Revolving sprinkler.							
Sprinkler .....	A. S. Pennington and E. Beggs. (Reissue.) .....	10,310	Apr. 10	1213	332	23	1441
Sprocket for rope and similar belts .....	J. Mills .....	276,619	May 1	91	25	23	1643
Spur for foundry use .....	J. H. Depew .....	275,332	Apr. 3	529	158	23	1326
Spur .....	A. Buermann .....	272,026	Feb. 13	551	149	23	548
Spur .....	A. Buermann .....	272,027	Feb. 13	552	149	23	548
Spur .....	A. Buermann. (Reissue) .....	10,321	May 1	597	156	23	1728
Square .....	C. W. Green .....	281,761	July 24	1797	490	24	332
Square and bevel. Center .....	J. W. Romans .....	271,128	Jan. 23	1605	461	23	323
Square and bevel. Try .....	J. K. Minich .....	287,847	Nov. 6	69	21	25	519
Square and scale-holder. Folding .....	W. H. Goldsberry .....	285,405	Sept. 25	1528	430	24	1188
Square. Bevel .....	M. Farley .....	285,601	Sept. 25	1763	499	24	1231
Square. Carpenter's .....	E. Prescott .....	280,398	July 3	71	19	24	15
Square. Draftsman's T .....	A. Hitchcock .....	274,194	Mar. 20	1216	335	23	1059
Square. Dress .....	B. T. Phelps .....	279,979	June 26	1685	473	23	2432
Square. Miter and framing .....	J. H. Bolles .....	288,613	Nov. 20	1037	286	25	703
Square. Siding-hook .....	P. Delany .....	280,588	July 3	304	84	24	54
Square. T .....	J. Gardam .....	255,404	Sept. 25	1527	430	24	1188
Square. T .....	J. Weidenmann .....	282,248	July 31	2422	666	24	443
Square. Try .....	R. Hodges .....	288,807	Nov. 20	1281	351	25	745
Squibs. Seal for miners' .....	J. R. Powell .....	288,484	Nov. 13	886	241	25	670
Stable .....	G. A. Knight .....	285,759	Sept. 25	1961	555	24	1265
Stacking railway-rails, lumber, &c. Device for .....	S. J. Guscott .....	275,763	Apr. 10	1173	{ 321 322 }	{ 23 24 }	1434
Stair-pad .....	H. W. Mather .....	289,020	Dec. 11	687	192	25	1013
Stair-pad .....	W. Warren .....	281,325	July 17	1235	342	24	231
Stair-rod securer .....	F. Kingston .....	271,083	Jan. 23	1558	448	23	316
Stairs. Iron and illuminating .....	F. H. Jackson .....	269,863	Jan. 2	51	16	23	12
Stalk-cutter .....	E. T. Cook .....	281,460	July 17	1404	386	24	260
Stalk-cutter .....	J. J. Coyle .....	287,248	Oct. 27	1862	510	25	356
Stalk-cutter .....	G. Duncan and J. R. Evens .....	281,621	July 17	1606	439	24	293
Stalk-cutter .....	L. S. and M. J. B. Early .....	280,590	July 3	305	85	24	55
Stalk-cutter .....	J. J. Snider and W. H. O'Bannon .....	288,374	Nov. 13	743	202	25	644



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Stalk-cutter .....	H. J. Springer .....	270,994	Jan. 23	1449	{ 417 418	23	298
Stalk-cutter and soil-pulverizer. Combined .....	J. Lafeber .....	275,501	Apr. 10	834	226	23	1377
Stamp. Branding .....	S. E. Adamson .....	279,116	June 12	643	176	23	2243
Stamp-canceler .....	A. Landon .....	283,902	Aug. 28	1730	488	24	836
Stamp-canceling device .....	T. McCabe .....	274,627	Mar. 27	1794	499	23	1166
Stamp case and attacher .....	J. S. Miller .....	279,786	June 19	1443	404	23	2385
Stamp. Dating .....	R. S. Robson .....	279,815	June 19	1477	414	23	2390
Stamp for crushing ore. Steam .....	E. D. Leavitt, Jr .....	275,224	Apr. 3	438	{ 120 121 122	23	1301
Stamp. Hand .....	H. C. Dorr .....	283,583	Aug. 21	1346	376	24	756
Stamp. Hand .....	C. A. Klinkner .....	289,844	Dec. 11	595	165	25	998
Stamp. Hand .....	W. B. Purvis .....	273,149	Feb. 27	1982	{ 557 558	23	809
Stamp. Hand .....	W. W. Sawyer .....	287,177	Oct. 23	1769	485	25	341
Stamp. Hand .....	L. K. Scottford .....	284,243	Sept. 4	113	30	24	923
Stamp. Hand .....	G. Van Zandt .....	288,385	Nov. 13	761	205	25	647
Stamp. Hand .....	W. D. Wesson .....	286,884	Oct. 16	1390	381	25	266
Stamp holder. Postage .....	I. W. Heysinger .....	284,737	Sept. 11	714	200	24	1032
Stamp-mill .....	J. C. Butterfield .....	285,388	Sept. 25	1507	424	24	1184
Stamp-mill .....	F. W. Hall .....	276,582	May 1	52	15	23	1636
Stamp-mill cam .....	R. H. Butler, W. C. Mount, and J. W. Alexander .....	276,350	Apr. 24	1907	529	23	1576
Stamp-mill mortar .....	J. C. Butterfield .....	285,391	Sept. 25	1510	425	24	1185
Stamp or hammer. Steam .....	N. W. Condict, Jr .....	275,358	Apr. 10	641	{ 171 172 173	23	1344
Stamp or hammer. Steam .....	N. W. Condict, Jr .....	275,359	Apr. 10	642	{ 172 173	23	1344
Stamp or hammer. Steam .....	N. W. Condict, Jr .....	275,360	Apr. 10	645	173	23	1344
Stamp. Pocket hand .....	P. J. Patterson .....	285,837	Oct. 2	66	20	25	14
Stamp. Self-inking printing .....	R. H. Smith .....	288,674	Nov. 20	1117	307	25	716
Stamp. Steam-power .....	W. S. Sharpneck .....	272,485	Feb. 20	1136	319	23	653
Stamp. Steam-power .....	W. S. Sharpneck .....	279,984	June 26	1691	475	23	2433
Stamp-sticker .....	F. C. Graves .....	270,948	Jan. 23	1388	401	23	289
Stamp. Time .....	W. H. Gillette .....	289,404	Dec. 4	38	11	25	893
Stamps. Dating-box for self-inking hand .....	G. Van Zandt .....	289,475	Dec. 4	125	36	25	908
Stamps, &c. Device for affixing postage .....	C. A. Zeising and H. A. Wehmann, Jr .....	279,070	June 5	561	154	23	2319
Stamps. Type-holding attachment for hand .....	L. H. Moise .....	280,652	July 3	376	105	24	66
Stamping, &c. Composition for dry .....	F. L. Bird .....	288,199	Nov. 13	509	25	25	605
Stamping-die .....	P. Ely .....	275,897	Apr. 17	1342	370	23	1472
Stamping-machine .....	W. N. Wheelless .....	289,047	Nov. 27	1578	436	25	806
Stamping-machine. Rotary .....	P. Drinkaus, Jr .....	283,871	Aug. 28	1696	478	24	830
Stamping machinery .....	N. W. Condict, Jr .....	275,355	Apr. 10	638	{ 170 171	23	1343
Stanchion. Cattle .....	M. G. Wood .....	290,620	Dec. 18	1581	435	25	1180
Stand:							
See Advertising-stand. Perfumery-stand.							
Book show-stand. Photographic-camera stand.							
Bottle-stand. stand.							
Bottle and flask Pitcher-stand.							
stand. Railway-switch stand.							
Camera-stand. Sample-stand.							
Carboy-stand. Sewing-machine stand.							
Christmas-tree stand. Sewing-machine spool-stand.							
Cuspidor-stand. Show-stand.							
Flower-stand. Stove-stand.							
Garment-stand. Swinging stand.							
Hat and bonnet Switch-stand.							
stand. Toilet-stand.							
Horseshoeing-stand. Tub-stand.							
Ironing-stand. Type-case stand.							
Kettle-stand. Wash-stand.							
Lathe-stand. Water-cooler stand.							
Music-stand.							
Newspaper-stand.							
Stand and rack for exhibiting goods .....	A. Richards, Sr .....	279,810	June 19	1471	412	23	2389
Stand-pipe .....	J. B. Collin .....	271,195	Jan. 23	1690	488	23	337
Stand-pipe and fire-escape .....	J. T. Cowles .....	273,032	Feb. 27	1838	514	23	783
Stand-pipe and fire-escape. Combined .....	W. and J. M. Heffner .....	282,314	July 31	2502	688	24	456
Stand-pipe for buildings .....	J. T. Cowles .....	273,031	Feb. 27	1837	514	23	783
Standard-clamp .....	H. C. Stahl .....	270,855	Jan. 16	1266	365	23	262
Staple .....	S. Frost .....	274,481	Mar. 27	1619	449	23	1135
Staple and lock for bag-frames .....	O. Reichenbach. (Reissue) .....	10,383	Sept. 18	1481	417	24	1173
Staple-fastener .....	G. W. McGill .....	285,640	Sept. 25	1808	514	24	1240
Staple-puller .....	H. A. Gore .....	277,420	May 8	1120	300	23	1825
Staples. Implement for driving .....	W. Young, M. Neil, and C. M. Wetzel .....	288,191	Nov. 6	489	136	25	593
Staples. Machine for forming .....	T. S. Bayles .....	287,087	Oct. 23	1655	454	25	319
Staples. Machine for forming .....	W. A. Root .....	277,615	May 15	1359	366	23	1871
Staples. Machine for inserting and clinching .....	I. W. Heysinger .....	274,941	Apr. 3	73	20	23	1238
Staples. Machine for making .....	S. E. Mower .....	290,994	Dec. 25	2076	{ 571 572	25	1271
Stapling-machine .....	C. Kittredge .....	282,533	Aug. 7	69	21	24	512
Starch .....	J. Günther .....	276,806	May 1	352	23	23	1688
Starch and other valuable substances from waste water in the manufacture of starch, &c. Process of and apparatus for recovering .....	T. A. Jebb .....	270,439	Jan. 9	746	219	23	154
Starch. Apparatus for settling and molding .....	W. Liess .....	275,394	Apr. 10	700	187	23	1354
Starch, dextrine, glucose, sirup, and grape-sugar. Production of .....	J. Duff .....	270,210	Jan. 9	456	23	23	100
Starch, dextrine, glucose, sirup, grape-sugar, or spirits, beer, and vinegar. Method of and apparatus for manufacturing .....	J. Duff .....	270,894	Jan. 23	1318	380	23	277
Starch from wheat, corn, &c. Manufacture of .....	T. P. Kingsford .....	280,044	June 26	1774	23	23	2448

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Starch into blocks. Process of and apparatus for molding	W. Liess and M. Maher	284,447	Sept. 4	350	97	24	963
Starch. Manufacture of	L. P. Best	278,490	May 29	2459	{ 670 671 }	23	2078
Starch. Manufacture of	J. Polson and J. M. Harley	285,067	Sept. 18	1124	.....	24	1111
Starch, &c. Manufacturing	E. S. Renwick	272,324	Feb. 13	910	255	23	610
Starch. Saccharification of	F. P. Stiker	270,260	Jan. 9	513	150	23	110
Starch. Separating	T. H. Müller and J. W. Decastro	273,128	Feb. 27	1954	{ 548 549 }	23	804
Starch-separator	W. Allen	275,320	Apr. 3	558	152	23	1321
Starch-separator	G. S. Graves	270,304	Jan. 9	563	166	23	120
Starch-separator	F. H. Kimball	275,340	Apr. 3	602	162	23	1323
Starch-table	W. Allen	275,318	Apr. 3	555	151	23	1320
Starch-troughs. Adjustable dam for	F. O. Matthiessen	273,572	Mar. 6	433	116	23	908
Starch-washing machine	W. Allen	273,319	Apr. 3	556	152	23	1321
Starching goods	C. F. Scattergood	284,983	Sept. 11	1004	283	24	1084
Starching-machine	E. B. Hurd	285,901	Oct. 2	158	44	25	31
Station-indicator	C. O. Ball	278,489	May 29	2458	670	23	2078
Station-indicator	E. S. Boynton	279,478	June 12	1089	301	23	2315
Station-indicator	W. W. Campbell	287,094	Oct. 23	1666	457	25	321
Station-indicator	W. C. Collyer	288,162	Nov. 6	453	127	25	587
Station-indicator	S. Forrester	274,927	Apr. 3	51	{ 13 14 15 }	23	1234
Station-indicator	A. B. Gill	281,684	July 24	1689	460	24	312
Station-indicator	H. Koehler	277,745	May 15	1503	408	23	1896
Station-indicator	G. M. Lane	288,644	Nov. 20	1076	296	25	710
Station-indicator	B. McCrary	274,355	Mar. 20	1430	392	23	1095
Station-indicator	J. A. McDermott	281,383	July 17	1300	360	24	243
Station-indicator	F. C. McDonald	285,289	Sept. 18	1382	391	24	1157
Station-indicator	T. Melrose	285,499	Sept. 25	1637	{ 460 461 }	24	1208
Station-indicator	I. N. Phillips	285,158	Sept. 18	1237	347	24	1130
Station-indicator	G. P. Rasck	271,985	Feb. 6	492	133	23	525
Station-indicator	G. F. Robertson	279,436	June 12	1039	288	23	2308
Station-indicator	S. Stewart	288,379	Nov. 13	748	203	25	645
Station-indicator	W. H. Waddell	288,518	Nov. 13	923	252	25	676
Station-indicator	J. W. Watts	281,215	July 10	1087	299	24	199
Station-indicator. Railway	P. Price	288,112	Nov. 6	399	113	25	576
Station-indicators. Device for operating	S. Forrester	290,562	Dec. 18	1508	{ 416 417 }	25	1167
Stationery-box	A. G. Brown	275,578	Apr. 10	927	252	23	1393
Stave-baling machine	C. A. Harris	287,672	Oct. 30	2411	650	25	468
Stave-crozing machine	F. Headen	276,398	Apr. 24	1968	545	23	1587
Stave-cutter	G. W. McKim	276,262	Apr. 24	1784	496	23	1556
Stave-cutting machine	F. Witzmann	271,290	Jan. 30	1809	{ 524 525 }	23	366
Stave dog. Barrel	H. Schwarzwalder	289,453	Dec. 4	94	27	25	903
Stave-finishing machine	E. Hibbard	281,066	July 10	896	249	24	165
Stave-jointer	J. F. and W. C. Vogt	288,517	Nov. 13	922	252	25	676
Stave-jointing machine	T. Bruno	271,682	Feb. 6	116	32	23	460
Stave-jointing machine	H. Wilde	271,009	Jan. 23	1466	{ 421 422 }	23	301
Stave-jointing machines. Knife for	H. A. Crossley	269,831	Jan. 2	16	6	23	5
Stave-machine	P. Flanders	270,772	Jan. 16	1172	335	23	244
Stave-machine. Barrel	W. H. Griffiths	273,274	Mar. 6	35	11	23	840
Stave-shaping machine. Barrel	J. B. Hoyerling	283,886	Aug. 28	1712	422	24	833
Stay. Garment	C. Erlanger	279,549	June 19	1178	326	23	2338
Stay. Garment	T. B. Farrington	287,916	Nov. 6	158	46	25	535
Steam and air engine	H. E. Depp	290,405	Dec. 18	1282	360	25	1129
Steam and air engine	F. McMellon	273,376	Mar. 6	182	49	23	865
Steam and heating air. Apparatus for reheating exhaust.	L. Hussey	276,568	May 1	57	16	23	1638
Steam. Apparatus for reheating exhaust.	L. Hussey	279,247	June 12	787	217	23	2268
Steam. Apparatus for superheating	L. Block	275,571	Apr. 10	920	249	23	1391
Steam-hath cabinet	B. Galland	270,564	Jan. 9	906	261	23	186
Steam-boiler	G. H. Asire	289,796	Dec. 11	529	{ 147 148 }	25	985
Steam-boiler	J. Bergmann	273,338	Mar. 6	127	36	23	855
Steam-boiler	V. W. Blanchard	289,962	Dec. 11	729	206	25	1021
Steam-boiler	A. P. Blatchley	289,610	Dec. 4	297	83	25	940
Steam-boiler	J. A. M. Cox	279,920	June 26	1613	453	23	2420
Steam-boiler	G. W. Dickie	275,471	Apr. 10	802	216	23	1371
Steam-boiler	P. F. Dundon	281,037	July 10	861	239	24	159
Steam-boiler	P. Fitzgibbons	274,301	Mar. 20	1360	373	23	1083
Steam-boiler	P. Fitzgibbons	290,762	Dec. 25	1774	490	25	1221
Steam-boiler	A. Ford	272,225	Feb. 13	796	221	23	590
Steam-boiler	R. Garstang	281,051	July 10	877	244	24	162
Steam-boiler	D. M. Graham	286,695	Oct. 16	1157	311	25	225
Steam-boiler	D. Groesbeck	284,415	Sept. 4	313	87	24	956
Steam-boiler	T. Holland	278,963	June 5	429	117	23	2197
Steam-boiler	L. Hoppe	287,832	Nov. 6	52	16	25	516
Steam-boiler	G. Kingsley	282,330	July 31	2531	693	24	461
Steam-boiler	W. J. P. Kingsley	289,661	Dec. 4	359	101	25	950
Steam-boiler	W. R. Kirk	279,335	June 12	993	276	23	2300
Steam-boiler	W. R. Kirk	279,396	June 12	994	276	23	2301
Steam-boiler	F. F. Landis	271,477	Jan. 30	2059	593	23	411
Steam-boiler	J. E. Leadley	289,282	Nov. 27	1856	515	25	858
Steam-boiler	H. H. Lindemuth	283,497	Aug. 21	1249	{ 351 352 }	24	737
Steam-boiler	J. Oldham and B. N. Payne	272,578	Feb. 20	1257	350	23	674
Steam-boiler	B. N. and D. W. Payne	277,426	May 8	1126	302	23	1826
Steam-boiler	A. A. Plummer	285,923	Oct. 2	185	53	25	36
Steam-boiler	G. A. Porter	273,387	Mar. 6	196	53	23	867



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g	Vol.	Page.
Steam-boiler	N. W. Pratt	275,787	Apr. 10	1198	329	23	1439
Steam-boiler	N. W. Pratt	275,788	Apr. 10	1200	329	23	1439
Steam-boiler	N. P. Stevens	270,915	Jan. 23	1347	388	23	282
Steam-boiler	H. Stollwerck	272,347	Feb. 13	940	261	23	615
Steam-boiler	H. Stollwerck	266,864	Oct. 16	1362	373	25	261
Steam-boiler	H. H. Snplee	271,541	Jan. 30	2134	614	23	424
Steam-boiler	J. C. Titus	273,640	Mar. 6	511	137 138	23	921
Steam-boiler	J. W. Van Dyke	289,322	Nov. 27	1905	529 530	25	867
Steam-boiler and crucible-furnace. Combined	A. Riegler	280,954	July 10	766	212	24	140
Steam-boiler and furnace	A. C. Engert	281,852	July 24	1915	523	24	352
Steam-boiler. Base-burning	J. Rowe	286,076	Oct. 2	365	101	25	67
Steam-boiler cleaner	A. Lowcock and J. Taylor	287,038	Oct. 23	1594	439	25	308
Steam-boiler cleaner	C. Reiser	272,770	Feb. 20	1495	420	23	717
Steam-boiler-cleaning apparatus	T. C. Purves	276,627	May 1	104	28	23	1645
Steam-boiler covering	E. A. Hayes	280,470	July 3	173	46	24	32
Steam-boiler fire-box	E. E. Carter	284,610	Sept. 11	553	157	24	1004
Steam-boiler for gas-generators	J. Haulon, J. E. Leadley, and S. Gibbs	273,522	Mar. 6	360	96	23	896
Steam-boiler for traction-engines	L. Lillard	284,134	Aug. 28	2040	567	24	891
Steam-boiler heater	H. M. Young	285,453	Sept. 25	1586	446	24	1198
Steam-boiler heater and filter	T. R. Butman	281,013	July 10	831	231	24	154
Steam-boiler indicator and alarm	E. J. Coffin	285,798	Oct. 2	19	6	25	6
Steam-boiler or generator	C. Rummann	271,523	Jan. 30	2113	608	23	421
Steam-boiler safety-seam	J. R. Robinson	282,120	July 31	2263	620	24	416
Steam-boiler. Sectional	W. H. Hutchins	288,178	Nov. 6	477	132	25	590
Steam-boiler sediment-collector	J. Spaulding	276,493	Apr. 24	2081	578	23	1607
Steam-boiler. Straw-burning	W. R. Michener	272,453	Feb. 20	1094	309	23	646
Steam-boiler superheater	V. W. Blanchard	289,964	Dec. 11	735	208	25	1023
Steam-boiler-tube cleaner	I. L. Stover	270,614	Jan. 16	973	231	23	207
Steam-boiler-tube closer	G. C. Hicks	287,931	Nov. 6	177	50, 51	25	538
Steam-boiler. Vertical	J. A. Langdon	281,890	July 24	1963	537	24	361
Steam-boiler. Vertical	A. H. B. Sharpe and F. Palmer	283,672	Aug. 21	1446	405	24	775
Steam-boilers. Apparatus for filtering and purifying water in	N. A. T. Jones	286,705	Oct. 16	1168	314	25	227
Steam-boilers. Automatic safety attachment for	C. Case	269,827	Jan. 2	12	4	23	4
Steam-boilers. Combustion-chamber for	J. Scott	270,490	Jan. 9	802	234	23	166
Steam-boilers, &c. Covering for	G. Kelly	273,689	Mar. 6	578	153	23	933
Steam-boilers, &c. Electric alarm for	H. W. Page and H. Carley	290,161	Dec. 11	898	255	25	1052
Steam-boilers. Retaining heat in	G. C. Hicks	287,829	Nov. 6	48	14	25	516
Steam-boilers. Setting	W. J. F. Liddell	271,482	Jan. 30	2065	594 595	23	413
Steam-cylinder lubricator	T. A. Naylor	286,473	Oct. 9	863	234	25	167
Steam-engine	W. T. Baker	280,710	July 3	445	127	24	80
Steam-engine, &c.	A. M. Barton and P. Z. Davis	290,167	Dec. 11	977	276	25	1067
Steam-engine	C. Baumgarten	283,558	Aug. 21	1317	368	24	750
Steam-engine	B. Brazelle	271,781	Feb. 6	236	66	23	481
Steam-engine	F. D. Cummer	281,843	July 24	1901	518 519 520	24	351
Steam-engine	A. Eberhard	290,871	Dec. 25	1905	526	25	1244
Steam-engine	H. Hartig	277,897	May 22	1693	462	23	1937
Steam-engine	W. E. Hill	277,034	May 8	657	171	23	1744
Steam-engine	A. W. Jackson	285,271	Sept. 18	1364	384	24	1154
Steam-engine	A. W. Jackson and C. S. White	276,970	May 1	569	148	23	1723
Steam-engine	S. E. Jarvis	275,389	Apr. 10	692	184	23	1353
Steam-engine	J. Kaiser	285,904	Oct. 2	161	45, 46	25	32
Steam-engine	H. and W. Monk	273,126	Feb. 27	1950	547	23	803
Steam-engine	J. W. Nystrom	272,306	Feb. 13	826	248	23	607
Steam-engine	J. F. Pond	286,482	Oct. 9	873	237	25	169
Steam-engine	F. J. Roth	271,741	Feb. 6	186	51	23	472
Steam-engine	A. Schnier and S. R. Smith	276,479	Apr. 24	2064	573	23	1604
Steam-engine	J. B. Shaffer	273,171	Feb. 27	2008	565	23	813
Steam-engine	E. Tandler	278,062	May 22	1886	516	23	1970
Steam-engine	J. Walrath	281,809	July 24	1862	509	24	343
Steam-engine	W. N. Willis	288,684	Nov. 20	1131	311	25	719
Steam-engine	J. C. Wilson	280,703	July 3	439	125	24	78
Steam-engine and electric generator. Combined	L. G. Woolley	286,985	Oct. 16	1521	418	25	288
Steam-engine bed-plate	J. H. Elward	279,924	June 26	1617	454	23	2421
Steam-engine. Compound	M. Brunell	289,065	Nov. 27	1600	443	25	810
Steam-engine. Compound	M. C. Bullock	274,437	Mar. 20	1532	421 422	23	1113
Steam-engine. Compound	D. N. Melvin	270,552	Jan. 9	892	258	23	184
Steam-engine. Compound balanced	J. R. Wells	278,841	June 5	229	67, 68	23	2162
Steam-engine crank-pin	A. K. Eddowes	286,404	Oct. 9	788	212	25	153
Steam-engine crank-shaft	L. Skinner	276,910	May 1	480	126	23	1710
Steam-engine cylinder	W. A. Clarke	270,875	Jan. 16	1290	372	23	266
Steam-engine cylinders. Device for supplying steam to	E. T. Davies	274,286	Mar. 20	1339	369	23	1080
Steam-engine exhaust-nozzle	W. A. Clarke	270,743	Jan. 16	1139	327	23	238
Steam-engine for mining purposes	B. Yoch	286,105	Oct. 2	400	110	25	73
Steam-engine indicator	L. Stanek	280,256	June 26	2015	566	23	2491
Steam-engine indicator. Mechanism for indicating the longitudinal expansion of the operative cord of a	G. W. Brown	284,176	Sept. 4	21	6	24	908
Steam-engine-indicator scale	J. W. See	282,931	Aug. 7	537	132	24	596
Steam-engine link-box	H. Blood	278,766	June 5	110	31	23	2142
Steam-engine lubricator	J. H. Wiehl	290,838	Dec. 25	1858	514	25	1235
Steam-engine. Oscillating	J. E. Smith	290,713	Dec. 25	1712	472	25	1210
Steam-engine. Portable	J. Walrath	284,344	Sept. 4	226	64	24	942
Steam-engine. Portable	W. C. Wolfe	284,701	Sept. 11	669	188	24	1023
Steam-engine reversing-gear	W. A. Clarke	272,648	Feb. 20	1345	377 378	23	691

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr's	Vol.	Page.
Steam-engine-reversing gear .....	M. E. Hershey .....	285,812	Oct. 2	38	13	25	9
Steam-engine-reversing gear .....	F. Rock .....	273,609	Mar. 6	474	128	23	915
Steam-engine-reversing mechanism .....	J. Frazier .....	271,327	Jan. 30	1855	538	23	374
Steam-engine separator. Portable .....	J. H. Elward .....	275,615	Apr. 10	984	266	23	1402
Steam-engine. Superheating .....	J. E. Sinclair .....	279,453	June 12	1056	292	23	2311
Steam-escape. Cylinder-cock .....	J. H. Porter .....	290,924	Dec. 25	1971	544	25	1255
Steam-generator .....	C. Ahrens .....	287,211	Oct. 23	1815	498	25	348
Steam-generator .....	B. T. Babbitt .....	271,397	Jan. 30	1947	563	23	392
Steam-generator .....	J. Brandl .....	288,688	Nov. 20	1136	313		720
Steam-generator .....	W. Cooper .....	283,756	Aug. 28	1563	564	24	808
Steam-generator .....	A. H. Crockford .....	282,172	July 31	2331	643		427
Steam-generator .....	J. E. Culver .....	280,989	Dec. 11	766	216	25	1029
Steam-generator .....	H. W. Ellicott .....	289,818	Dec. 11	556	156	25	990
Steam-generator .....	E. F. Gordon and H. Hobbs .....	271,329	Jan. 30	1859	539	23	375
Steam-generator .....	C. Gorton .....	280,605	July 3	322	90	24	57
Steam-generator .....	C. Gorton .....	280,606	July 3	323	90	24	57
Steam-generator .....	D. M. Graham .....	287,824	Nov. 6	43	13	25	515
Steam-generator .....	S. L. Hill .....	284,204	Sept. 4	61	17	24	915
Steam-generator .....	G. W. Lutz .....	288,584	Nov. 13	1000	275	25	691
Steam-generator .....	W. P. Magreevy .....	277,844	May 15	1624	442	23	1918
Steam-generator .....	G. W. McAllister .....	287,452	Oct. 30	2115	575	25	410
Steam-generator .....	J. Miller and D. Howarth .....	273,579	Mar. 6	441	118	23	910
Steam-generator .....	L. H. Page .....	277,848	May 15	1628	443	23	1919
Steam-generator .....	S. Smith .....	289,317	Nov. 27	1892	527	25	865
Steam-generator .....	J. C. Stead .....	274,046	Mar. 13	1018	279	23	1017
Steam-generator .....	H. P. and R. E. Tilton .....	272,798	Feb. 20	1530	431	23	723
Steam-generator .....	J. W. Van Dyke .....	276,735	May 1	268	68	23	1670
Steam-generator .....	J. W. Van Dyke .....	289,182	Nov. 27	1737	483	25	834
Steam-generator .....	J. W. Van Dyke .....	289,183	Nov. 27	1739	483	25	835
Steam-generator .....	J. W. Van Dyke .....	290,503	Dec. 18	1427	395		1153
Steam-generator .....	J. R. Vance and S. D. Parker .....	282,808	Aug. 7	398	113	24	570
Steam-generator .....	R. Venator and J. Weller .....	282,243	July 31	2418	665	24	442
Steam-generator .....	S. Waterhouse .....	288,524	Nov. 13	928	254	25	677
Steam-generator .....	D. Wilde .....	275,449	Apr. 10	769	205	23	1365
Steam-generator. Flue and tubular .....	H. C. Rew .....	290,997	Dec. 25	1979	546	25	1256
Steam-generator. Magazine or base-burning .....	W. H. Wilson .....	287,603	Oct. 30	2323	628	25	451
Steam-generator. Portable .....	A. W. Eldredge .....	282,618	Aug. 7	172	52	24	530
Steam-generator. Sectional .....	W. Burlingame .....	271,031	Jan. 23	1488	429	23	304
Steam-generator. Sectional .....	D. Renshaw .....	274,824	Mar. 27	2023	563	23	1206
Steam-generator. Sectional .....	W. P. Thompson .....	281,946	July 24	2027	555	24	372
Steam-generators. Fuel-magazine for .....	G. Mehrling .....	285,828	Oct. 2	57	17	25	12
Steam-heater .....	W. B. Dunning. (Reissue) .....	10,391	Oct. 9	988	266	25	190
Steam in street mains and branches. Method of and apparatus for obtaining a high-pressure motor from low pressure of .....	W. S. Colwell .....	274,175	Mar. 20	1196	329		1055
Steam-motor boiler .....	J. Schreiber .....	281,401	July 17	1326	367	24	246
Steam-motor engine .....	H. F. Gaskill .....	282,071	July 31	2187	601	24	405
Steam-pipe and boiler covering .....	L. Aldrich .....	289,744	Dec. 4	468	132	25	968
Steam-pipe clothing. Cap for .....	P. Holt .....	276,044	Apr. 17	1514	417	23	1501
Steam-pipes, &c. Casing for .....	J. Riely .....	282,368	July 31	2578	707	24	470
Steam-pipes, &c. Covering for .....	J. D. Pierce. (Reissue) .....	10,375	Aug. 28	2078	577	24	897
Steam-pipes, &c. Covering for .....	J. D. Pierce. (Reissue) .....	10,376	Aug. 28	2079	577	24	897
Steam-pressure-gage trap .....	J. D. Lloyd .....	281,533	July 17	1492	410	24	275
Steam-shovel .....	F. C. Starke and P. J. Crowley .....	271,939	Feb. 6	425	117	23	516
Steam-shovels. Method of and device for the application of cable-power to .....	F. C. Starke and P. J. Crowley .....	272,790	Feb. 20	1519	428	23	721
Steam street-mains. Connection-well for .....	E. Brooks .....	275,129	Apr. 3	333	91	23	1283
Steam-superheater .....	W. H. Burnet .....	278,311	May 29	2233	612	23	2038
Steam-trap .....	J. H. Banks .....	271,400	Jan. 30	1953	565	23	392
Steam-trap .....	G. B. McCracken .....	277,045	May 8	671	175	23	1747
Steam-trap .....	J. Morehead .....	282,353	July 31	2561	702	24	467
Steam-trap .....	R. Newton .....	282,558	Aug. 7	105	31, 32	24	518
Steam-trap .....	J. A. Trane .....	286,506	Oct. 9	906	245	25	175
Steam-trap .....	F. H. West .....	281,592	July 17	1563	428	24	286
Steam-trap .....	W. O. White and W. D. Huse .....	278,381	May 29	2328	637	23	2055
Steam-trap and boiler-feeder .....	R. W. Clark .....	289,368	Dec. 4	18	6	25	890
Steam-trap and boiler-feeder .....	J. Collis .....	270,638	Jan. 16	1003	289	23	212
Steam-trap and boiler-feeder .....	F. H. West .....	276,107	Apr. 17	1593	440	23	1515
Steam-trap. Drain and returning .....	J. H. Blessing .....	278,390	May 29	2337	639	23	2057
Steam. Utilization of exhaust .....	M. Honigsmann .....	287,937	Nov. 6	186	53	25	540
Steam. Utilizing exhaust .....	D. Renshaw .....	274,974	Apr. 3	117	33	23	1245
Steam. Utilizing exhaust .....	D. Renshaw .....	274,975	Apr. 3	118	33	23	1246
Steam. Utilizing exhaust .....	D. Renshaw .....	282,773	Aug. 7	360	101	24	563
Steam-washer .....	O. J. Smith and R. J. Johnson .....	285,934	Oct. 2	202	57		39
Steamboat-staging .....	J. B. Mooney .....	290,342	Dec. 18	1205	338	25	1115
Steamer and evaporator. Stock-foed .....	C. F. Farrar and A. Bowman .....	279,142	June 12	675	186	23	2249
Steamer-chair. Adjustable .....	F. G. Johnson and J. H. Hayward .....	271,857	Feb. 6	330	91	23	499
Steamer. Cooking .....	J. M. Johnson .....	287,292	Oct. 23	1918	524	25	367
Steamer. Culinary .....	I. H. Swink .....	282,587	Aug. 7	137	41	24	524
Steamer. Domestic .....	W. B. Allen .....	272,015	Feb. 13	538	145	23	545
Steaming jumbles, crackers, &c., before baking. Machine for .....	L. J. Oberle and J. Janggen .....	281,201	July 10	1068	294	24	196
Steel. Apparatus for compressing liquid .....	J. F. Bennett .....	282,041	July 31	2143	588	24	397
Steel. Apparatus for making Bessemer .....	T. H. Burridge .....	277,831	May 15	1607	439	23	1916
Steel by the open-hearth process. Manufacture of .....	W. A. O. Wuth .....	279,473	June 12	1081	.....	23	2315
Steel. Compound for tempering .....	J. T. Mercer .....	278,250	May 22	2127	.....	23	2012
Steel. Compound for the manufacture of .....	E. Coyle .....	288,979	Nov. 27	1494	.....	25	792
Steel ingots for rolling. Preparing .....	W. Hainsworth .....	272,682	Feb. 20	1381	388	23	607
Steel. Manufacture of .....	W. W. Chipman .....	287,235	Oct. 23	1847	.....	25	354



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Steel. Manufacture of.....	J. Giers.....	283,735	Aug. 21	1524	430	24	790
Steel. Manufacture of.....	H. M. Nichols.....	276,453	Apr. 24	2035	.....	23	1599
Steel. Manufacturing.....	W. Hainsworth.....	284,006	Aug. 28	1886	528	24	864
Steel. Manufacturing Bessemer.....	S. McDonald.....	287,842	Nov. 6	62	.....	25	518
Steel. Manufacturing crucible cast.....	J. Reese.....	283,141	Aug. 14	792	.....	24	647
Steel-melting furnace. Open-hearth.....	C. M. Ryder.....	287,864	Nov. 6	87	26	25	523
Steelyard.....	P. Arnaud and L. Gaytté.....	280,779	July 10	559	156	24	105
Steering apparatus.....	J. S. Lake.....	280,191	June 26	1929	543	23	2476
Steering apparatus.....	C. G. Otis.....	285,835	Oct. 2	64	20	25	14
Steering apparatus.....	R. O. Toole.....	282,805	Aug. 7	396	112	24	569
Steering apparatus. Steam.....	J. Frazier.....	271,326	Jan. 30	1853	537 538 539	23	374
Steering apparatus. Steam.....	F. E. Sickels.....	273,617	Mar. 6	482	129 130	23	916
Steering-engine for ships. Hydraulic.....	D. P. Dey and G. M. Hathaway.....	286,534	Oct. 9	939	253	25	181
Steering-engine. Steam.....	W. C. Williamson.....	276,117	Apr. 17	1610	443	23	1518
Steering mechanism. Vessel.....	J. L. Cathcart.....	274,172	Mar. 20	1194	328	23	1054
Stench-trap.....	C. Halstead.....	289,831	Dec. 11	574	160	25	994
Stench-trap.....	R. McBee.....	286,951	Oct. 16	1477	405	25	280
Stench-trap.....	H. Pietsch.....	270,473	Jan. 9	785	230	23	163
Stench-trap.....	H. Pietsch.....	274,139	Mar. 20	1150	317	23	1046
Stencil-holder.....	J. W. Bennett.....	277,201	May 8	869	231	23	1781
Stencil-plate for graining.....	J. J. Callow.....	280,446	July 3	135	37	24	25
Stencil-plate.....	S. T. Berry.....	286,172	Oct. 9	481	133	25	100
Stencil-plate lock.....	W. M. Harris.....	275,205	Apr. 3	419	115	23	1298
Stenographic machine.....	J. Galloway.....	288,419	Nov. 13	800	217	25	655
Steps. Winter covering for door.....	S. B. Trescot.....	271,205	Jan. 23	1701	491	23	339
Stereoscope.....	C. A. Gartner.....	283,997	Aug. 28	1850	522	24	859
Stereoscope.....	H. C. White.....	281,743	July 24	1770	482	24	326
Stereotype-block.....	E. E. Pratt.....	284,757	Sept. 11	742	206	24	1036
Stereotype-blocks. Plate-rack for.....	J. L. Firm.....	283,876	Aug. 28	1701	479	24	831
Stereotype-matrices. Machine for making.....	C. H. Davids.....	274,918	Apr. 3	38	10	23	1232
Stereotype-plate holder.....	A. W. Marshall.....	282,655	Aug. 7	216	63	24	537
Stereotype-plate holder.....	F. Wesel.....	276,204	Apr. 24	1716	475	23	1544
Stereotype-plates. Appliance for making.....	J. H. Stonemetz.....	275,958	Apr. 17	1408	388	23	1484
Stereotype-plates. Machine for trimming.....	S. D. Tucker.....	271,380	Jan. 30	1929	558	23	387
Stereotyped line-strips and putting and securing them in column or page form. Apparatus for justifying.....	M. H. Dement.....	282,176	July 31	2338	645	24	427
Stereotyping.....	W. Mears.....	285,643	Sept. 25	1810	.....	24	1240
Stereotyping-machine.....	H. Hagemann.....	270,056	Jan. 2	268	78, 79	23	55
Stereotyping matrix-strips. Apparatus for.....	M. H. Dement and A. W. Granville.....	285,470	Sept. 25	1606	451	24	1202
Stereotyping outfit.....	T. Bradwell and S. K. White.....	288,203	Nov. 13	512	142	25	606
Stereotyping. Preparing matrix-forms for.....	M. H. Dement. (Reissue).....	10,385	Sept. 25	1994	564	24	1270
Stern-wheel boat.....	J. J. Schurr.....	270,344	Jan. 9	617	181 182	23	130
Stile for wire fences.....	W. H. Rodden.....	286,226	Oct. 9	542	149	25	110
Stiletto.....	S. L. Pratt.....	278,733	June 5	74	22	23	2137
Still. Oil.....	J. B. Duhler.....	283,471	Aug. 21	1214	341	24	731
Still. Oil.....	J. Thomas.....	282,239	July 31	2413	664	24	441
Still. Self heating and separating.....	D. Rogers.....	284,331	Sept. 4	212	59	24	940
Still.....	H. D. P. Allen.....	279,071	June 5	561	154	23	2219
Stirrup.....	B. F. Williamson.....	283,310	Aug. 14	1003	281	24	687
Stirrup for riding-saddles.....	P. Ganzhorn.....	281,861	July 24	1925	526	24	354
Stitch-holes. Machinery for producing.....	E. F. Mower.....	270,909	Jan. 23	1340	387	23	281
Stock and die.....	F. Armstrong.....	286,673	Oct. 16	1125	303	25	220
Stock-indicator.....	B. A. Fiske.....	285,805	Oct. 2	27	9, 10	25	7
Stock-indicator for manufacturers.....	S. Kemper.....	271,865	Feb. 6	339	93, 94	23	500
Stock loader. Live.....	W. H. Barnes.....	286,575	Oct. 16	997	270	25	197
Stock-releasing device.....	W. Donlon.....	289,398	Dec. 4	31	10	25	892
Stock-releasing device.....	A. Iske.....	283,786	Aug. 28	1600	452	24	815
Stock-rest.....	J. McVane.....	286,462	Oct. 9	852	231	25	166
Stock-trough.....	H. B. Wakefield.....	290,948	Dec. 25	2007	553	25	1260
Stocking.....	F. Lasher.....	271,338	Jan. 30	1870	542	23	377
Stocking and making the same.....	G. W. Landenberger.....	286,141	Oct. 2	443	120	25	82
Stocking and method of making the same.....	R. W. Scott.....	271,526	Jan. 30	2116	609	23	421
Stocking-blanks. Cutting.....	M. Landenberger, Jr.....	276,832	May 1	387	103	23	1694
Stocking-clasp.....	O. W. Way.....	288,749	Nov. 20	1216	332	25	733
Stocking. Cnt.....	O. Osborne.....	288,592	Nov. 13	1012	278	25	693
Stocking-protector.....	C. A. Schleier.....	280,522	July 3	226	60	24	40
Stocking, sock, and slipper.....	W. H. Davis and A. A. Hawley.....	287,807	Nov. 6	21	7	25	511
Stocking-supporter.....	A. N. Horner.....	272,695	Feb. 20	1400	393	23	700
Stocking-supporter.....	E. Méthot.....	280,846	July 10	634	178	24	118
Stockings. Making.....	M. Landenberger, Jr.....	284,026	Aug. 28	1907	534	24	888
Stoker. Mechanical.....	G. E. Hibbard.....	282,519	Aug. 7	51	15, 16	24	509
Stone and emery. Manufacture of artificial.....	B. Hess.....	283,603	Aug. 21	1365	.....	24	759
Stone and ore crushers. Movable jaw for.....	D. Brennan, Jr.....	281,829	July 24	1885	515	24	347
Stone. Artificial.....	P. F. Haverty.....	284,299	Sept. 4	176	.....	24	934
Stone. Artificial.....	J. S. Peirce.....	282,219	July 31	2389	.....	24	437
Stone. Artificial.....	W. P. Rose.....	279,817	June 19	1480	.....	23	2391
Stone. Artificial.....	J. H. Thorp.....	278,671	May 29	2677	733	23	2116
Stone. Artificial.....	J. S. and L. G. Watts.....	282,426	July 31	2652	.....	24	483
Stone. Artificial.....	D. G. Weems.....	274,237	Mar. 20	1280	353	23	1070
Stone breaker and crusher.....	P. W. Gates.....	279,147	June 12	685	187	23	2250
Stone breaking and crushing machine.....	P. W. Gates.....	279,146	June 12	683	187	23	2250
Stone-breaking machine.....	P. W. Gates.....	272,233	Feb. 13	804	924	23	592
Stone-channeling machine.....	A. H. Rapp.....	281,135	July 10	981	274	24	180
Stone. Composite.....	J. H. Drake and D. G. Weems.....	273,824	Mar. 13	760	.....	23	972
Stone. Composition to be used in the manufacture of artificial.....	J. L. Rowland.....	288,262	Nov. 13	588	.....	25	619
Stone. Compound for the manufacture of artificial.....	J. A. Greer.....	269,849	Jan. 2	37	.....	23	10
Stone-cutting apparatus.....	W. W. Beaumont and J. Welman.....	270,925	Jan. 23	1357	391	23	284
Stone-dressing lathe.....	F. Trier.....	283,685	Aug. 21	1463	412	24	778
Stone-dressing machine.....	A. McDonald.....	277,914	May 22	1709	467	23	1940

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Stone-dressing machine	J. T. Turner	281,211	July 10	1082	298	24	198
Stone-dressing machines. Cutter-holder for	A. McDonald	278,352	May 29	2293	627	23	2040
Stone-dressing tool	H. A. Kimball	279,488	June 12	1098	303	23	2317
Stone-drilling machine	J. T. Clark	271,792	Feb. 6	251	70	23	484
Stone for veneers, &c. Artificial	W. Matt. (Reissue)	10,343	June 19	1538		23	2419
Stone for veneers, molded articles, &c. Artificial	W. Matt.	289,112	Nov. 27	1653		25	819
Stone. Manufacture of artificial	J. W. Gallup	290,765	Dec. 25	1778		25	1232
Stone. Manufacture of artificial	S. Ravenel	283,358	Aug. 14	1074		24	700
Stone. Manufacture of artificial	R. H. Stone	280,332	June 26	2114		23	2508
Stone or metal. Manufacturing artificial	A. Simon and V. Petit	272,786	Feb. 20	1513		23	720
Stone-sawing machine	L. B. Batcheller	288,296	Nov. 13	627	172	25	625
Stone-sawing machine	A. Folsom	274,926	Apr. 3	50	13	23	1234
Stone-sawing machine	D. Shortleeve	283,929	Aug. 28	1762	497	24	843
Stone-sawing machines. Automatic sand and water feeding device for	W. T. Ripley	286,071	Oct. 2	359	100	25	66
Stone scouring and polishing machine	A. R. McGahy	274,509	Mar. 27	1655	460	23	1141
Stone scouring and polishing machine	H. Young and H. G. Hubert	290,304	Dec. 18	1156	324	25	1106
Stone-settings. Holder for	S. Joel	289,106	Nov. 27	1648	457	25	818
Stone-smoothing machine	J. Eger	287,648	Oct. 30	2379	641	25	461
Stone, tile, &c. Plastic compound for the manufacture of	E. Pick	281,395	July 17	1317		24	245
Stone-turning lathe	T. F. Clemons	274,563	Mar. 27	1720	477	23	1152
Stone. Undercut imitation	H. C. Luther	290,442	Dec. 18	1346	372	25	1139
Stone-work clamp	J. O'Connor	285,918	Oct. 2	179	51	25	35
Stone-working machine	Z. Butler	288,544	Nov. 13	950	260	25	681
Stones. Manufacture of artificial	G. Langon	286,023	Oct. 2	299	83	25	56
Stones. Mounting artificial	J. G. C. Cottier	290,863	Dec. 25	1896	523	25	1242
Stool and bucket-holder. Combined milk	A. Woodward	271,292	Jan. 30	1811	525	23	367
Stool. Commode	H. H. Hughes	284,852	Sept. 11	852	240	24	1056
Stool. Counter or table	J. J. Reynolds	283,512	Aug. 21	1263	354	24	740
Stool. Folding	J. Briggs	272,853	Feb. 27	1621	453	23	747
Stool. Folding	A. Rintelman	282,371	July 31	2580	708	24	470
Stool foot-rest. Piano	O. R. Burlingame	280,907	July 10	701	197	24	130
Stool. Milking	S. P. Perry	272,084	Feb. 13	622	169	23	560
Stool. Milking	S. P. Perry	287,958	Nov. 6	214	61	25	544
Stool. Office	M. V. B. Howe	275,384	Apr. 10	683	181	23	1351
Stool. Piano	J. Emerson	281,676	July 24	1680	457	24	311
Stool. Piano	T. P. I. Magoun	286,457	Oct. 9	847	230	25	165
Stool. Piano	J. S. Munson	280,068	June 26	1799	506	23	2452
Stool. Piano	G. A. Ramseyer	282,926	Aug. 7	532	150	24	595
Stool. Piano	G. W. Rich	275,413	Apr. 10	721	192	23	1358
Stool. Piano	W. Yount	270,273	Jan. 9	526	154	23	113
Stool screw-clamp	R. Wangeman	274,680	Mar. 27	1858	517	23	1177
Stool. Store	J. S. Sammons	277,514	May 15	1235	333	23	1851
Stop-motion or safety-brake for machinery	D. T. Winter	269,949	Dec. 11	714	202	25	1019
Stopper:							
See Boiler-tube stopper. Flue-stopper.							
Bottle-stopper. Inkstand-stopper.							
Bottle and jar stopper. Jar and bottle stopper.							
Cable-stopper. Tube-stopper.							
Stopper-fastening	E. Haas	284,200	Sept. 4	55	15	24	914
Stopper for bottles, jars, &c.	H. Barrett	281,334	July 17	1245	345	24	232
Stopper for liquid-containing vessels	E. Burnett	281,611	July 17	1591	435	24	290
Stopper for milk-cans. Lock	A. P. Browne	281,608	July 17	1586	434	24	229
Stopper for wire rope, &c.	E. M. Stoddard and J. N. Johnson	286,863	Oct. 16	1361	373	25	261
Stoppers for bottles, jars, &c. Manufacture of	H. Barrett	281,332	July 17	1243	344	24	232
Stoppers for bottles, jars, &c. Manufacture of	H. Barrett	281,333	July 17	1244	345	24	232
Stoppers of milk-cans, &c. Fastener for	A. P. Browne	281,607	July 17	1585	434	24	229
Stopping and starting mechanism for intermittent machines.	E. Baker	275,116	Apr. 3	310	86	23	1279
Storage-batteries. Automatic regulator for	C. G. Perkins	290,468	Dec. 18	1381	382	25	1145
Storage-battery	C. T. Tomkins	279,046	June 5	532	145	23	2214
Storage-battery	C. T. Tomkins	284,342	Sept. 4	223	63	24	942
Storage or secondary battery.	C. J. Van Depoele	276,099	Apr. 17	1582	436	23	1513
Store.	J. A. Houston	276,587	May 1	56	16	23	1637
Store-service apparatus	H. Hayden	272,686	Feb. 20	1388	390	23	698
Store-service apparatus	H. H. Hayden	273,525	Mar. 6	362	97	23	896
Store-service apparatus	H. H. Hayden	273,526	Mar. 6	364	97, 98	23	896
Store-service apparatus	H. H. Hayden	277,276	May 8	951	255	23	1796
Store-service apparatus	H. H. Hayden	280,469	July 3	171	45	24	31
Store-service apparatus	H. H. Hayden	283,104	Aug. 14	754	212	24	641
Store-service apparatus	H. H. Hayden	283,239	Aug. 14	915	253	24	670
Store-service apparatus	F. H. Stanwood and M. B. Miller	282,582	Aug. 7	130	39	24	523
Store-service apparatus	E. Werner	283,543	Aug. 21	1292	361	24	745
Store-service apparatus. Carrier for.	H. H. Hayden	280,468	July 3	170	45	24	31
Store-service apparatus. Pneumatic	J. W. Hardie	289,649	Dec. 4	345	97	25	948
Store-service system	G. R. Elliott	279,562	June 19	1538	430	23	2400
Store-service system	G. R. Elliott	283,088	Aug. 14	730	205	24	637
Store-service system	A. B. Upham	284,989	Sept. 11	1014	285	24	1085
Store-track switch	J. C. Coran	278,657	May 29	2660	728	23	2113
Stores. Carrying system for	G. R. Elliott	284,953	Sept. 11	974	273	24	1078
Stove	E. W. Anthony	271,013	Jan. 23	1471	423	23	301
Stove	M. C. Armour	273,005	Feb. 27	1803	504	23	777
Stove	M. C. Armour	284,112	Aug. 28	2012	560	24	896
Stove	M. C. Armour	284,113	Aug. 28	2014	560	24	887
Stove	P. O. Elterich	291,011	Dec. 25	2007	578	25	1274
Stove	I. W. Harlow	273,730	Mar. 13	636	169	23	951
Stove	J. W. Kocher	262,735	Aug. 7	319	91	24	556



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Stove	C. Mattice	287,765	Oct. 30	2544	684	25	492
Stove	G. W. McAllister	287,453	Oct. 30	2116	575	25	411
Stove	W. H. and E. A. Noyes	282,600	Aug. 7	222	65	24	538
Stove	W. A. G. Schönheyder	270,135	Jan. 2	360	105	23	73
Stove	I. D. Smead	273,402	Mar. 6	210	57	23	869
Stove	J. W. Thomas	273,912	Mar. 13	866	235	23	990
Stove	G. W. Walker	274,062	Mar. 13	1043	287	23	1020
Stove	G. W. Walker	275,442	Apr. 10	762	203	23	1364
Stove	L. A. White	286,664	Oct. 16	1112	299	25	218
Stove and furnace fire-pot.	J. V. D. Eldredge	283,584	Aug. 21	1347	376	24	756
Stove and furnace grate.	F. O. Hart	274,938	Apr. 3	69	19	23	1237
Stove and furnace grate.	W. McClave	272,733	Feb. 20	1448	406	23	708
Stove and other sheet-metal pipes.	J. Vincent, Jr.	274,421	Mar. 20	1513	416	23	1110
Stove and range. Cook.	A. E. Chamberlain	269,829	Jan. 2	13	4, 5	23	5
Stove and range. Cooking.	N. S. Arnold	284,795	Sept. 11	789	220	24	1043
Stove and range. Cooking.	W. A. Spicer	284,916	Sept. 11	938	261	24	1069
Stove and range grate. Adjustable.	J. Brower	271,214	Jan. 30	1715	497	23	350
Stove attachment.	Z. and E. Hunt	284,017	Aug. 28	1898	532	24	867
Stove-board.	A. I. Griggs	279,240	June 12	778	214	23	2266
Stove-board.	H. C. Milligan	273,582	Mar. 6	444	119	23	911
Stove-board cover.	I. Van Hagen	271,163	Jan. 23	1649	474	23	331
Stove-boards. Process of and apparatus for manufacturing	I. Van Hagen	288,892	Nov. 20	1383	382	25	764
Stove-bracket.	J. H. Whissemore	273,653	Mar. 6	528	142	23	924
Stove. Car.	K. Fife and J. N. Pickenpangh	287,268	Oct. 23	1855	516	25	360
Stove. Charcoal.	E. M. Stern	282,235	July 31	2409	662	24	441
Stove. Coal.	S. H. La Rue	286,315	Oct. 9	680	181 182	25	133
Stove. Coal-oil.	J. W. Brower	271,215	Jan. 30	1716	497	23	350
Stove. Coal-oil.	H. Daisley	270,892	Jan. 23	1315	380	23	277
Stove. Cooking.	J. W. Allen	286,248	Oct. 9	576	158	25	116
Stove. Cooking.	R. E. Burns	290,316	Dec. 18	1173	328	25	1109
Stove. Cooking.	N. Cooper and T. E. Conwell	277,009	May 8	622	163	23	1738
Stove. Cooking.	C. H. Dunton	270,766	Jan. 16	1166	333 334	23	243
Stove. Cooking.	W. A. Greene	271,626	Feb. 6	52	14, 15	23	449
Stove. Cooking.	L. F. Holloway and N. Griswold	283,244	Aug. 14	924	257 258	24	671
Stove. Cooking.	C. Östlund	270,690	Jan. 16	1072	307 308	23	225
Stove-cover lifter	N. L. Post	272,472	Feb. 20	1114	315	23	650
Stove-door hinge	J. B. Conde and H. C. Marshall	282,170	July 31	2329	642	24	426
Stove-drum	N. B. Acheson	271,758	Feb. 6	207	58	23	476
Stove extinguisher. Car.	C. Hittinger	289,657	Dec. 4	355	100	25	950
Stove fire-back	G. A. Way	278,240	June 5	228	67	23	2162
Stove fire-pot	R. Hatchman	283,602	Aug. 21	1365	381	24	759
Stove fire-pot	J. A. Miller	277,050	May 8	679	177	23	1748
Stove. Folding pocket cook-	T. W. Houchin	274,330	Mar. 20	1399	383 384	23	1090
Stove. Gas.	E. E. Gold	281,685	July 24	1690	460	24	313
Stove. Gas.	W. F. Shaw and A. S. Dinsmore	285,311	Sept. 18	1406	398	24	1162
Stove. Gas.	H. H. Sheldon	285,170	Sept. 18	1252	351	24	1132
Stove. Gas.	E. Stern	276,302	Apr. 24	1836	511	23	1564
Stove. Gas.	I. Van Hagen	288,893	Nov. 20	1385	382	25	764
Stove. Gas.	A. H. P. S. Wortley	286,160	Oct. 2	464	126	25	86
Stove. Gas-burning	J. W. Baker	285,376	Sept. 25	1492	420	24	1182
Stove. Gas-generator	N. H. Schilling and H. Bunte	274,829	Mar. 27	2028	564 565	23	1207
Stove. Gas heating and cooking	J. H. Keyser	276,049	Apr. 17	1520	418	23	1502
Stove-grate	E. E. Bunker	273,251	Mar. 6	11	4	23	836
Stove-grate	D. Elsing	271,229	Jan. 30	1730	501	23	353
Stove-grate	A. L. Foote	286,411	Oct. 9	795	215	25	155
Stove-grate	J. Hahn	287,537	Oct. 30	2220	602	25	432
Stove-grate. Revolving	C. Kemmerling	283,790	Aug. 28	1604	453	24	815
Stove. Heating.	H. C. Bascom	283,953	Aug. 28	1798	509	24	850
Stove. Heating.	P. D. Beckwith	289,802	Dec. 11	536	149 150	25	986
Stove. Heating.	J. Dwyer	272,128	Feb. 13	663	186	23	570
Stove. Heating.	S. Ingling	289,840	Dec. 11	588	163	25	996
Stove. Heating.	J. Kilshaw	273,106	Feb. 27	1932	541	23	799
Stove. Heating.	C. L. Ridgway	281,795	July 24	1844	504	24	340
Stove-hood	A. Schwibinger	286,643	Oct. 16	1085	293	25	213
Stove. Hot-blast	F. W. Gordon	278,234	May 22	2109	581	23	2009
Stove. Hot-blast	J. M. Hartman	275,908	Apr. 17	1354	373	23	1474
Stove. Hydrocarbon-	A. B. Hutchins. (Reissue)	10,273	Jan. 16	1300	374	23	268
Stove. Hydrocarbon-gas	A. M. Brainard	275,127	Apr. 3	327	91	23	1283
Stove. Lamp.	H. J. Reilly	278,740	June 5	82	24	23	2138
Stove. Lamp.	J. E. Stephens	286,862	Oct. 16	1360	373	25	261
Stove. Lamp.	C. S. West	274,426	Mar. 20	1518	417	23	1111
Stove-leg	L. S. Hoyt	278,433	May 29	2391	652	23	2066
Stove-leg	G. F. Wilson	280,273	June 26	2038	573	23	2495
Stove-lid and pan lifter.	W. H. H. Smith	278,369	May 29	2315	633	23	2053
Stove-lid lifter	J. S. Lash	281,278	July 17	1172	324	24	820
Stove-lids. Pattern for molding	W. H. Smith	278,370	May 29	2315	633	23	2053
Stove-lug molds. Device for forming.	W. N. Moore	289,685	Dec. 4	388	111	25	955
Stove. Magazine.	S. Smyth	286,235	Oct. 9	554	152	25	112
Stove. Oil.	C. F. Beaman and W. P. Cragin	272,018	Feb. 13	542	146	23	546
Stove. Oil.	A. S. Dinsmore	282,504	Aug. 7	33	10	24	506
Stove. Oil.	J. E. Fleming	273,717	Mar. 13	610	164	23	946
Stove. Oil.	J. Johnstone	281,515	July 17	1471	404	24	272
Stove. Oil.	I. F. Kearns	284,639	Sept. 11	585	164 165	24	1009
Stove. Oil.	J. Marion	278,574	May 29	2557	698	23	2095

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Drawings	Vol.	Page.
Stove. Oil.....	J. McConnell.....	276,187	Apr. 24	1692	{ 467 468 }	{ 23 23 }	1540
Stove. Oil.....	F. Sloan.....	276,911	May 1	481	127	23	1710
Stove. Oil.....	F. Sloan.....	285,696	Sept. 25	1873	534	24	1252
Stove. Oil.....	A. Velguth.....	278,063	May 22	1887	517	23	1970
Stove. Oil.....	M. W. Walker.....	288,523	Nov. 13	927	253	25	677
Stove. Oil and gas.....	E. A. Meyenburg.....	269,950	Jan. 2	153	45	23	32
Stove. Oil or vapor.....	R. S. Oliver.....	281,917	July 24	1993	546	24	366
Stove. Open-grate.....	E. Brown.....	273,456	Mar. 6	279	75	23	881
Stove or furnace.....	W. Masters.....	274,130	Mar. 20	1142	{ 314 315 }	{ 23 23 }	1045
Stove or range.....	J. A. Price.....	284,230	Sept. 4	95	26	24	921
Stove or range. Cooking.....	F. L. C. Anderson.....	273,004	Feb. 27	1802	504	23	776
Stove or range. Cooking.....	J. A. Price.....	278,267	May 22	2155	592	23	2016
Stove ornament.....	W. L. McDowell.....	280,295	June 26	1947	547	23	2479
Stove oven-door. Cooking.....	W. A. Spicer.....	278,057	May 22	1882	515	23	1970
Stove oven. Oil and gas.....	C. F. Whorf.....	271,670	Feb. 6	101	27	23	457
Stove ovens. Attachment for cooking.....	E. L. Maranville.....	274,009	Mar. 13	981	269	23	1010
Stove-ovens. Turn-table for.....	E. L. Maranville.....	286,029	Oct. 2	305	85	25	57
Stove. Parlor.....	J. Jamieson.....	282,085	July 31	2206	{ 606 607 }	{ 24 24 }	407
Stove. Parlor heating.....	J. Van Wormer.....	274,677	Mar. 27	1854	516	23	1177
Stove-pipe. Adjustable.....	D. A. Smith.....	278,617	May 23	2611	711	23	2104
Stove-pipe and chimney attachment.....	J. M. Egnor.....	287,258	Oct. 23	1873	513	25	358
Stove-pipe cleaner.....	G. and J. Rasgorahok.....	284,897	Sept. 11	899	254	24	1065
Stove-pipe elbow.....	J. P. Barker.....	287,494	Oct. 30	2170	589	25	421
Stove-pipe drum, shelf, and damper. Combined.....	W. L. Hess.....	272,048	Feb. 13	576	156	23	552
Stove-pipe fastener.....	B. D. Campbell.....	275,586	Apr. 10	935	254	23	1394
Stove-pipe fastener.....	A. Huttlinger.....	275,660	Apr. 10	1039	281	23	1412
Stove-pipe fastening.....	S. E. Shute and J. C. Albright.....	274,835	Mar. 27	2036	567	23	1209
Stove-pipe fitting and fastening.....	F. Kaltwasser.....	278,798	June 5	166	49	23	2151
Stove-pipe-fitting device.....	M. J. Robinson.....	278,599	May 29	2584	705	23	2100
Stove-pipe holder.....	F. S. Gullick.....	285,748	Sept. 25	1951	551	24	1264
Stove-pipe section.....	C. P. Kramer.....	279,873	June 19	1553	434	23	2403
Stove-pipe shelf.....	W. A. Bowyer and J. E. Elliott.....	283,959	Aug. 28	1803	510	24	851
Stove-pipe shelf.....	J. Kurtis.....	277,294	May 8	977	262	23	1800
Stove-pipe shelf.....	S. F. Seely.....	283,822	Aug. 28	1639	462	24	821
Stove-pipe shelf.....	A. W. Stossmeister.....	284,256	Sept. 4	125	35	24	926
Stove-pipe thimble.....	M. McGuire.....	281,710	July 24	1726	469	24	319
Stove-pipe thimble.....	E. S. Sweetser.....	280,880	July 10	669	189	24	125
Stove-pipe thimble.....	G. W. Tubbs.....	279,205	June 12	741	203	23	2260
Stove-pipe thimble.....	H. E. Wieber.....	290,157	Dec. 11	965	273	25	1065
Stove-pipe thimble and flue-stopper.....	F. J. Karleskind.....	276,597	May 1	69	19	23	1639
Stove plate and frame fastener.....	W. L. McDowell.....	281,096	July 10	929	259	24	171
Stove-plates. Device for forming dovetails for.....	N. Burdick and J. A. Sandford.....	273,252	Mar. 6	13	4	23	837
Stove-platform.....	A. C. Stoessiger.....	281,208	July 10	1080	297	24	197
Stove reservoir. Cooking.....	J. L. Natchez.....	285,502	Sept. 25	1641	{ 461 462 }	{ 24 24 }	1208
Stove-shelf.....	J. Wenzel.....	281,949	July 24	2031	555	24	373
Stove-shelf.....	L. A. White.....	279,620	June 19	1254	348	23	2351
Stove-shelf.....	W. J. Wood.....	279,068	June 5	558	153	23	2219
Stove. Smoke-consuming.....	E. L. Dodge.....	285,397	Sept. 25	1520	428	24	1186
Stove stand. Oil.....	F. Baier.....	272,620	Feb. 20	1309	365	23	684
Stove-support.....	G. H. Phillips.....	270,978	Jan. 23	1430	412	23	295
Stove, table, and cabinet. Combined.....	L. V. Pierce.....	279,276	June 12	822	228	23	2274
Stove-top.....	E. B. Finch.....	286,536	Oct. 9	942	254	25	182
Stove top and cover.....	W. H. Noyes.....	278,170	May 22	2027	557	23	1994
Stove. Vapor.....	J. H. Bean.....	282,037	July 31	2137	587	24	396
Stove. Vapor.....	Z. Davis. (Reissue).....	10,355	July 10	1103	304	24	202
Stove. Vapor.....	H. A. Dow.....	288,216	Nov. 13	524	146	25	608
Stove. Vapor.....	C. A. Koehler.....	281,375	July 17	1294	358	24	241
Stove. Vapor.....	P. Martin.....	275,058	Apr. 3	230	63	23	1265
Stove. Vapor.....	W. C. North.....	272,462	Feb. 20	1103	312	23	648
Stove. Vapor.....	J. H. Shepherd and H. H. Beuscho- ten.....	278,752	June 5	96	27	23	2140
Stove. Vapor-burning cooking.....	J. K. Thomas.....	271,158	Jan. 23	1641	472	23	330
Stove ventilator. Cooking.....	J. F. Linscott.....	272,720	Feb. 20	1431	401	23	705
Stoves, &c. Burner for vapor.....	W. Holt.....	283,395	Aug. 21	1121	317	24	715
Stoves. Coffee and peanut roasting attachment for.....	M. M. Robbins.....	274,225	Mar. 20	1263	348	23	1067
Stoves. Elevated reservoir, warming-oven, and shelf for.....	E. C. and V. Strayer.....	279,456	June 12	1059	293	23	2311
Stoves. Flat-iron attachment for oil.....	I. F. Kearns.....	272,059	Feb. 13	592	160	23	554
Stoves, &c. Oil-reservoir for oil.....	S. T. McDougall.....	287,557	Oct. 30	2247	610	25	437
Stoves. Safety-casing for railway-car.....	B. D. Stevens.....	277,854	May 15	1636	{ 445 446 }	{ 23 23 }	1921
Stoves. Steam heating attachment for.....	W. H. Pratt.....	272,768	Feb. 20	1492	420	23	716
Stoves. Thermometer attachment for.....	S. Raymond.....	282,707	Aug. 7	358	100	24	562
Stoves. Top-cover for kerosene, gas, and other.....	W. H. Noyes.....	279,421	June 12	1019	283	23	2305
Strainer for caves-spouts.....	G. W. Van Tassel.....	289,473	Dec. 4	123	35	25	908
Strainer for tea and coffee pots.....	E. F. Haskell.....	286,813	Oct. 16	1297	352	25	251
Strainer for water-faucets.....	G. F. Barrington.....	275,978	Apr. 17	1432	395	23	1489
Strainer. Milk.....	H. Haak.....	282,189	July 31	2355	649	24	430
Straining-beam.....	B. F. Davis.....	284,824	Sept. 11	820	228	24	1050
Straining-machine.....	T. R. Ryan.....	277,789	May 15	1560	425	23	1908
Strands. Machine for confining.....	G. Doolittle and H. D. Stanley.....	289,077	Nov. 27	1614	447	25	813
Strap:							
See Boot-strap. Shawl-strap.							
Hitching-strap. Thill-strap.							
Overshoe-strap. Trunk-strap.							
Strap-fastener.....	A. J. Aldrich.....	270,922	Jan. 23	1354	390	23	283
Strap. Metallic mercantile bundling.....	G. T. Parry.....	290,351	Dec. 18	1217	342	25	1117
Strap or buckle fastening.....	F. A. Neider.....	298,358	Nov. 13	714	195	25	640
Straps to buckles, &c. Device for securing.....	C. H. Allen.....	285,200	Sept. 18	1283	361	24	1139



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Straw and other board. Machine for lining.....	G. Munro.....	278,448	May 29	2410	657	23	2070
Straw braid.....	H. Friend.....	272,229	Feb. 13	799	222	23	590
Straw-burning boiler.....	J. Stevens.....	271,148	Jan. 23	1626	467	23	328
Straw-carrier.....	J. Ridenour.....	272,457	May 29	2424	660	23	2072
Straw-cutter.....	J. A. Brooks.....	284,175	Sept. 4	21	5	24	908
Straw-cutter.....	J. N. Slaughenhanp.....	273,619	Mar. 6	485	130	23	917
Straw-stacker.....	A. H. Allison.....	277,400	May 8	1094	294	23	1821
Straw-stacker.....	A. H. Allison.....	289,204	Nov. 27	1767	490	25	840
Straw-stacker.....	E. Anderson.....	275,453	Apr. 10	773	207	23	1366
Straw-stacker.....	W. H. Anderson.....	285,339	Sept. 18	1436	406	24	1167
Straw-stacker.....	L. W. Berger, E. A. Peters, and O. P. Chaney.....	271,404	Jan. 30	1959	566	23	394
Straw-stacker.....	J. J. Cox.....	290,975	Dec. 25	2054	565	25	1267
Straw-stacker.....	J. M. Crawford and T. B. Kirkwood.....	273,470	Mar. 6	298	81	23	884
Straw-stacker.....	A. Davis.....	278,891	June 5	294	85	23	2173
Straw-stacker.....	R. Gowdy.....	285,747	Sept. 25	1950	551	24	1264
Straw-stacker.....	W. H. Grove and G. H. Steely.....	278,131	May 22	1978	543	23	1986
Straw-stacker.....	F. F. Hartwich.....	277,720	May 15	1478	400	23	1892
Straw-stacker.....	L. W. Hasselman.....	274,940	Apr. 3	72	20	23	1238
Straw-stacker.....	L. W. Hasselman.....	290,050	Dec. 11	842	239	25	1042
Straw-stacker.....	L. W. Hasselman. (Reissue).....	10,347	July 3	548	{ 152 } 153	24	97
Straw-stacker.....	C. Leffingwell.....	277,750	May 15	1515	411	23	1899
Straw-stacker.....	I. C. Lindley.....	274,205	Mar. 20	1228	338	23	1061
Straw-stacker.....	J. H. and D. Meltzer and J. J. Baker.....	282,210	July 31	2378	654	24	435
Straw-stacker.....	C. E. Morrifield.....	272,572	Feb. 20	1252	349	23	674
Straw-stacker.....	J. J. Moore.....	284,317	Sept. 4	195	55	24	937
Straw-stacker.....	J. J. Moore. (Reissue).....	10,315	Apr. 10	1222	334	23	1442
Straw-stacker.....	K. K. Parker.....	286,060	Oct. 2	344	96	25	64
Straw-stacker.....	J. W. Parkinson and C. E. Merrifield.....	275,941	Apr. 17	1392	383	23	1481
Straw-stacker.....	M. T. and A. B. Reeves.....	284,234	Sept. 4	100	27	24	921
Straw-stacker.....	J. F. and W. N. Springer.....	287,882	Nov. 6	115	34	25	528
Straw-stacker. Portable.....	A. Cossel.....	284,280	Sept. 4	153	42	24	930
Straw-stacker. Portable.....	S. H. Garver.....	288,224	Nov. 13	536	149	25	610
Straw-stackers. Clamp for securing turn-tables for.....	L. W. Hasselman.....	290,049	Dec. 11	841	238	25	1042
Straw-stackers. Folding conveyer-chute for.....	J. J. Moore.....	274,632	Mar. 27	1799	500	23	1167
Straw-stacking machine.....	C. E. Merrifield.....	274,134	Mar. 20	1145	316	23	1045
Straw-stacking machine.....	C. E. Merrifield.....	287,844	Nov. 6	63	19	25	518
Straw-stacking machine.....	M. T. and A. B. Reeves.....	272,155	Feb. 13	710	195	23	575
Straw-stacking machine.....	H. S. Stone and J. M. F. Shepler.....	271,943	Feb. 6	433	119	23	517
Straw-stacking machine.....	W. C. Swindler.....	277,080	May 8	723	189	23	1755
Straw-stacking machine.....	W. C. Swindler.....	282,799	Aug. 7	359	110	24	568
Straw-stacking machine.....	G. W. Williamson.....	274,540	Mar. 27	1692	{ 469 } 470	23	1147
Straw-stacking machine.....	G. W. Williamson.....	281,654	July 17	1647	449	24	299
Straw to be converted into paper-stock, &c. Preparing.....	T. New.....	290,913	Dec. 25	1957		25	1253
Street-sprinkling apparatus.....	H. Flad.....	288,222	Nov. 13	531	148	25	609
Street-subway.....	O. D. Orvis and N. B. Adams.....	288,730	Nov. 20	1194	326	25	729
Street-sweeper.....	F. F. and J. C. Bioren.....	280,008	June 26	1723	483	23	2439
Street-sweeping machine.....	J. S. Goldsmith.....	269,847	Jan. 2	34	11	23	9
Street-sweeping machine.....	C. Z. O'Neill.....	270,834	Jan. 16	1244	359	23	258
Street-sweeping machine.....	P. Ryan.....	271,993	Feb. 6	504	136	23	527
Street-sweeping machine.....	A. Stackpole, Jr.....	287,186	Oct. 23	1782	{ 488 } 489	25	343
Street-sweeping machine.....	G. E. Woodbury.....	274,164	Mar. 20	1184	326	23	1053
Stretcher.....	W. H. Johnstone.....	273,287	Mar. 6	52	16	23	843
Stretcher-frame.....	A. D. Shattuck.....	272,162	Feb. 13	718	197	23	576
Stripping pails, tubs, &c. Machine for.....	C. Hoffmann.....	290,329	Dec. 18	1191	334	25	1112
Strontium carbonates. Manufacture of.....	H. Grouven.....	280,172	June 26	1909		23	2473
Strontium. Obtaining carbonate of.....	D. Sidersky and H. Probst.....	278,283	May 22	2172	598	23	2019
Structures. Apparatus for erecting and supporting } colossal.....	J. C. Goodridge, Jr.....	289,644	Dec. 4	338	{ 94 } 95 96	25	947
Structures with béton or concrete. Repairing.....	J. C. Goodridge, Jr.....	271,234	Jan. 30	1736	502	23	354
Stud for shirts, &c.....	P. F. Allen.....	288,293	Nov. 13	623	170	25	624
Stud-shield. Shirt.....	J. W. Wilkins.....	276,741	May 1	275	70	23	1671
Stud-wrench.....	D. H. Pollard.....	282,768	Aug. 7	356	100	24	562
Stuffing-box for journals.....	J. W. Wilbraham.....	272,819	Feb. 20	1557	437	23	728
Stuffing-box for valve-stems, &c.....	W. Haas.....	275,484	Apr. 10	816	221	23	1374
Stuffing-box or packing-chamber.....	S. Fox.....	279,642	June 19	1283	356	23	2356
Stuffing-machine.....	F. Benoit.....	286,171	Oct. 9	478	{ 132 } 133 201	25	99
Stump and grub puller.....	D. Cornelius.....	277,117	May 8	766	{ 202 } 203	23	1763
Stump-extractor.....	D. Cornelius.....	287,002	Oct. 23	1546	426	25	298
Stump-extractor.....	H. B. Hawes.....	277,484	May 15	1202	323	23	1846
Stump-extractor.....	W. Smith.....	278,620	May 29	2616	714	23	2105
Stump-machine.....	W. H. Hamilton.....	272,957	Feb. 27	1748	488	23	766
Stump-puller.....	R. Greeley.....	275,644	Apr. 10	1021	275	23	1408
Stump-puller.....	R. J. Hosner.....	285,898	Oct. 2	152	43	25	30
Stump-puller.....	H. P. Reading.....	275,855	Apr. 17	1292	355	23	1462
Stump-puller.....	W. A. Tucker.....	276,506	Apr. 24	2098	583	23	1610
Stump-pulling machine.....	O. A. Anthony.....	287,606	Oct. 30	2331	629	25	452
Subaqueous boring. Apparatus for.....	T. English.....	286,797	Oct. 16	1281	346	25	247
Submarine boat.....	J. Jopling.....	273,851	Mar. 13	792	215	23	978
Sucker-rod.....	D. Jones.....	273,234	Feb. 27	2091	586	23	827
Sucker-rod extractor for oil and other wells.....	L. R. Hitchcock and J. W. Lufkin.....	280,314	June 26	2089	588	23	2304
Suction-ventilator.....	E. S. Radcliff.....	272,583	Feb. 20	1262	352	23	675
Sugar and apparatus employed therein. Manufacture and treatment of.....	J. Duncan and B. E. R. Newlands.....	278,110	May 22	1942	533	23	1980
Sugar, &c. Apparatus for stirring, mixing, and melting.....	G. M. Newhall.....	276,065	Apr. 17	1538	423	23	1506
Sugar-cane. Apparatus for coagulating the albuminous matters contained in.....	C. Blandin.....	287,902	Nov. 6	141	41	25	533

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Sugar-cane, &c. Machine for defecating and clarifying the juices of	H. A. Weber and M. A. Scovell	285,938	Oct. 2	206	58	25	40
Sugar. Crystallizing grape	W. Robinson	270,699	Jan. 16	1085	.....	23	227
Sugar-evaporator	R. D. Shindelbower and H. Pressler	279,450	June 12	1053	291	23	2310
Sugar-evaporator	D., C. W., and D. H. Smouse	272,093	Feb. 13	633	172	23	561
Sugar from molasses, sirups, or the juices of plants, &c. Extracting	C. Steffen	277,521	May 15	1243	.....	23	1852
Sugar from molasses, sirups, &c. Separating	C. Scheibler	279,446	June 12	1050	.....	23	2310
Sugar from sugar-cane, sorghum, maize, &c. Manufacture of	O. B. Jennings	287,544	Oct. 30	2229	{ 605 } 606	25	434
Sugar in ingots. Apparatus for the manufacture of	G. and J. Lebandy	270,818	Jan. 16	1228	355	23	255
Sugar. Machine for cutting, granulating, and disintegrating blocks or cakes of	C. C. Miller	273,875	Mar. 13	825	224	23	983
Sugar. Manufacture of effervescent	H. Michaelis	284,464	Sept. 4	370	.....	24	966
Sugar. Manufacturing	J. A. Morrell	280,943	July 10	754	.....	24	138
Sugar. Manufacturing crystallized grape	T. Norton	285,654	Sept. 25	1820	.....	24	1242
Sugar. Method of and apparatus for converting amy-laceous and ligneous substances into grape	A. C. Landry and C. Lauga	278,562	May 29	2544	694	23	2093
Sugar-mixing apparatus	J. H. Brookmire	278,392	May 29	2339	640	23	2057
Sugar-producing plants. Defecating the juices of	H. A. Weber and M. A. Scovell	285,939	Oct. 2	207	.....	25	40
Sugar, salt, &c. Apparatus for the manufacture of	J. A. Cook	277,833	May 15	1608	429	23	1916
Sugar, sirups, molasses, &c. Bleaching, defecating, and preserving	N. H. Darton and D. D. Williamson	278,104	May 22	1937	.....	23	1979
Sugars. Centrifugal machine for treating sorghum and other	R. B. Palmer	277,155	May 8	817	215	23	1772
Sulky	D. Berry	280,561	July 3	269	74	24	48
Sulky	T. Boettcher	274,167	Mar. 20	1189	327	23	1054
Sulky	D. B. Chandler and J. C. Williams	275,143	Apr. 3	345	95	23	1286
Sulky	P. F. Dean	285,238	Sept. 18	1328	374	24	1147
Sulky	O. O. Newberry	283,916	Aug. 28	1746	493	24	840
Sulky	W. Yeoman and E. M. Drum	272,397	Feb. 13	1017	284	23	627
Sulky. Adjustable-frame	J. Caley	287,622	Oct. 30	2352	634	25	456
Sulky. Polo	W. A. Ostuire	283,722	Aug. 21	1509	{ 425 } 426	24	787
Sulky-spring	I. A. Wesson	275,445	Apr. 10	765	204	23	1365
Sulphides. Treating	C. A. Stetefeldt	287,737	Oct. 30	2502	.....	25	485
Sunshade. Shoulder	R. Ray	288,115	Nov. 6	403	114	25	577
Superheater	J. R. Moore	271,651	Feb. 6	80	22	23	454
Superheater. Steam	M. Gross	284,958	Sept. 11	979	{ 275 } 276	24	1079
Superheaters. Maintaining high pressure in	D. Renshaw	282,772	Aug. 7	359	101	24	563
Superheaters. Maintaining pressure in	D. Renshaw	282,774	Aug. 7	361	102	24	563
Superheaters. Maintaining pressure in	D. Renshaw	285,543	Oct. 2	75	22	25	15
Superheating-pipes. Protecting	M. Gross	278,537	May 29	2516	686	23	2088
Superheating steam and heating air. Apparatus for	S. N. Carvalho	270,281	Jan. 9	540	159	23	115
Supporter; See Abdominal sup- porter. Bedstead-slat sup- porter. Garment-supporter. Hat and bonnet sup- porter.	Hose-supporter. Rail-supporter. Sleeve-supporter. Stocking-supporter. Uterine supporter.						
Suppositories. Composition for	A. Larsen	273,552	Mar. 6	402	.....	23	903
Suppositories. Machine for making	W. A. Long	286,719	Oct. 16	1185	{ 319 } 320	25	230
Surcingle	C. C. Malthy and J. F. Sabine	274,801	Mar. 27	1997	555	23	1202
Surface-gage	E. A. Darling	275,892	Apr. 17	1337	368	23	1471
Surface-gage	S. E. Waterman and F. H. Kelley	273,784	Mar. 13	711	192	23	964
Surge-reliever	W. C. Fuller	272,874	Feb. 27	1640	461	23	751
Surgeon's operating-chair	F. A. Krill	278,241	May 22	2118	583	23	2016
Surgical and invalid chair. Adjustable	J. Poolman and F. R. Marks	278,818	June 5	187	54, 55	23	2154
Surgical and medical dressing. Manufacture of fabrics for	S. Gangee	282,624	Aug. 7	180	.....	24	532
Surgical bandage	S. M. Furman	283,478	Aug. 21	1221	343	24	732
Surgical chair	F. Bohser	290,841	Dec. 25	1870	516	25	1237
Surgical chair	F. E. Young	289,743	Dec. 4	467	{ 131 } 132	25	968
Surveying inaccessible heights, &c. Instrument for	M. Farley	288,321	Nov. 13	661	183	25	631
Surveying-instrument	C. W. Stickney	272,494	Feb. 20	1149	323	23	656
Surveying instruments. Attachment for transits and other	R. Gibbons	275,034	Apr. 3	204	55	23	1260
Surveyor's steel chain-tape and reel	F. J. Sager	279,190	June 12	726	109	23	2257
Suspender attachment	A. M. Freeman	287,819	Nov. 6	36	11	25	513
Suspender-end	H. B. Dittwiler	277,997	May 22	1814	495	23	1957
Suspender-end	J. Katzenberg	290,061	Dec. 11	855	242	25	1044
Suspender-end	A. Netzer	285,650	Sept. 25	1817	518	24	1242
Suspender-end	C. C. Shelby	273,768	Mar. 13	692	186	23	960
Suspender-end	C. C. Shelby	273,769	Mar. 13	693	186	23	961
Suspender-end	C. C. Shelby	280,964	July 10	777	215	24	143
Suspender-end	M. Silberstein	276,909	May 1	479	126	23	1710
Suspender-hook	H. M. Heineman	276,244	Apr. 24	1763	491	23	1553
Suspender-loop	G. F. Atwood	275,975	Apr. 17	1429	394	23	1488
Suspenders	J. A. Adamson	279,306	June 12	858	238	23	2279
Suspenders	M. Altman	288,755	Nov. 20	1793	334	25	734
Suspenders	G. F. Atwood	290,958	Dec. 25	2020	557	25	1262
Suspenders	C. D. Cheesman	276,352	Apr. 24	1908	530	23	1577
Suspenders	A. M. Freeman	287,818	Nov. 6	34	10, 11	25	513
Suspenders	W. A. Laverty	276,834	May 1	390	103	23	1694
Suspenders	W. A. Laverty	282,736	Aug. 7	320	91	24	556
Suspenders	M. Marcus	289,429	Dec. 4	69	20	25	899
Suspenders	B. Petchaff	277,776	May 15	1547	421	23	1905
Suspenders	T. O. Potter	280,859	July 10	645	182	24	120
Suspenders	W. B. Pratt	286,958	Oct. 16	1485	407	25	282



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Suspension device.....	H. R. Heyl.....	284,129	Aug. 28	2036	566	24	890
Suspension-hook.....	S. J. Fletcher.....	279,236	June 12	774	213	23	2265
Suspension-hook.....	G. A. Schlechter.....	285,435	Sept. 25	1566	441	24	1194
Suspension-wrench for gas and other cocks.....	I. W. Heysinger.....	275,042	Apr. 3	211	57	23	1262
Swamp and grab hook.....	A. M. Millard.....	290,785	Dec. 25	1799	497	25	1236
Sweeping apparatus. Pneumatic.....	E. S. Leaycraft.....	279,572	June 19	1205	333	23	2342
Sweeping-machine.....	E. G. Passmore.....	283,415	Aug. 21	1142	323	24	719
Swimmers. Device for aiding.....	B. Bloch.....	281,005	July 10	822	229	24	152
Swimming-bath. Tide-water.....	J. Ennis.....	270,293	Jan. 9	554	163	23	118
Swing.....	I. N. Forrester.....	283,388	Aug. 21	1114	315	24	713
Swing.....	C. L. Gelineau.....	270,656	Jan. 16	1027	295	23	217
Swing.....	W. Hyde.....	277,902	May 22	1698	463	23	1938
Swing.....	B. Tully.....	282,934	Aug. 7	540	153	24	596
Swing.....	H. J. White.....	281,216	July 10	1089	300	24	199
Swing.....	C. W. Young.....	270,872	Jan. 16	1286	371	23	265
Swing and chair. Combined.....	M. Ingersoll.....	289,267	Nov. 27	1834	506	25	854
Swing. Child's.....	A. G. Forster.....	275,899	Apr. 17	1345	370	23	1472
Swinging gate.....	G. King.....	272,061	Feb. 13	595	161	23	555
Swinging stand and rest. Automatic.....	E. Fletcher.....	285,119	Sept. 18	1187	333	24	1121
Switch: See Automatic switch. Railway safety-switch. Electric switch. Split switch. Electric-light switch. Store-track switch. Interlocking switch. Telephone-switch. Lamp-switch. Telephone-exchange switch. Railway-switch. switch.							
Switch and signal connections. Deflection-stand for.	A. G. Cummings.....	271,608	Feb. 6	30	8	23	446
Switch and signal levers. Electric locking mechanism for.....	O. Gassett.....	283,231	Aug. 14	905	252	24	668
Switch-closer. Automatic.....	C. L. Northrup.....	283,721	Aug. 21	1508	425	24	786
Switch guard. Safety.....	H. Harmer.....	289,254	Nov. 27	1819	503	25	851
Switch lever and rod.....	H. M. Harper.....	275,336	Apr. 3	594	159	23	1327
Switch-lock.....	D. P. Driscoll and J. H. Dugan.....	271,435	Jan. 30	1999	577	23	401
Switch-lock.....	D. H. Speer.....	276,089	Apr. 17	1569	432	23	1511
Switch-operator.....	J. H. Kennedy and T. P. Hall.....	288,577	Nov. 13	992	273	25	689
Switch-signal. Automatic.....	A. L. Wilkinson.....	289,739	Dec. 4	462	130	25	967
Switch-stand.....	J. Brahm.....	273,450	Mar. 6	270	72	23	879
Switch-stand. Automatic.....	O. J. True and H. H. Houghton.....	271,999	Feb. 6	510	137	23	528
Switch stand. Safety.....	G. W. Horne.....	290,194	Dec. 11	1006	283	25	1072
Swivel-coupling.....	J. P. Warner.....	276,203	Apr. 24	1715	474	23	1544
Syringe.....	M. Dittenhoefer.....	285,978	Oct. 2	243	70	25	47
Syringe.....	G. W. Goodner.....	289,528	Dec. 4	196	55	25	921
Syringe.....	O. Hendrick.....	277,568	May 15	1306	350	23	1862
Syringe.....	R. Lockwood.....	273,373	Mar. 6	178	48	23	864
Syringe.....	P. J. McElroy.....	288,828	Nov. 20	1308	358	25	750
Syringe education-tube.....	T. J. Mayall.....	286,041	Oct. 2	322	90	25	59
Syringe. Hypodermatic.....	F. S. Grant.....	286,605	Oct. 16	1036	280	25	204
Syringe-piston.....	J. B. Wortham.....	282,144	July 31	2294	630	24	421
Syringe. Vaginal.....	C. L. Jensen.....	287,681	Oct. 30	2419	652	25	470
Table: See Adjustable table. Library-table. Billiard-table. Machine-table. Card-table. Operating-table. Dining-table. Ore-concentrating table. Drawing-table. Planing-machine table. Duplex writing-table. Potter's table. Extension-table. Printer's correcting-table. Folding table. Saw-table. Game-table. Sewing-machine table. Hat-blocking table. Starch-table. Ironing-table. Tile-machine table. Knockdown table. Toy ten-pin table. Work-table.							
Table.....	D. Kelly.....	274,614	Mar. 27	1782	495	23	1163
Table.....	T. R. Price.....	285,362	Sept. 18	1469	413	24	1171
Table.....	A. von der Vulbeke.....	279,290	June 12	836	232	23	2276
Table and cupboard. Combined.....	J. H. Bartine.....	285,208	Sept. 18	1291	363	24	1140
Table and desk. Combined.....	S. T. Corbitt.....	290,862	Dec. 25	1895	523	25	1242
Table and mirror.....	G. W. Simonds.....	290,361	Dec. 18	1228	346	25	1119
Table and radiator. Combination.....	M. R. Spelman.....	273,905	Mar. 13	857	232	23	988
Table-frame former.....	J. A. Conover.....	289,623	Dec. 4	310	86, 87	25	942
Table-leaf support.....	P. Bradford.....	270,006	Jan. 2	214	62	23	52
Table-leaf support.....	H. J. Durgin.....	279,231	June 12	768	212	23	2264
Table-leaf support.....	E. Mets.....	282,350	July 31	2557	701	24	466
Table-leaf support.....	D. Shuler.....	279,986	June 26	1693	475	23	2434
Table-leg.....	A. M. Seymour.....	284,764	Sept. 11	749	208	24	1037
Table-leg.....	D. N. Smith and J. B. Raynor.....	290,128	Dec. 11	935	265	25	1060
Table-leg. Detachable.....	J. C. Smith.....	271,143	Jan. 23	1619	466	23	326
Table-leg fastening.....	H. Rose.....	275,274	Apr. 3	500	138	23	1311
Table-legs. Device for securing.....	A. S. Robinson.....	280,401	July 3	76	21	24	16
Table-legs. Machine for channeling.....	H. J. Durgin.....	284,193	Sept. 4	41	12, 13	24	912
Table-top. Revolving.....	A. C. Fowler.....	271,054	Jan. 23	1515	436	23	309
Tables, &c. Covering for.....	C. H. Tyler.....	279,110	June 5	631	171	23	2230
Tablet and instrument-case. Combination of drawing.....	W. P. Kidder.....	284,131	Aug. 28	2038	566	24	891
Tablet and tablet-cover.....	R. McCurdy.....	283,006	Aug. 14	636	180	24	619
Tablet. Blotter.....	W. Bancroft.....	272,188	Feb. 13	747	206	23	581
Tablet for teaching penmanship.....	E. L. Regna.....	274,031	Mar. 13	1005	275	23	1014
Tablet. Writing-paper.....	L. G. Reynolds.....	289,933	Dec. 11	697	196	25	1015
Tachometer.....	C. H. Prüssmann.....	288,593	Nov. 13	1613	278	25	693
Tack-heads. Machine for trimming and shaping.....	H. R. Packard.....	289,023	Nov. 27	1546	426	25	800
Tacking or nailing apparatus. Hand.....	L. Goddn.....	287,375	Oct. 23	2016	549	25	384

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Tacks, &c., with copper. Surfacing.....	E. S. Morton.....	282,754	Aug. 7	338	.....	24	559
Tag.....	C. R. Crane.....	278,888	June 5	289	83	23	2173
Tag.....	E. W. Thompson.....	271,378	Jan. 30	1927	557	23	387
Tag. Address or shipping.....	A. S. Pennington.....	270,108	Jan. 2	321	95	23	65
Tag and envelope. Combined.....	J. T. Dunham.....	277,245	May 8	918	246	23	1790
Tag-attaching device.....	J. W. Tuttle.....	283,169	Aug. 14	829	231	24	653
Tag. Bottle.....	N. K. Stanly.....	275,432	Apr. 10	750	200	23	1362
Tag. Bottle.....	N. K. Stanly.....	276,298	Apr. 24	1828	509	23	1563
Tag-fastener.....	M. Alshuler.....	284,706	Sept. 11	674	190	24	1024
Tag-fastener.....	G. N. Buck.....	286,112	Oct. 2	409	112	25	75
Tag for wall-paper, &c.....	F. H. Shepherd and J. W. Meyer.....	279,192	June 12	728	200	23	2858
Tag-holders. Machine for forming.....	G. H. Scharf.....	283,027	Aug. 14	662	186	24	625
Tag. Jeweler's.....	J. Wiesbauer.....	278,674	May 29	2681	734	23	2117
Tag. Metallic.....	E. J. Brooks.....	278,214	May 22	2084	574	23	2004
Tag or ticket fastener.....	H. H. Cautman.....	273,708	Mar. 13	602	162	23	945
Tag. Pin.....	O. J. Cohn.....	290,537	Dec. 18	1476	408	25	1162
Tag. Price.....	Z. T. Hall.....	286,430	Oct. 9	818	222	25	159
Tag. Shipping.....	W. F. Edwards.....	276,166	Apr. 24	1669	461	23	1536
Tag. Shipping.....	W. F. Edwards.....	276,167	Apr. 24	1670	461	23	1536
Tag. Shipping.....	T. E. Lewis.....	274,348	Mar. 20	1422	390	23	1095
Tailor's shears.....	L. Kully.....	280,047	June 26	1777	498	23	2446
Tally-board.....	W. Brown.....	283,750	Aug. 28	1556	439	24	807
Tally. Grain.....	J. E. Fellers.....	280,163	June 26	1900	535	23	2471
Tamping-bar.....	G. D. Hayden.....	290,422	Dec. 18	1324	367	25	1135
Tan-bark. Preparing.....	B. Holbrook.....	284,738	Sept. 11	716	200	24	1032
Tan-vat.....	G. Ruemelin.....	276,634	May 1	111	30	23	1646
Tan-vat agitator.....	J. Head.....	281,061	July 10	888	247	24	164
Tan-vat and wheel. Combined.....	D. Halsey, Jr.....	278,331	May 29	2260	619	23	2043
Tank:							
<i>See</i> Acid-tank. Oil-tank.							
Cream-transporta- Portable tank.							
tion tank. Rendering-tank.							
Flushing-tank. Tempering-tank.							
Gas-tank. Water-tank.							
Hatter's tank. Water-closet tank.							
Measuring-tank.							
Tank.....	M. Fleisher.....	284,402	Sept. 4	298	84	24	954
Tannin extracts. Clarifying.....	P. Gondolo.....	283,881	Aug. 28	1707	.....	24	832
Tanning.....	A. J. and J. E. Weeks.....	289,568	Dec. 4	272	.....	25	935
Tanning composition.....	E. Logue, M. T. Jones, and C. E. Morrill.....	283,798	Aug. 28	1612	.....	24	817
Tanning hides. Apparatus for.....	E. R. Locke.....	278,961	June 5	446	122	23	2199
Tanning hides. Composition for.....	J. F. Cranford.....	271,804	Feb. 6	263	.....	23	487
Tanning hides, skins, &c. Machine for expeditiously.....	B. D. Hyam.....	290,885	Dec. 25	1922	{ 531 } { 532 }	25	1247
Tanning leather. Machine for.....	B. D. Hyam.....	274,336	Mar. 20	1405	{ 385 } { 386 } { 387 }	23	1091
Tap.....	W. H. Goodwin.....	272,425	Feb. 20	1062	299	23	640
Tap and faucet.....	I. N. Gregg and E. Briody.....	279,745	June 19	1400	391	23	2377
Tap and faucet.....	F. Larkin.....	288,457	Nov. 13	830	230	25	663
Tap. Barrel.....	T. Watkins.....	290,722	Dec. 25	1723	475	25	1212
Tap. Beer.....	W. C. Boone and W. A. Whitfield.....	277,872	May 22	1665	454	23	1932
Tap. Bottle.....	J. W. Colcord.....	280,798	July 10	579	{ 161 } { 162 }	24	109
Tap. Expanding.....	J. O. Morse.....	284,220	Sept. 4	82	23	24	919
Tap for cutting spiral wedge-nuts.....	H. A. Harvey.....	274,492	Mar. 27	1631	452	23	1137
Tap for steam and gas fittings.....	L. D. Castle.....	284,377	Sept. 4	263	73, 74	24	949
Tap-wrench.....	M. S. Brooks.....	272,408	Feb. 20	1040	291	23	637
Tap-wrench.....	R. F. Rice.....	272,478	Feb. 20	1128	317	23	652
Tap-wrench.....	A. J. Smart.....	277,430	May 8	1133	305	23	1827
Tapping and facing machine.....	F. H. Richards.....	277,611	May 15	1355	365	23	1870
Tapping. Apparatus for raising barrels or kegs for.....	G. S. Lavendol.....	289,664	Dec. 4	362	102	25	951
Tapping beer and other barrels. Device for.....	J. F. Davey.....	289,075	Nov. 27	1612	446	25	812
Tapping gas and water mains. Device for.....	D. Lennox.....	284,746	Sept. 11	725	{ 202 } { 203 }	24	1033
Tapping steam, gas, and water fittings. Machine for.....	L. D. Castle.....	280,575	July 3	283	78	24	51
Target.....	F. Medart.....	271,647	Feb. 6	76	21	23	453
Target. Archery.....	J. W. C. Alday.....	275,111	Apr. 3	301	83	23	1278
Target-balls. Apparatus for filling.....	P. J. and E. A. Jarre.....	279,391	June 12	986	274	23	2299
Target-balls. Composition for.....	G. Westerman, Jr., and W. T. Miller.....	290,296	Dec. 18	1145	321	25	1104
Target. Flying.....	A. H. Bogardus.....	288,000	Nov. 6	271	76	25	554
Target. Flying.....	L. Fey.....	286,800	Oct. 16	1284	347	25	248
Target. Flying.....	N. Fischer.....	281,183	July 10	1046	289	24	192
Target. Flying.....	D. A. Johnson.....	282,000	July 24	2089	573	24	382
Target. Flying.....	F. J. Moyer.....	290,788	Dec. 25	1801	498	25	1226
Target. Flying.....	A. Woelher.....	287,985	Nov. 6	252	72	25	551
Target. Flying.....	B. F. Wright.....	276,125	Apr. 17	1618	445	23	1519
Target-trap.....	B. F. Wright.....	276,124	Apr. 17	1616	445	23	1519
Tassel.....	J. O. Remington.....	277,609	May 15	1353	{ 364 } { 365 }	23	1869
Tea-chests. Attachment for emptying.....	M. L. Gage.....	280,168	June 26	1904	536	23	2472
Tea-kettle.....	E. M. Brewster.....	279,635	June 19	1276	354	23	2355
Tea-kettle.....	W. S. Liscomb.....	278,569	May 29	2552	696	23	2094
Tea-kettle.....	C. J. Schoening.....	283,287	Aug. 14	977	273	24	682
Tea-kettle handle.....	I. Woepell.....	290,956	Dec. 25	2018	557	25	1262
Tea or coffee pot.....	T. A. Brown.....	283,731	Sept. 25	1927	546	24	1360
Tea or coffee pot.....	E. Krippendorf.....	276,976	May 1	576	151	23	1725
Tea-pot.....	J. Mitchell.....	275,246	Apr. 3	462	129	23	1305
Tea-pot. Earthenware.....	E. Bennett.....	273,221	Feb. 27	2072	582	23	825
Teaching drawing. Card for.....	J. A. Newman.....	282,659	Aug. 7	221	65	24	538
Teaching. Puzzle-card for object.....	S. Lyman.....	274,799	Mar. 27	1995	553	23	1202
Teams. Device for checking runaway.....	C. J. Dexter.....	283,860	Aug. 7	462	131	24	582
Teeth. Device for regulating.....	J. J. R. Patrick.....	274,367	Mar. 20	1447	397	23	1098



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Teeth for reception of artificial dentures. Preparing roots of	C. M. Richmond	277,943	May 22	1741	475	23	1944
Teeth. Preparing and treating	C. M. Richmond	277,935	May 22	1736		23	1944
Teeth. Sample-card of artificial	A. S. Robinson	290,933	Dec. 25	1989	549	25	1258
Teeth to artificial gums and flask for the same. Securing	F. W. Seabury	271,370	Jan. 30	1919	555	23	386
Tele-thermoscope. Electric	W. S. Johnson	281,884	July 24	1953	534	24	359
Telegraph alarm. Printing	S. D. Field	279,730	June 19	1386	356 357	23	2374
Telegraph and clock system. Combined	C. E. Buell	279,327	June 12	894	249 250	23	2284
Telegraph and other wires. Conduit for underground lines for	W. Hendley	281,064	July 10	893	248 249	24	165
Telegraph and semaphore signal	W. W. McLellan	274,212	Mar. 20	1248	344	23	1064
Telegraph and telephone cable	J. C. Chambers	289,891	Dec. 11	651	181	25	1007
Telegraph and telephone cable	C. Huek	278,963	June 5	433	119	23	2197
Telegraph and telephone conductor	J. C. Chambers	289,890	Dec. 11	650	181	25	1007
Telegraph and telephone line	T. N. Vail	279,289	June 12	835	232	23	2276
Telegraph and telephone lines. Combined cut-out and ground-switch for	C. H. Lethrop	284,031	Aug. 28	1912	535	24	869
Telegraph and telephone wire	G. Grav	290,769	Dec. 25	1783	492	25	1223
Telegraph and transmitter therefor. Printing	S. D. Field	287,265	Oct. 23	1881	515	25	360
Telegraph apparatus	G. D'Infreville	274,112	Mar. 20	1120	309	23	1041
Telegraph. Automatic	R. Anderson	289,205	Nov. 27	1769	490	25	841
Telegraph. Automatic	J. H. Rogers	277,349	May 8	1039	279	23	1812
Telegraph. Automatic	J. W. Rogers	283,665	Aug. 21	1433	401	24	773
Telegraph. Automatic printing	A. F. and F. B. Johnson	275,339	Apr. 3	597	160 161 162	23	1327
Telegraph. Automatic printing	F. Ostrogovich	281,788	July 24	1831	500 501 502	24	338
Telegraph-blank	N. W. Hartwell	284,297	Sept. 4	175	49, 50	24	934
Telegraph-cable	W. T. Henley	286,698	Oct. 16	1161	312	25	226
Telegraph-cable	N. M. Rittenhouse	272,774	Feb. 20	1500	422	23	718
Telegraph-cable splice	W. R. Patterson	277,335	May 8	1025	275	23	1809
Telegraph-cable. Submarine	S. Trott and F. A. Hamilton	271,548	Jan. 30	2142	616	23	426
Telegraph-cable pipe	W. R. Patterson	271,262	Jan. 30	1771	513	23	360
Telegraph-cables. Apparatus for covering	J. Robertson	275,859	Apr. 17	1299	357	23	1463
Telegraph-cables. Apparatus for making	A. H. Hamon	288,795	Nov. 20	1369	347	25	743
Telegraph. Chemical	T. F. Taylor	289,173	Nov. 27	1722	480	25	832
Telegraph. District, police, or fire	F. Pearce	288,107	Nov. 6	394	111	25	576
Telegraph. Duplex	J. E. Fenn	275,334	Apr. 3	591	159	23	1326
Telegraph. Duplex	B. Thompson	286,867	Oct. 16	1367	375	25	262
Telegraph. Duplex and quadruplex	G. W. Gardanier	283,995	Aug. 28	1845	520 521	24	859
Telegraph. Dynamo multiple	S. D. Field	288,786	Nov. 20	1256	344 345	25	741
Telegraph. Fire-alarm	T. Ahearn	283,944	Aug. 28	1786	504	24	848
Telegraph. Fire-alarm	E. Rogers	285,076	Sept. 18	1132	316	24	1112
Telegraph. Fire-alarm or district	W. B. Vansize	280,536	July 3	239	64, 65	24	43
Telegraph. Fire and district	T. D. Lockwood	273,374	Mar. 6	179	49	23	864
Telegraph-key	H. Anderson	288,609	Nov. 20	1033	285	25	703
Telegraph-key	E. A. Edwards	270,767	Jan. 16	1167	334	23	243
Telegraph-key	W. D. Farren	270,632	Jan. 16	1024	294	23	216
Telegraph-key	E. G. Stevens	275,433	Apr. 10	750	200	23	1362
Telegraph-key. Imitation	L. H. Hart	281,362	July 17	1281	335	24	238
Telegraph-keys. Automatic circuit-closer for	S. J. Spurgeon	284,508	Sept. 4	428	121	24	976
Telegraph line. Underground	W. Cohlman	277,007	May 8	620	162 163	23	1738
Telegraph line. Underground	N. M. Rittenhouse and M. W. Locke	276,472	Apr. 24	2056	571	23	1603
Telegraph-lines. Automatic roll-call for	W. P. Harris	290,616	July 3	332	93	24	59
Telegraph-lines. Ground-wire clamp for	H. W. Pope	283,140	Aug. 14	791	222	24	647
Telegraph. Mechanical speaking	A. M. Rosebrugh	270,848	Jan. 16	1260	363	23	261
Telegraph. Multiplex	E. A. Calahan and P. B. Delany	281,339	July 17	1249	346 347 348	24	233
Telegraph or telephone lines. Conduit for	S. Brentano	274,710	Mar. 27	1891	527	23	1183
Telegraph-pole	T. Breen	282,489	Aug. 7	11	3	24	503
Telegraph-pole	B. A. Davis	290,752	Dec. 25	1767	487	25	1220
Telegraph-pole	S. T. Suit	289,320	Nov. 27	1899	529	25	866
Telegraph. Printing	W. J. Burnside	273,810	Mar. 13	737	200	23	969
Telegraph. Printing	S. V. Essick	279,550	June 19	1179	326 327	23	2338
Telegraph. Printing	S. D. Field	274,300	Mar. 20	1358	373	23	1082
Telegraph. Printing	S. D. Field	274,748	Mar. 27	1934	538	23	1191
Telegraph. Printing	S. D. Field	279,729	June 19	1385	386	23	2373
Telegraph. Printing	S. D. Field	279,865	June 19	1542	431	23	2401
Telegraph. Printing	S. D. Field	287,266	Oct. 23	1883	515	25	360
Telegraph. Printing	S. D. Field	290,557	Dec. 18	1502	414	25	1166
Telegraph. Printing	S. D. Field	290,635	Dec. 18	1602	439 440	25	1182
Telegraph. Printing	G. B. Scott	274,665	Mar. 27	1840	512 513	23	1175
Telegraph. Printing	H. Van Hoevenbergh	274,416	Mar. 20	1503	414	23	1109
Telegraph. Printing	H. Van Hoevenbergh	285,709	Sept. 25	1886	537 538	24	1254
Telegraph. Printing	H. Van Hoevenbergh	285,710	Sept. 25	1892	538	24	1255
Telegraph. Printing	H. Van Hoevenbergh	286,977	Oct. 16	1508	415	25	256
Telegraph. Printing	W. B. Vansize and C. L. Buckingham	290,613	Dec. 18	1573	432	25	1178
Telegraph. Printing	A. Wirsching	286,667	Oct. 16	1115	300 301	25	218

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Telegraph. Quadruplex.....	G. D'Infreville.....	281,249	July 17	1138	{ 313 314 315 }	{ 24 24 24 }	214
Telegraph. Quadruplex.....	A. Muirhead.....	281,117	July 10	953	267	24	176
Telegraph. Quadruplex.....	A. Muirhead and G. K. Winter.....	281,118	July 10	955	267	24	176
Telegraph. Railway.....	W. D. C. Pattysen.....	290,602	Dec. 18	1561	{ 429 430 }	{ 25 25 }	1176
Telegraph. Railway-train.....	W. T. Waters.....	271,958	Feb. 6	451	123	23	520
Telegraph-relay.....	M. J. O'Sullivan.....	286,955	Oct. 16	1481	407	25	281
Telegraph-relay. Quadruplex.....	H. C. Nicholson.....	289,301	Nov. 27	1875	521	25	862
Telegraph-sounder.....	W. E. Davis.....	273,264	Mar. 6	24	8	23	838
Telegraph-sounder.....	W. C. Smith.....	288,881	Nov. 20	1370	378	25	762
Telegraph-transmitter.....	H. Lyon.....	283,716	Aug. 21	1503	424	24	766
Telegraph-wire.....	T. Shaw.....	289,575	Dec. 4	255	72	25	932
Telegraph-wire conduit. Underground.....	A. Sloan.....	274,522	Mar. 27	1671	464	23	1144
Telegraph-wire coupling.....	G. Brott.....	272,524	Feb. 20	1183	330	23	661
Telegraph-wires. Laying underground.....	F. M. Speed.....	286,861	Oct. 16	1359	372	25	261
Telegraph-wires. System of laying.....	A. J. O'Reilly.....	284,655	Sept. 11	604	171	24	1012
Telegraph-wires. Underground tube for.....	W. Lenderoth.....	284,643	Sept. 11	590	166	24	1010
Telegraphs. Controlling printing-circuits of printing.....	S. D. Field.....	290,556	Dec. 18	1500	414	25	1166
Telegraphs. Dynamo-electric machine for printing.....	S. D. Field.....	282,297	July 31	2482	682	24	454
Telegraphs. Multiple signal-box for fire and district.....	J. C. Wilson.....	284,527	Sept. 4	449	{ 127 128 }	{ 24 24 }	980
Telegraphs. Optical attachment for printing.....	W. J. McCausland.....	270,907	Jan. 23	1338	386	23	280
Telegraphs. Perforator for automatic.....	T. M. Foote.....	270,774	Jan. 16	1174	{ 336 337 }	{ 23 23 }	244
Telegraphs. Polarized relay for quadruplex.....	G. W. Gardanier.....	275,185	Apr. 3	392	107	23	1294
Telegraphs. Signaling apparatus for district and fire-alarm.....	T. A. Casey.....	272,645	Feb. 20	1341	376	23	690
Telegraphs. Station-switch for fire.....	G. F. Bulen.....	271,597	Feb. 6	15	4	23	443
Telegraphic and telephonic instruments. Protector for.....	M. D. Connolly.....	279,712	June 19	1364	380	23	2370
Telegraphic and telephonic instruments. Protector for.....	M. D. Connolly.....	279,714	June 19	1366	381	23	2371
Telegraphic and telephonic instruments. Protector for.....	M. D. Connolly.....	279,715	June 19	1367	381	23	2371
Telegraphic apparatus.....	P. B. Delany.....	286,280	Oct. 9	633	170	25	125
Telegraphic apparatus.....	W. L. Hunt.....	270,674	Jan. 16	1051	300	23	221
Telegraphic apparatus.....	F. L. Pope.....	284,481	Sept. 4	387	107	24	969
Telegraphic conductors. Supporting and preserving.....	J. H. Green.....	275,195	Apr. 3	402	111	23	1295
Telegraphic fire-alarm stations. Automatic testing apparatus for.....	G. F. Bulen.....	271,598	Feb. 6	18	5	23	443
Telegraphic receiving-instrument.....	E. M. Hamilton.....	273,728	Mar. 13	634	168	23	951
Telegraphic relay.....	T. Cocbran.....	272,210	Feb. 13	775	214	23	566
Telegraphic relay.....	J. P. Smithers.....	276,087	Apr. 17	1564	431	23	1510
Telegraphic relay and repeater.....	J. A. Maloney.....	289,285	Nov. 27	1859	516	25	858
Telegraphic repeater.....	W. E. Athearn.....	286,107	Oct. 2	401	110	25	74
Telegraphic repeater.....	J. P. Smithers.....	279,670	June 19	1317	366	23	2362
Telegraphic transmitter.....	M. H. Dement.....	287,914	Nov. 6	156	45	25	535
Telegraphy.....	P. B. Delany.....	286,282	Oct. 9	638	170	25	126
Telegraphy.....	T. M. Foote.....	270,775	Jan. 16	1178	{ 337 338 }	{ 23 23 }	245
Telegraphy.....	G. Smith and T. F. Taylor.....	284,498	Sept. 4	414	118	24	974
Telegraphy apparatus. Electric.....	P. E. Perez.....	274,652	Mar. 27	1824	507	23	1172
Telegraphy. Duplex.....	P. B. Delany.....	286,279	Oct. 9	629	169	25	125
Telegraphy. Duplex and multiplex.....	G. W. Gardanier.....	280,028	June 26	1753	492	23	2444
Telegraphy. Duplex and quadruplex.....	A. Muirhead.....	280,753	July 3	505	{ 143 144 }	{ 24 24 }	90
Telegraphy. Dynamo.....	S. D. Field.....	282,294	July 31	2470	681	24	452
Telegraphy. Dynamo.....	S. D. Field.....	282,295	July 31	2476	681	24	452
Telegraphy. Dynamo.....	S. D. Field.....	282,296	July 31	2478	682	24	453
Telegraphy. Dynamo.....	H. Van Hovenbergh.....	274,417	Mar. 20	1505	414	23	1109
Telegraphy. Multiplex.....	C. Solden.....	270,990	Jan. 23	1443	417	23	297
Telegraphy. Receiving-instrument for quadruplex.....	S. D. Field.....	275,181	Apr. 3	386	106	23	1293
Telemeter.....	W. D. Patterson.....	279,273	June 12	620	227	23	2273
Telephone.....	H. Clay.....	277,112	May 8	760	200	23	1762
Telephone.....	A. E. Dolbear.....	288,215	Nov. 13	523	146	25	608
Telephone.....	D. Drawbaugh.....	290,978	Dec. 25	2057	566	25	1267
Telephone.....	D. Drawbaugh.....	290,979	Dec. 25	2058	566	25	1268
Telephone.....	T. A. Edison.....	272,034	Feb. 13	557	151	23	549
Telephone.....	T. A. Edison.....	274,577	Mar. 27	1736	482	23	1155
Telephone.....	C. Egan.....	282,969	Aug. 14	584	163	24	611
Telephone.....	C. T. Loring and G. W. Pierce.....	271,878	Feb. 6	351	98	23	502
Telephone.....	J. H. Rogers.....	281,560	July 17	1523	418	24	279
Telephone.....	G. R. Shepherd.....	286,737	Oct. 16	1208	325	25	234
Telephone.....	B. N. Bots.....	286,680	Oct. 16	1135	306	25	221
Telephone.....	O. and W. S. Higgins and J. Grim.....	273,079	Feb. 27	1886	530	23	791
Telephone.....	C. Selden.....	281,407	July 17	1333	369	24	248
Telephone and signal circuit.....	E. P. Warner.....	284,102	Aug. 28	1998	556	24	884
Telephone and telegraph cable.....	C. Huck.....	284,425	Sept. 4	326	91	24	958
Telephone and telegraph cable.....	C. Huck.....	284,426	Sept. 4	327	91	24	958
Telephone and telegraph lines. Signaling apparatus for.....	E. Gray and F. L. Pope.....	284,003	Aug. 28	1877	{ 526 527 }	{ 24 24 }	863
Telephone and telegraph protector.....	C. C. Drake.....	280,916	July 10	711	206	24	132
Telephone and telegraph switches. Electric time-register for.....	F. E. Kinsman.....	276,184	Apr. 24	1688	466	23	1540
Telephone and telegraph wires, &c. Machinery for covering.....	J. A. Sparling.....	282,680	Aug. 7	246	71	24	542
Telephone apparatus. Circuit for.....	C. E. Allen.....	290,307	Dec. 18	1161	{ 325 326 }	{ 25 25 }	1107
Telephone-cabinet.....	R. Busted.....	282,841	Aug. 7	438	123	24	577
Telephone-call.....	P. C. Ohl.....	280,948	July 10	759	211	24	139



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr &	Vol.	Page.
Telephone call-bell.	H. Clay	280,451	July 3	141	38	24	27
Telephone call-boxes. Automatic crank-switch for.	C. E. Scribner	287,873	Nov. 6	103	30	25	525
Telephone call-boxes. Circuit for.	C. E. Scribner	283,927	Aug. 28	1761	497	24	842
Telephone call-circuits. Pole-changer for.	E. E. Bawsel	274,552	Mar. 27	1705	473	23	1149
Telephone-call indicator	J. M. Provost	276,465	Apr. 24	2050	569	23	1601
Telephone-call. Individual.	J. H. Cary	281,614	July 17	1596	436	24	291
Telephone-call. Individual.	J. A. Lakin	276,604	May 1	75	21	23	1641
Telephone central-office apparatus	W. M. Brock	282,699	Aug. 7	278	78, 79	24	547
Telephone central-office apparatus	L. B. Firman	283,334	Aug. 14	1038	291	24	693
Telephone central-office switch-board	T. J. Perrin	280,662	July 3	385	108	24	68
Telephone-circuit	J. A. McCoy	278,351	May 29	2292	{ 626 627 }	23	2048
Telephone-circuit	J. M. Stearns, Jr	281,413	July 17	1342	371	24	249
Telephone-circuits. Automatic signaling apparatus for	T. N. Vail	275,296	Apr. 3	526	144	23	1315
Telephone cut-out.	C. D. Wright and C. A. Fisher	288,908	Nov. 20	1400	386	25	767
Telephone. Electric	H. B. Porter	269,879	Jan. 2	65	20	23	15
Telephone. Electric	J. H. Robertson	276,630	May 1	107	29	23	1645
Telephone. Electric	J. H. Robertson	276,631	May 1	109	29	23	1646
Telephone. Electric	J. M. Stearns, Jr	281,414	July 17	1343	371	24	250
Telephone. Electric speaking	A. W. Rose and C. A. Cheever	272,329	Feb. 13	919	256	23	611
Telephone-exchange	I. M. O'Donel	283,806	Aug. 28	1619	{ 456 457 }	24	818
Telephone-exchange apparatus	T. A. Watson	280,266	June 26	2026	570	23	2493
Telephone-exchange. Automatic	G. A. Cardwell	281,613	July 17	1593	436	24	290
Telephone-exchange circuit	A. S. Hibbard	274,602	Mar. 27	1770	490	23	1161
Telephone-exchange circuit	C. E. Scribner	278,367	May 29	2313	633	23	2052
Telephone-exchange signaling circuit and apparatus	T. N. Vail	274,857	Mar. 27	2058	574	23	1213
Telephone-exchange switch	G. W. Coy	275,362	Apr. 10	648	174	23	1345
Telephone-exchange system	G. F. Durrant	286,595	Oct. 16	1024	278	25	202
Telephone-exchange system	J. E. Fenn	285,245	Sept. 18	1335	376	24	1148
Telephone-exchange system	C. A. Randall	270,556	Jan. 9	897	259	23	185
Telephone-exchange system and apparatus	F. Shaw and W. A. Childs	278,613	May 29	2601	710	23	2103
Telephone-exchange systems. Signaling apparatus for	J. H. Cary	285,342	Sept. 18	1440	407	24	1167
Telephone-exchanges. Alarm-signal apparatus for	E. A. Woelk	272,505	Feb. 20	1163	326	23	658
Telephone-exchanges. Circuit for multiple switch-boards for	C. E. Scribner	271,279	Jan. 30	1790	520	23	633
Telephone-exchanges. Duplicate switch-board for	G. M. Phelps, Jr	285,670	Sept. 25	1840	525	24	1246
Telephone-exchanges. Signaling apparatus for	T. D. Lockwood	283,626	Aug. 21	1389	389	24	764
Telephone-exchanges. Spring-jack switch for	J. C. Warner	281,741	July 24	1769	481	24	326
Telephone-holder and automatic circuit-breaker. Adjustable	W. H. Eckert, J. A. Seely, and E. A. Eckert	288,320	Nov. 13	659	182	25	630
Telephone-lines. Angle-hanger for mechanical	G. F. Shaver	278,750	June 5	93	27	23	2140
Telephone-lines. Electric signaling apparatus for	D. Drawbaugh	276,136	Apr. 17	1630	449	23	1522
Telephone-lines. Mechanism for preventing induced currents in	J. W. Brennan and N. Rousseau	287,092	Oct. 23	1663	457	25	321
Telephone-lines. Spring-jack and circuit for through	C. H. Wilson	283,312	Aug. 14	1005	282	24	687
Telephone-lines. Switching apparatus for	J. V. M. Bartelous	290,730	Dec. 25	1733	479	25	1214
Telephone-lines. Transmitting apparatus for	T. D. Lockwood	281,895	July 24	1970	539	24	362
Telephone local-call instrument	W. Nichols	283,354	Aug. 14	1067	{ 300 301 }	24	699
Telephone. Mechanical	W. J. Bowen	285,004	Sept. 18	1047	293	24	1098
Telephone. Mechanical	J. W. Clark	289,620	Dec. 4	306	85, 86	25	941
Telephone. Mechanical	G. K. and H. C. Farrington	271,324	Jan. 30	1851	537	23	373
Telephone. Mechanical	H. E. Huston	285,269	Sept. 18	1361	384	24	1154
Telephone. Mechanical	A. G. Miller	288,835	Nov. 20	1315	360	25	751
Telephone. Mechanical	C. Selden	281,406	July 17	1332	369	24	247
Telephone-receiver	S. H. Bartlett and H. E. Waite	271,188	Jan. 23	1684	486	23	336
Telephone-receiver	S. H. Bartlett and H. E. Waite	287,896	Nov. 6	134	39	25	531
Telephone-receiver	J. F. Batchelor	281,000	July 10	815	227	24	151
Telephone-receiver	L. J. Crossley	280,200	July 10	581	162	24	109
Telephone-receiver	G. E. Shaw	276,723	May 1	249	63	23	1667
Telephone-receiver	H. E. Waite	286,875	Oct. 16	1380	378	25	264
Telephone-receiver	H. E. Waite	286,876	Oct. 16	1380	379	25	264
Telephone-receiver	H. E. Waite	287,742	Oct. 30	2507	675	25	486
Telephone-receiver	H. E. Waite and S. H. Bartlett	287,743	Oct. 30	2507	676	25	486
Telephone-receiver. Adjustable double	D. G. Barnard	280,116	June 26	1851	522	23	2462
Telephone-receivers. Circuit-closer for	E. C. Dean	271,610	Feb. 6	33	8	23	446
Telephone. Receiving	M. L. Baxter	277,199	May 8	867	230	23	1780
Telephone. Receiving	J. A. Maloney	274,352	Mar. 20	1426	391	23	1095
Telephone-repeater	D. Drawbaugh	287,111	Oct. 23	1689	{ 462 463 }	25	326
Telephone signaling apparatus	J. J. Carty	288,691	Nov. 20	1140	314	25	720
Telephone signaling apparatus	W. J. Dudley	278,322	May 29	2244	616	23	2040
Telephone signaling apparatus	F. B. Herzog	289,834	Dec. 11	577	{ 161 162 }	25	994
Telephone. Speaking	F. Blake, Jr	283,062	Aug. 14	704	197	24	632
Telephone. Speaking	S. D. Field	275,178	Apr. 3	382	106	23	1292
Telephone. Speaking	J. H. Robertson	289,309	Nov. 27	1885	525	25	864
Telephone-support	T. W. Lane	287,301	Oct. 23	1930	527	25	369
Telephone-support	C. T. Loring	281,381	July 17	1299	360	24	242
Telephone-support	C. H. Ohly	288,183	Nov. 6	482	134	25	591
Telephone-support	J. Tregurtha	289,179	Nov. 27	1730	482	25	834
Telephone-support	J. Tregurtha	289,180	Nov. 27	1734	482	25	834
Telephone support and switch. Adjustable	G. A. Wilkins	286,518	Oct. 9	922	{ 248 249 }	25	177
Telephone-switch	H. W. Breckenridge	278,494	May 29	2466	672	23	2079
Telephone-switch	C. T. Loring	289,353	Nov. 27	1940	539	25	874
Telephone-switch	T. J. McTighe	270,326	Jan. 9	594	175	23	126
Telephone-switch	C. E. Scribner	284,908	Sept. 11	918	259	24	1068
Telephone-switch	C. E. Scribner	284,909	Sept. 11	919	259	24	1068
Telephone-switch	J. Tregurtha	289,178	Nov. 27	1726	{ 481 482 }	25	833

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Telephone-switch .....	J. Tregurtha .....	289,321	Nov. 27	1900	529	25	867
Telephone-switch .....	T. A. Watson .....	270,522	Jan. 9	853	{ 248 249 }	{ 23	177
Telephone switch-board .....	H. Clay .....	280,351	July 3	15	4	24	5
Telephone switch-board .....	E. B. Hamlin .....	279,747	June 19	1402	{ 331 392 }	{ 23	2377
Telephone switch-board .....	T. J. Perrin .....	280,663	July 3	388	109	24	69
Telephone switch-boards. Looping-in mechanism for .....	E. M. Wilson .....	279,471	June 12	1074	298	23	2314
Telephone system .....	W. H. Eckert and J. A. Seely .....	288,627	Nov. 20	1057	291	25	707
Telephone system .....	C. A. Jackson .....	259,539	Dec. 4	209	59	25	923
Telephone system and apparatus .....	I. H. Farnham .....	281,478	July 17	1428	391	24	263
Telephone system and apparatus .....	C. A. Randall .....	271,513	Jan. 30	2102	604	23	419
Telephone systems. Automatic indicator-switch for .....	G. L. Anders .....	280,707	July 3	442	126	24	79
Telephone time-signal .....	J. M. Oram .....	278,357	May 29	2300	{ 629 630 }	{ 23	2050
Telephone time-signal repeating system .....	J. M. Oram .....	287,710	Oct. 30	2462	{ 663 664 }	{ 25	478
Telephone-transmitter .....	E. Berliner .....	285,102	Sept. 18	1166	326	24	1118
Telephone-transmitter .....	J. H. Chcever .....	281,240	July 17	1126	310	24	212
Telephone-transmitter .....	H. Clay .....	280,580	July 3	204	81	24	53
Telephone-transmitter .....	W. A. Crawford .....	270,752	Jan. 16	1150	{ 329 330 }	{ 23	239
Telephone-transmitter .....	D. Drawbaugh .....	272,865	Feb. 27	1636	458	23	749
Telephone-transmitter .....	D. Drawbaugh .....	276,137	Apr. 17	1631	449	23	1522
Telephone-transmitter .....	D. Drawbaugh .....	290,980	Dec. 25	2059	566	25	1268
Telephone-transmitter .....	C. D. Haskins .....	286,923	Oct. 16	1438	395	25	274
Telephone-transmitter .....	J. A. Lakin .....	278,026	May 22	1849	505	23	1963
Telephone-transmitter .....	J. A. Lakin .....	279,401	June 12	999	277	23	2301
Telephone-transmitter .....	W. C. Lockwood .....	283,123	Aug. 14	775	218	24	645
Telephone-transmitter .....	E. A. Schoettel .....	271,924	Feb. 6	417	113	23	513
Telephone-transmitter .....	E. L. Wilson .....	275,310	Apr. 3	545	148	23	1319
Telephone-transmitter .....	E. L. Wilson .....	287,490	Oct. 30	2167	588	25	421
Telephone-transmitter .....	R. D. Woodworth .....	274,075	Mar. 13	1062	293	23	1024
Telephone transmitter and receiver .....	J. H. Rogers .....	269,884	Jan. 2	70	21	23	16
Telephone-transmitter. Electric .....	J. A. Maloney .....	274,353	Mar. 20	1427	391	23	1095
Telephone-transmitter. Electric .....	J. H. Robertson .....	276,632	May 1	110	20	23	1646
Telephone-transmitters. Mouth-piece for .....	A. S. Nichols .....	271,903	Feb. 6	384	106	23	508
Telephone. Transmitting .....	M. L. Baxter .....	277,198	May 8	865	230	23	1780
Telephone. Transmitting .....	T. A. Edison .....	274,576	Mar. 27	1734	482	23	1154
Telephones. Apparatus for counterbalancing disturbances in .....	A. Bernstein .....	286,577	Oct. 16	999	270	25	198
Telephones. Automatic resistance cut-out for .....	C. D. Wright and C. A. Fisher .....	288,909	Nov. 20	1402	{ 386 387 }	{ 25	768
Telephones. Head-gear for switchmen's .....	C. E. Scribner .....	275,420	Apr. 10	728	194	23	1359
Telephones. Individual signaling apparatus for .....	J. H. Cary .....	281,470	July 17	1394	383	24	258
Telephones. Secrecy-switch for .....	C. E. Scribner .....	271,280	Jan. 30	1791	520	23	363
Telephones. Speaking-trumpet for receiving .....	D. Drawbaugh .....	272,866	Feb. 27	1639	458	23	749
Telephonic and burglar-alarm system. Combined .....	W. S. Shoup and T. Buskirk .....	279,193	June 12	729	200	23	2258
Telephonic and other electrical purposes. Line-changer for .....	C. H. Lothrop .....	277,145	May 8	805	212	23	1770
Telephonic and telegraphic instruments. Apparatus for protecting .....	F. E. Kinsman .....	283,492	Aug. 21	1242	349	24	736
Telephonic and telegraphic system .....	J. P. Barrett .....	284,595	Sept. 11	533	151	24	1001
Telephonic apparatus .....	W. A. Belcher .....	283,747	Aug. 28	1549	438	24	806
Telephonic apparatus .....	J. H. Kinsman .....	288,449	Nov. 13	835	{ 226 227 }	{ 25	661
Telephonic circuit .....	W. H. Eckert and J. A. Seely .....	282,867	Aug. 7	472	133	24	584
Telephonic circuit .....	J. M. Stearns, Jr .....	270,500	Jan. 9	815	238	23	169
Telephonic communication. Apparatus and system for .....	A. Dunand .....	280,365	July 3	31	9	24	8
Telephonic communication. Apparatus for .....	J. H. Rogers .....	288,366	Nov. 13	732	199	25	642
Telephonic repeater and relay .....	J. A. Maloney .....	287,449	Oct. 30	2111	574	25	410
Telephonic repeating-circuit .....	T. D. Lockwood .....	290,898	Dec. 25	1942	{ 535 536 }	{ 25	1250
Telephonic system .....	G. L. Anders .....	287,356	Oct. 23	1993	543	25	380
Telephonic system .....	J. P. Barrett .....	284,594	Sept. 11	532	151	24	1000
Telephonic transmitter .....	C. Ader .....	274,246	Mar. 20	1291	{ 355 356 }	{ 23	1072
Telephonic transmitter .....	H. Clay .....	288,017	Nov. 6	992	82	25	557
Telephonic transmitter .....	G. E. Shaw .....	270,136	Jan. 2	365	106	23	75
Telephonic transmitters. Adjustable support for .....	W. H. Eckert, J. A. Seely, and E. A. Eckert .....	275,611	Apr. 10	972	264	23	1401
Telephonically. System and apparatus for communicating .....	C. T. Dickson .....	278,411	May 29	2362	{ 645 646 }	{ 23	2061
Telescopic case. Portable .....	J. E. Haskell .....	281,268	July 17	1163	321	24	219
Telethermometer .....	C. L. Clarke .....	285,572	Sept. 25	1720	{ 486 487 }	{ 24	1223
Tellurian .....	C. A. Shaw .....	288,372	Nov. 13	741	201	25	644
Temperature and pressure indicators. Circuit and apparatus for electric .....	C. L. Clarke .....	284,382	Sept. 4	270	76	24	950
Temperature-indicator. Electric .....	R. Hewitt, Jr .....	281,877	July 24	1943	531	24	358
Temperature-indicator. Marine .....	F. B. Stevens and J. L. Bond .....	284,774	Sept. 11	761	212	24	1039
Temperature-regulator. Automatic .....	A. Morel .....	273,757	Mar. 13	669	179	23	957
Tempering-tank .....	A. A. Simonds .....	277,518	May 15	1239	334	23	1852
Tenoning-machine .....	G. Luppert .....	286,546	Oct. 9	955	257	25	184
Tenoning-machines. Carriage-support for .....	W. H. Doane .....	285,586	Sept. 25	1740	492	24	1227
Tension-release .....	J. and W. L. Heberling .....	287,938	Nov. 6	173	50	25	538
Tent and bed. Combined .....	M. Perez .....	279,593	June 19	1227	340	23	2347
Tent-frame .....	W. B. Garver and E. Varian .....	288,938	Nov. 20	1437	396	25	774
Terret for bridles. Overcheck .....	F. L. Jones .....	288,709	Nov. 20	1160	318	25	723
Terret for harness. Crown .....	H. C. Gill .....	279,149	June 12	686	188	23	2250
Terret. Harness .....	P. McFadden .....	282,743	Aug. 7	328	93	24	557
Tester. Liquid .....	J. O. Schnbert and V. Bukey .....	290,935	Dec. 25	1991	549	25	1258



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Drawg.	Vol.	Page.
Testing-machine. Hydraulic.....	C. E. Emery.....	278,919	June 5	377	{ 102 103	{ 23	2187
Testing the strength of materials. Machine for.....	A. H. Emery.....	278,916	June 5	358	{ 98, 99	{ 23	2124
Testing the strength of materials. Machine for.....	A. H. Emery.....	278,917	June 5	361	{ 99 100	{ 23	2185
Testing the strength of materials. Machinery for.....	A. H. Emery.....	278,915	June 5	352	{ 96 97	{ 23	2183
Testing the strength of metal. Machinery for.....	A. H. Emery.....	278,914	June 5	347	{ 95, 96	{ 23	2183
Testing the strength of metal. Machinery for.....	A. H. Emery.....	278,918	June 5	366	{ 100 101 102	{ 23	2186
Tether.....	C. F. Christopher and R. B. Alexander. W. Heaton.....	274,462	Mar. 27	1574	431	23	1123
Tethering device. Animal.....	H. da Costa Corrêa Leite.....	283,240	Aug. 14	918	256	24	670
Textile fabric and the like. Manufacture of.....	C. A. Needham.....	287,247	Oct. 23	1862	.....	25	356
Theater-stage.....	F. Seymour.....	273,880	Mar. 13	831	225	23	984
Theatrical appliance.....	J. B. Fancette.....	280,525	July 3	229	60	24	41
Theodolite.....	J. W. Holmes.....	289,401	Dec. 4	35	11	25	893
Theodolite. Solar.....	A. W. K. Andrews and C. R. Teed..	275,913	Apr. 17	1360	{ 374 375	{ 23	1475
Therapeutic apparatus. Electro-.....	J. E. Carr.....	282,431	July 31	2659	{ 729 730	{ 24	484
Therapeutic electric appliance.....	A. K. Eaton.....	287,096	Oct. 23	1669	458	25	322
Thermo-electric battery.....	J. G. Smith.....	289,631	Dec. 4	320	89	25	944
Thermometer.....	H. Weinbagen.....	282,390	July 31	2603	715	24	475
Thermometer. Clinical.....	J. J. Hicks.....	278,380	May 29	2326	637	23	2055
Thermometer. Self-registering.....	W. H. H. Barton.....	280,037	June 26	1765	495	23	2446
Thermometer-tube.....	H. Weinbagen. (Reissue). W. G. Day.....	289,603	Dec. 4	289	81	25	938
Thermostat.....	T. Reeve.....	10,274	Jan. 16	1301	375	23	268
Thermostat. Electric.....	F. H. Prentiss and J. A. Tilden.....	277,241	May 8	912	244	23	1789
Thermostat. Electrical.....	E. S. Renwick.....	269,960	Jan. 2	164	48	23	34
Thermostat for incubators.....	H. Dowens.....	285,676	Sept. 25	1846	527	24	1247
Thermostats. Automatic correcting device for.....	C. H. Myers.....	281,397	July 17	1319	{ 364 365	{ 24	246
Thill-adjuster.....	F. A. Hake.....	270,643	Jan. 16	1008	291	23	213
Thill-carrier for harness.....	G. W. Beebe.....	278,449	May 29	2412	657	23	2070
Thill-coupling.....	A. A. Bennett.....	273,983	Mar. 13	947	261	23	1004
Thill-coupling.....	I. G. Bower.....	272,628	Feb. 20	1320	370	23	686
Thill-coupling.....	S. E. and S. A. Browne.....	270,571	Jan. 16	920	265	23	197
Thill-coupling.....	C. A. Buffington.....	271,191	Jan. 23	1687	487	23	337
Thill-coupling.....	C. L. Dalton.....	288,541	Nov. 13	948	259	25	680
Thill-coupling.....	I. Elting.....	273,808	Mar. 13	735	200	23	968
Thill-coupling.....	L. H. Emmmons.....	286,911	Oct. 16	1427	392	25	272
Thill-coupling.....	T. and C. L. Ferguson.....	286,123	Oct. 2	421	115	25	78
Thill-coupling.....	J. H. Flemming.....	280,806	July 10	587	164	24	110
Thill-coupling.....	J. H. Foote.....	273,497	Mar. 6	325	88	23	890
Thill-coupling.....	H. E. Gamble.....	274,751	Mar. 27	1939	539	23	1192
Thill-coupling.....	F. E. Goldsmith.....	277,416	May 8	1112	299	23	1824
Thill-coupling.....	F. Groh.....	288,992	Nov. 27	1507	417	25	794
Thill-coupling.....	F. Hand.....	273,064	Feb. 27	1872	526	23	769
Thill-coupling.....	G. W. Haskell.....	276,580	May 1	50	14	23	1636
Thill-coupling.....	J. Haviland.....	285,409	Sept. 25	1532	432	24	1189
Thill-coupling.....	H. E. Henwood.....	279,381	June 12	973	270	23	2297
Thill-coupling.....	F. B. Herzog.....	289,413	Dec. 4	49	14	25	895
Thill-coupling.....	H. M. Holiday.....	278,960	June 5	426	117	23	2196
Thill-coupling.....	J. O. Hopping.....	282,080	July 31	2197	603	24	406
Thill-coupling.....	D. E. Hull.....	286,439	Oct. 9	829	225	25	161
Thill-coupling.....	G. H. Hutton.....	278,138	May 22	1987	546	23	1987
Thill-coupling.....	D. A. Johnson.....	279,246	June 12	787	216	23	2268
Thill-coupling.....	J. W. Kelley.....	282,457	July 31	2693	739	24	490
Thill-coupling.....	B. McGovern.....	282,086	July 31	2207	607	24	408
Thill-coupling.....	A. E. Stafford.....	278,339	May 29	2278	622	23	2046
Thill-coupling.....	H. Temple.....	271,642	Feb. 6	71	20	23	453
Thill-coupling.....	R. T. Wolston and S. W. Printz.....	290,782	Dec. 25	1797	496	25	1225
Thill-coupling.....	L. C. Wood and J. S. Taylor.....	290,783	Dec. 25	1798	496	25	1225
Thill-coupling.....	M. E. Zeller.....	284,750	Sept. 11	731	204	24	1035
Thill-coupling.....	C. Grunder and J. H. Moyer.....	284,053	Aug. 28	1936	541	24	873
Thill-coupling.....	T. Broderick.....	274,656	Mar. 27	1829	508	23	1172
Thill-coupling.....	J. A. Folsom.....	279,026	June 5	505	137	23	2209
Thill-coupling.....	E. H. and C. Morgan.....	283,827	Aug. 28	1644	463	24	822
Thill-coupling.....	A. B. and M. D. Wise.....	279,043	June 5	527	143	23	2213
Thill-coupling.....	R. T. Wolston and S. W. Printz.....	283,933	Aug. 28	1769	500	24	845
Thill-coupling.....	L. C. Wood and J. S. Taylor.....	281,583	July 17	1552	425	24	284
Thill-coupling.....	M. E. Zeller.....	281,323	July 17	1233	341	24	231
Thill-coupling.....	C. Grunder and J. H. Moyer.....	279,996	June 26	1707	478	23	2436
Thill-coupling.....	T. Broderick.....	274,428	Mar. 20	1320	418	23	1112
Thill-coupling.....	J. A. Folsom.....	283,309	Aug. 14	1002	281	24	687
Thill-coupling.....	E. H. and C. Morgan.....	275,740	Apr. 10	1131	309	23	1428
Thill-coupling.....	A. B. and M. D. Wise.....	276,120	Apr. 17	1612	444	23	1518
Thill-coupling.....	L. C. Wood and J. S. Taylor.....	282,021	July 24	2117	580	24	366
Thill-coupling.....	M. E. Zeller.....	273,791	Mar. 13	717	195	23	965
Thill-coupling and detacher.....	D. Green.....	270,658	Jan. 16	1030	296	23	217
Thill-coupling bolt.....	C. A. Curtis.....	270,935	Jan. 23	1370	395	23	286
Thill-coupling clip.....	V. M. Bruffett.....	282,951	Aug. 14	567	160	24	608
Thill-coupling for sleighs.....	A. J. Allen.....	277,099	May 8	742	195	23	1759
Thill-coupling jack.....	J. Parent.....	279,005	June 5	476	130	23	2204
Thill-coupling jack.....	T. M. Stone.....	287,884	Nov. 6	117	35	25	528
Thill loop or tug.....	C. Grunder and J. H. Moyer.....	279,151	June 12	688	188	23	2251
Thill-lug.....	T. Broderick.....	290,523	Dec. 18	1459	403	25	1158
Thill-lug.....	J. A. Folsom.....	269,843	Jan. 2	30	10	23	8
Thill. Sleigh.....	G. H. Lusk.....	277,843	May 15	1623	442	23	1918
Thill-strap. Harness.....	A. Lobdell.....	274,206	Mar. 20	1229	338	23	1061
Thill-supporter.....	E. H. and C. Morgan.....	273,877	Mar. 13	829	224	23	984

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Thill-supporter .....	E. H. and C. Morgan .....	280,942	July 10	753	209	24	138
Thill. Vehicle .....	A. Rasmussen .....	279,804	June 19	1466	411	23	2388
Thill. Vehicle .....	D. P. Sharp .....	276,196	Apr. 24	1704	471	23	1542
Thimble .....	M. Beaty .....	279,524	June 19	1152	319	23	2333
Thimble and thread-cutter. Combined .....	W. J. Miller .....	273,380	Mar. 6	187	50	23	866
Thimble-skein .....	C. B. Brown .....	279,909	June 26	1600	448	23	2418
Thimbles. Manufacture of .....	H. McDougall .....	274,356	Mar. 20	1430	392	23	1096
Thimbles. Manufacture of sewing .....	W. D. Whiting .....	273,924	Mar. 13	883	240	23	993
Thrasher and cleaner. Grain .....	D. H. Rader and J. Malsbary .....	273,391	Mar. 6	199	53, 54	23	868
Thrasher and huller. Clover .....	E. R. Jones .....	278,336	May 29	2274	621	23	2045
Thrasher and separator. Grain .....	J. Buchanan .....	271,310	Jan. 30	1829	531	23	371
Thrasher and separator. Grain .....	O. O. Graves .....	287,665	Oct. 30	2400	647	25	466
Thrasher and separator. Grain .....	W. L. Muller .....	280,066	June 26	1796	504 505	23	2452
Thrasher and separator. Grain and seed .....	J. H. Hamaker .....	283,778	Aug. 23	1588	449	24	813
Thrasher and separator. Pea .....	T. J. Porter .....	287,324	Oct. 23	1956	534	25	374
Thrasher-cylinder .....	A. G. Stewart .....	283,529	Aug. 21	1278	358	24	743
Thrasher. Flax .....	A. Wannamaker .....	274,866	Mar. 27	2081	578	23	1215
Thrasher. Pea .....	G. E. Luckey .....	275,052	Apr. 3	230	60	23	1264
Thrasher-stacker .....	D. Sherry .....	272,487	Feb. 20	1141	390	23	654
Thrasher-stacker-base .....	D. Sherry and F. W. Robinson .....	272,488	Feb. 20	1142	320	23	654
Thrashing and cleaning machine .....	J. Miller .....	275,244	Apr. 3	460	128	23	1305
Thrashing and cleaning machines. Wind-gage for .....	J. E. Curry .....	276,781	May 1	327	85	23	1682
Thrashing and clover-bulling machine .....	A. W. Lockhart .....	285,422	Sept. 25	1552	437	24	1192
Thrashing and separating machine. Grain .....	J. Miller .....	274,097	Mar. 13	1088	300	23	1028
Thrashing-machine .....	B. F. Applegate .....	282,693	Aug. 7	263	76	24	545
Thrashing-machine .....	J. Bower .....	284,600	Sept. 11	539	152 153	24	1002
Thrashing-machine .....	S. Coats .....	283,206	Aug. 14	877	245	24	663
Thrashing-machine .....	J. Ellis .....	283,595	Sept. 25	1752	497	24	1229
Thrashing-machine .....	W. J. Jackson .....	285,036	Sept. 18	1992	304	24	1105
Thrashing-machine .....	J. C. Laquey .....	273,551	Mar. 6	399	107	23	902
Thrashing-machine .....	A. Love .....	273,113	Feb. 27	1938	543	23	800
Thrashing-machine .....	A. W. Mantle .....	278,716	June 5	53	16	23	2134
Thrashing-machine .....	A. W. Mantle .....	278,717	June 5	55	17	23	2134
Thrashing-machine .....	J. H. Melick .....	277,595	May 15	1335	358 359	23	1866
Thrashing-machine .....	G. F. Messinger .....	290,647	Dec. 18	1613	444	25	1185
Thrashing-machine .....	S. E. Oviatt .....	277,055	May 8	685	178	23	1749
Thrashing-machine .....	G. A. Roberts and C. Schafer .....	277,347	May 8	1037	278	23	1811
Thrashing-machine .....	J. Rumely .....	277,512	May 15	1233	332	23	1851
Thrashing-machine .....	J. C. Schneider .....	274,395	Mar. 20	1480	407	23	1105
Thrashing-machine .....	H. Stephan .....	280,258	June 26	2017	567	23	2492
Thrashing-machine and separator .....	S. Hamilton .....	287,925	Nov. 6	170	49	25	537
Thrashing-machine and separator. Combined .....	W. Rath .....	276,467	Apr. 24	2051	570	23	1601
Thrashing-machine hand-cutter and feeder .....	D. Dowd .....	290,547	Dec. 18	1489	412	25	1164
Thrashing-machine. Clover and grain .....	D. Lippy and Z. S. Stocking .....	287,304	Oct. 23	1932	528	25	369
Thrashing-machine cutting and feeding attachment .....	D. Dowd .....	279,725	June 19	1380	385	23	2373
Thrashing-machine derrick-table and feeder .....	M. N. Laufenburg .....	286,316	Oct. 9	684	182	25	134
Thrashing-machine feeder and band-cutter .....	J. A. Hughes and R. C. Blackwell .....	283,710	Aug. 21	1496	422	24	784
Thrashing-machine feeders. Supply apparatus for .....	J. P. Cobb .....	276,225	Apr. 24	1737	481	23	1548
Thrashing-machine feeding mechanism .....	Z. S. Stocking .....	289,724	Dec. 4	443	124	25	964
Thrashing-machine grain-separator .....	W. A. Robinson .....	274,366	Mar. 20	1466	402	23	1102
Thrashing-machine screen .....	W. G. Scott and H. Campbell .....	286,853	Oct. 16	1351	370	25	260
Thrashing-machine separator .....	W. J. Dunlap .....	271,046	Jan. 23	1507	434	23	307
Thrashing-machine separator .....	W. N. Rumely .....	284,675	Sept. 11	635	180	24	1017
Thrashing-machine separator and cleaner .....	W. C. Buchanan .....	278,502	May 29	2476	675	23	2081
Thrashing-machine straw-carrier .....	E. Huber and F. Strobel .....	286,930	Oct. 16	1446	397	25	275
Thrashing-machine straw-carrier .....	E. A. Palmer .....	289,442	Dec. 4	82	24	25	901
Thrashing-machine straw-stacker .....	E. L. Perry .....	270,471	Jan. 9	782	229	23	162
Thrashing-machine straw-stacker .....	D. D. and P. J. Sprague. (Reissue) .....	10,406	Nov. 20	1469	406	25	781
Thrashing-machine straw-stacker .....	D. D. and P. J. Sprague .....	289,461	Dec. 4	103	30	25	905
Thrashing-machine straw-stacker .....	D. D. and P. J. Sprague .....	289,462	Dec. 4	105	30	25	905
Thrashing-machine straw-stacker attachment .....	D. D. and P. J. Sprague .....	284,507	Sept. 4	427	121	24	976
Thrashing-machine straw-stacking attachment .....	C. D. and P. J. Sprague .....	280,460	Dec. 4	101	29	25	904
Thrashing-machine tooth .....	M. L. Horner .....	282,027	July 24	2125	582	24	387
Thrashing-machine weighing apparatus .....	F. F. Neitzel .....	270,351	Jan. 9	600	177	23	127
Thrashing-machines. Revolving riddle for .....	L. T. Smith .....	282,790	Aug. 7	379	107	24	566
Thread-guide and tension device .....	R. Wharton .....	272,812	Feb. 20	1547	434	23	727
Thread-holder .....	J. T. Walker .....	275,736	Apr. 10	1126	308	23	1427
Thread-holder .....	J. T. Walker .....	283,689	Aug. 21	1468	414	24	779
Thread-mosaic .....	F. E. Forster .....	284,406	Sept. 4	301	85	24	955
Ticket-case .....	J. L. Ferguson .....	278,925	June 5	386	106	23	2189
Ticket-case .....	J. L. Kirk .....	272,708	Feb. 20	1415	397	23	702
Ticket-distributing box .....	S. B. Whitehead .....	286,352	Oct. 9	727	194	25	142
Ticket-holder .....	W. B. Van Amringe .....	287,486	Oct. 30	2160	586	25	420
Ticket-holder and press. Railway and other .....	J. Loudon .....	280,049	June 26	1779	499	23	2449
Ticket. Passenger .....	J. M. Reynolds .....	288,594	Nov. 13	1014	279	25	693
Ticket. Railway .....	J. W. Womeldorf .....	286,101	Oct. 2	397	109	25	73
Tide. Apparatus for utilizing the ebb and flow of the .....	N. L. Forster .....	285,251	Sept. 18	1341	377	24	1149
Tidy-fastener .....	W. W. Goodale .....	288,996	Nov. 27	1510	418	25	795
Tie: .....							
See Bag, bale, and bun- Package-tie.							
dle tie. Rail-tie.							
Bale-tie. Railway-tie.							
Belt-tie. Railway cross-tie.							
Cattle-tie. Railway metallic cross-tie.							
Cross-tie. Umbrella-tie.							
Necktie. .....							
Tile and brick machine .....	A. W. Bodell .....	281,606	July 17	1582	433	24	289
Tile and constructions made therefrom. Illuminat- ing grating .....	T. Hyatt .....	289,538	Dec. 4	208	58	25	923
Tile and drain cutter .....	E. D. Howland .....	286,826	Oct. 16	1317	359	25	254



*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Tile, architectural terra-cotta work, and pottery articles.	J. Lynch	271,088	Jan. 23	1561	450	23	317
Tile. Drain.	J. Lynch	271,089	Jan. 23	1562	450	23	317
Tile-fastening.	A. Chase	282,164	July 31	2316	636	24	425
Tile for floors, &c. Metallic.	A. H. Lord	285,636	Sept. 25	1804	514	24	1239
Tile hearth or vestibule-floor.	I. L. Frankem	287,373	Oct. 23	2015	548	25	384
Tile. Illuminating.	D. G. Beeching	272,629	Feb. 20	1321	370	23	686
Tile. Illuminating.	J. Jacobs	290,584	Dec. 18	1536	423	25	1172
Tile-laying machine.	C. A. Barnes	285,206	Sept. 18	1289	363	24	1139
Tile-machine.	C. J. Merrill	281,711	July 24	1727	469	24	319
Tile-machine.	G. Potts	274,514	Mar. 27	1661	462	23	1142
Tile-machine table.	W. F. Leach	279,259	June 12	801	222	23	2970
Tile. Sewer and drain.	G. J. M. Porter	270,476	Jan. 9	787	230	23	164
Tile. Underground-drain.	T. W. Larrahee	272,270	Feb. 13	851	237	23	600
Tiles, bricks, &c. Manufacture of.	I. B. Shaw	288,876	Nov. 20	1363		25	760
Tiles. Device for handling drain.	J. Ross	287,227	Oct. 30	2483	669	25	482
Tiles, plaques, &c. Manufacturing decorated.	W. B. Herbert	273,527	Mar. 6	367		23	897
Tiling apparatus.	L. E. and I. J. Chamberlin	270,932	Jan. 23	1367	{ 394 395 }	23	285
Tiling for vaults, &c. Illuminating.	C. H. Ross	270,132	Jan. 2	357	104	23	73
Till-alarm.	C. C. Hulung	273,086	Feb. 27	1895	532	23	793
Tilling-machine.	C. E. Sackett	279,819	June 19	1482	415	23	2391
Tilting and revolving chair.	H. A. Kimball and C. Kilburn	270,081	Jan. 2	295	88	23	60
Tilting can.	C. T. Draper	274,923	Apr. 3	47	12	23	1233
Tilting gate. Automatic.	F. Kennedy	271,336	Jan. 30	1868	542	23	377
Time and non-time lock. Combined.	W. Kock	272,063	Feb. 13	596	{ 161 162 }	23	555
Time-controlling system.	W. F. Gardner	287,015	Oct. 23	1563	{ 431 432 }	25	301
Time-detector. Electric.	T. Ahearn	287,401	Oct. 30	2055	559	25	399
Time-detector. Watchman's.	L. Van Bunnan	290,946	Dec. 25	2005	{ 552 553 }	25	1260
Time-detector. Watchman's.	H. J. Wenzel	276,740	May 1	273	69	23	1671
Time-detector. Watchman's electric.	J. E. Richards	270,125	Jan. 2	343	101	23	70
Time-keepers. Reversible center-pinion for.	C. E. Mason	288,087	Nov. 6	367	102	25	570
Time-lock.	B. F. Flint	276,381	Apr. 24	1943	538	23	1583
Time-lock.	B. F. Flint	276,382	Apr. 24	1946	538	23	1583
Time-lock.	B. F. Flint	276,383	Apr. 24	1947	{ 538 539 }	23	1583
Time-lock.	H. F. Newbury	283,645	Aug. 21	1411	395	24	768
Time-lock.	H. C. Stockwell.	280,260	June 26	2020	568	23	2492
Time-lock.	E. and H. C. Stockwell	290,609	Dec. 18	1570	431	25	1177
Time-lock. Electric.	W. E. Peirce	287,775	Oct. 30	2554	687	25	494
Time-locks. Mounting.	H. F. Newbury	284,049	Aug. 28	1931	540	24	872
Time-locks. Mounting.	H. F. Newbury	284,142	Aug. 28	2055	570	24	893
Time mechanism. Quarter-second.	J. Karr	273,100	Feb. 27	1924	{ 538 539 }	23	797
Time-piece.	F. Schuetz	276,892	May 1	458	123	23	1707
Time-piece hand.	P. G. Russell	290,116	Dec. 11	919	261	25	1057
Time-pieces. Compensating-balance for.	E. Osgood	278,173	May 22	2030	558	23	1995
Time-pieces. Electric synchronizing apparatus for.	J. Hamblet	270,058	Jan. 2	273	79	23	56
Time-pieces. Winding-indicator for.	B. F. Mersmann	287,559	Oct. 30	2249	610	25	438
Time-recorder. Watchman's.	G. N. Fillis	273,351	Mar. 6	147	41	23	859
Time-recorder. Watchman's.	A. M. Johnson	287,291	Oct. 23	1915	524	25	366
Time-signal.	D. T. Bound and C. A. Boone	279,696	June 19	1349	{ 375 376 }	23	2367
Time-signal.	J. Johnson	286,616	Oct. 16	1054	284	25	208
Time-signal and train-indicator.	R. P. Garsed	290,766	Dec. 25	1778	491	25	1222
Tin cans. Machine for scouring and polishing.	F. G. Cass	279,222	June 12	758	209	23	2263
Tin cans. Machine for use in the manufacture of.	W. Hipperling	281,508	July 17	1461	401	24	270
Tin from tin-scrap by electricity. Removing.	J. L. Delaplaine, J. G. Hendrickson, and F. J. Clamer.	282,964	Aug. 14	579	164	24	610
Tin, &c. Machine for cutting.	G. B. Wiggin	272,501	Feb. 20	1157	{ 324 325 }	23	657
Tin-plate and other sheet metal. Ornamenting surfaces of.	A. N. Hopkins and G. Hatton	286,823	Oct. 16	1313		25	253
Tinner's machinery.	N. G. Fair	271,440	Jan. 30	2004	578	23	402
Tire for wagon-wheels. Supplementary.	M. L. Trowbridge	271,998	Feb. 6	509	137	23	528
Tire-heating furnace.	W. Lewis	278,153	May 22	2002	550	23	1990
Tire-setter.	H. D. Bokop	274,168	Mar. 20	1189	327	23	1054
Tire-setter.	C. H. Smith	281,574	July 17	1539	422	24	282
Tire-setter.	J. P. Weller	276,944	May 1	537	139	23	1718
Tire-setter.	F. Winne	275,967	Apr. 17	1420	391	23	1486
Tire-tightener.	S. Basford	274,701	Mar. 27	1884	525	23	1182
Tire-tightener.	J. B. Cybert	274,179	Mar. 20	1201	330	23	1056
Tire-tightener.	D. P. Evans	271,050	Jan. 23	1511	435	23	308
Tire-tightener.	A. Galbraith	281,485	July 17	1438	394	24	265
Tire-tightener.	H. B. May	289,114	Nov. 27	1655	459	25	820
Tire-tightener.	J. S. Pursley	288,954	Nov. 20	1459	403	25	778
Tire-tightener.	B. F. Roberts.	273,608	Mar. 6	473	127	23	915
Tire-tightener.	M. B. Smyth	279,035	June 5	519	141	23	2211
Tire-tightening apparatus.	P. and J. Young	272,826	Feb. 20	1564	440	23	730
Tire-upsetter.	L. K. Miller	273,580	Mar. 6	441	119	23	910
Tire-upsetter.	W. Valentine	278,836	June 5	223	66	23	2161
Tire-upsetter.	F. E. and F. O. Wells	269,901	Jan. 2	94	28	23	20
Tire. Vehicle-wheel.	M. Chase	271,194	Jan. 23	1689	487	23	337
Tire. Vehicle-wheel.	J. P. Weller	276,943	May 1	536	139	23	1718
Tire. Wheel.	M. A. Pigott	289,358	Nov. 27	1948	541	25	875
Tire. Wheel.	J. T. Prior	273,147	Feb. 27	1981	557	23	809
Tires. Device for removing.	N. B. Hervey	275,909	Apr. 17	1356	373	23	1474
Tires. Device for securing wheel.	D. Shelton	289,719	Dec. 4	440	123	25	963
Tires on wheels. Machine for shrinking.	J. W. Bartlett	285,553	Sept. 25	1701	{ 479 480 }	24	1220
Toasting bread and broiling meats, &c. Apparatus for.	M. S. Gibson	281,683	July 24	1687	460.	24	312

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. 5	Vol.	Page.
Toasting-fork	E. Brookes	270,277	Jan. 9	531	156	23	114
Tobacco. Aging leaf	J. W. Daniel	269,632	Jan. 2	17	6	23	6
Tobacco, &c. Apparatus for drying or cleaning	S. B. Conover	275,596	Apr. 10	947	257	23	1396
Tobacco. Apparatus for separating stems and dust from granulated	J. B. Adt	288,911	Nov. 20	1406	387	25	769
Tobacco-box	W. Riley	275,944	Apr. 17	1395	384	23	1481
Tobacco-caddy. Tin	G. T. Tuckett	272,921	Feb. 27	1708	478	23	760
Tobacco-cutter	J. S. Beach	271,768	Feb. 6	219	61	23	478
Tobacco-cutter	T. F. Casad	289,975	Dec. 11	748	211	25	1025
Tobacco-cutter	G. Chapman	270,178	Jan. 2	411	120	23	84
Tobacco-cutter	J. W. Covel	289,625	Dec. 4	312	87	25	942
Tobacco-cutter	O. R. Hanchett	286,607	Oct. 16	1040	281	25	205
Tobacco-cutter	J. L. Haven	283,779	Aug. 28	1591	449	24	813
Tobacco-cutting machine	J. Smead	289,864	Dec. 11	616	172	25	1001
Tobacco cutting, separating, and mixing machine	C. Abner	283,739	Aug. 28	1537	435	24	803
Tobacco-drier	A. W. Walker	281,168	July 10	1019	285	24	187
Tobacco in cases. Packing	M. Tobin	290,818	Dec. 25	1847	511	25	1234
Tobacco-jars. Porous cover for	C. B. Hull	280,477	July 3	179	47	24	33
Tobacco. Machine for preparing and distributing	E. F. Leblond	290,333	Dec. 18	1196	335	25	1113
Tobacco-moistening pad	C. N. Swift	290,140	Dec. 11	949	268	25	1062
Tobacco-moistening tray	C. N. Swift	290,141	Dec. 11	949	268	25	1062
Tobacco molds or shapes. Composition of matter for greasing plug	I. H. Huddleston	281,997	July 24	2085	.....	24	382
Tobacco-pail cover	E. B. McIntyre	280,844	July 10	632	178	24	117
Tobacco-pipe	A. Burbank	270,562	Jan. 9	905	261	23	186
Tobacco-pipe	J. O. Kilroy	286,020	Oct. 2	296	82	25	55
Tobacco-pipe	E. Trieloff	288,382	Nov. 13	751	204	25	646
Tobacco. Plug	J. and C. A. Norburn	284,321	Sept. 4	202	56	24	938
Tobacco-pouch	A. W. Brinkerhoff	271,038	Jan. 23	1485	428	23	304
Tobacco. Preparing extracts of	O. Liebreich and H. Michaelis	283,622	Aug. 21	1385	.....	24	763
Tobacco-press	A. W. Mahon	277,912	May 22	1707	466	23	1940
Tobacco-press. Plug	W. T. Green	276,680	May 1	188	48	23	1656
Tobacco-receptacle	E. Mason	274,954	Apr. 3	90	25	23	1241
Tobacco-resweating device	B. Martin	278,029	May 22	1853	506	23	1964
Tobacco-tagging machine. Plug	G. H. Lasar	272,271	Feb. 13	852	238	23	600
Tobacco. Treating	E. Howard	273,362	Mar. 6	162	45	23	862
Toe-weight	J. Fenton	270,941	Jan. 23	1381	399	23	287
Toe-weight	C. B. Hitchcock	288,636	Nov. 20	1068	293	25	708
Toe-weight	D. Roberge	279,667	June 19	1314	365	23	2361
Toggle-press	C. H. Weston	276,108	Apr. 17	1595	440	23	1516
Toilet-case	M. A. Byrne	283,071	Aug. 14	711	200	24	634
Toilet-case	L. Wolf	279,302	June 12	855	237	23	2279
Toilet implement	W. H. Miles, Jr	289,550	Dec. 4	224	63	25	925
Toilet-paper pocket-case	J. F. Peacock	273,594	Mar. 6	458	123	23	913
Toilet-set box	J. Zander	275,110	Apr. 3	300	83	23	1278
Toilet-set case	J. O. Jasmagy and D. H. Frost	274,610	Mar. 27	1778	494	23	1163
Toilet-set case	F. Pattberg	279,272	June 12	820	226	23	2273
Toilet-stand. Portable	J. C. Milligan	270,459	Jan. 9	770	225	23	159
Tombstone	W. Mould	274,638	Mar. 27	1807	502	23	1169
Tombstones and monuments. Device for handling, &c.	W. H. Sanders	279,191	June 12	728	190	23	2257
Tongs	W. H. Evans	276,572	May 1	38	10	23	1633
Tongs	I. A. Murchison	282,105	July 31	2231	613	24	412
Tongs and cutter. Pipe	H. Herbert	287,378	Oct. 23	2021	549	25	385
Tongs and wrench. Combined pipe	E. F. Barnes	282,256	July 31	2431	669	24	445
Tongs. Automatic	A. S. Adams	273,243	Mar. 6	1	1	23	835
Tongs. Blacksmith's	G. M. Bird	281,437	July 17	1368	377	24	253
Tongs. Brick	D. Ralston	272,320	Feb. 13	907	254	23	610
Tongs. Crimping	F. R. Packham	273,382	Mar. 6	189	51	23	866
Tongs. Lifting	S. W. Hudson	270,069	Jan. 2	283	84	23	58
Tongs. Lifting	M. C. Ward	282,134	July 31	2285	627	24	420
Tongs or fork. Spring	F. H. Cilley	284,118	Aug. 28	2023	563	24	888
Tongs or wrenches. Attachment for pipe	C. H. Miller	273,874	Mar. 13	825	223	23	983
Tongs. Pipe	D. P. Foster	286,000	Oct. 16	1032	279	25	204
Tongs. Pipe	T. Patton	278,264	May 22	2152	591	23	2015
Tongs. Pipe	H. Rhyz	286,847	Oct. 16	1346	368	25	259
Tongs. Pipe	D. E. Stewart	283,164	Aug. 14	822	230	24	652
Tongs. Pipe	J. L. Strait	290,810	Dec. 25	1838	508	25	1232
Tongs. Pipe	G. W. Wilbur	284,933	Sept. 11	945	266	24	1072
Tongs. Roofing	T. Schwarz	288,498	Nov. 13	901	245	25	672
Tongue and caster attachment for agricultural implements.	S. C. Mendenhall	280,209	June 26	1952	548	23	2420
Tongue. Hinged	W. A. Rusler	287,328	Oct. 23	1961	535	25	375
Tongue-support	D. C. Ballard	283,188	Aug. 14	855	239	24	658
Tongue-support	A. J. Beach	280,896	July 10	688	193	24	128
Tongue-support	A. S. Brown	272,024	Feb. 13	549	148	23	547
Tongue-support	J. M. Haas	278,938	June 5	399	109	23	2191
Tongue-support	J. McConnell and E. H. Taylor	289,013	Nov. 27	1529	423	25	798
Tongue support. Wagon	J. R. Chadwick	288,407	Nov. 13	788	213	25	653
Tongue support. Wagon	F. Tripp, Sr	282,405	July 31	2619	719	24	478
Tongue support. Wagon	J. W. Wetmore	279,895	June 19	1577	442	23	2408
Tongue support. Wagon	H. Wood	272,180	Feb. 13	738	204	23	580
Tongue support. Wagon	H. M. Woodford	284,529	Sept. 4	452	128	24	981
Tongue. Vehicle	T. P. Case	278,505	May 29	2479	676	23	2082
Tongue. Vehicle	H. J. Roberts	278,275	May 22	2164	596	23	2017
Tongue. Wagon	H. Koch	274,342	Mar. 20	1417	388	23	1093
Tongue. Wagon	T. B. Sykes	272,794	Feb. 20	1525	429	23	722
Tool. Cast jointed	J. H. Davis	271,043	Jan. 23	1502	433	23	306
Tool. Combination	F. L. Armstrong	280,995	July 10	808	225	24	149
Tool. Combination	C. H. Barr	288,397	Nov. 13	778	210	25	650
Tool. Combination	R. Erdman and W. Phillips	276,793	May 1	340	91	23	1625
Tool. Combination	H. U. Kistner	271,868	Feb. 6	342	94	23	501
Tool. Combination	C. E. Marshall	286,458	Oct. 9	847	230	25	165



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g	Vol.	Page.
Tool. Combination.....	A. E. Nelson.....	280,849	July 10	635	179	24	118
Tool. Combination.....	R. P. Pearson.....	285,304	Sept. 18	1400	396	24	1160
Tool. Combination.....	I. T. Torrey.....	285,708	Sept. 25	1885	537	24	1254
Tool. Combination.....	R. G. Yonge.....	284,109	Aug. 28	2007	559	24	885
Tool. Convertible.....	H. Port.....	290,106	Dec. 11	903	257	25	1054
Tool for grasping and holding.....	S. B. McLane.....	275,341	Apr. 3	604	163	23	1328
Tool for grasping and holding articles.....	T. G. Hall.....	275,335	Apr. 3	593	159	23	1327
Tool for housekeepers. Combination.....	T. B. Taylor.....	271,000	Jan. 23	1455	419	23	299
Tool-guiding device. Automatic.....	C. A. Lougee.....	287,838	Nov. 6	58	17	25	518
Tool-handle.....	E. Buell.....	289,501	Dec. 4	164	45	25	915
Tool-handle.....	R. C. Ellrich.....	288,560	Nov. 13	970	267	25	685
Tool-handle.....	C. M. Fairbanks.....	285,802	Oct. 2	25	9	25	6
Tool-handle.....	C. M. Fairbanks.....	286,124	Oct. 2	422	115	25	78
Tool-handle.....	J. S. Fray.....	282,712	Aug. 7	296	84	24	551
Tool-handle.....	J. F. French.....	285,990	Oct. 2	259	73	25	49
Tool-handle.....	C. Heaton.....	290,581	Dec. 18	1533	422	25	1171
Tool-handle.....	G. A. Small.....	273,621	Mar. 6	487	131	23	917
Tool-handle.....	Z. Tremblay.....	274,414	Mar. 20	1501	414	23	1108
Tool-handle.....	S. Wales.....	281,418	July 17	1348	372	24	250
Tool-handle and extension-blade.....	H. F. Case.....	273,944	Feb. 27	1735	484	23	764
Tool-holder.....	W. T. Lander.....	274,344	Mar. 20	1418	359	23	1094
Tool-holder.....	J. F. Thayer and F. A. Smith, Jr.....	274,232	Mar. 20	1271	351	23	1068
Tool-holder. Adjustable.....	G. H. Strong.....	273,632	Mar. 6	502	135	23	920
Tool-holder for grinding tools.....	J. R. Kennett.....	271,249	Jan. 30	1751	506	23	257
Tool-holder. Ratchet.....	W. E. Thayer.....	291,007	Dec. 25	2094	577	25	1274
Tool. Pivoted hand.....	M. C. Johnson.....	273,549	Mar. 6	398	106	23	902
Tool-sharpener.....	G. H. Strong.....	277,957	May 22	1760	480	23	1947
Tooth. Artificial.....	L. T. Foss.....	275,625	Apr. 10	996	269	23	1404
Tooth. Artificial.....	L. T. Foss.....	275,636	Apr. 10	997	269	23	1404
Tooth. Artificial.....	W. S. How.....	275,491	Apr. 10	823	223	23	1375
Tooth. Artificial.....	W. S. How.....	276,245	Apr. 24	1763	491	23	1553
Tooth. Artificial.....	C. H. Land.....	271,476	Jan. 30	2058	593	23	411
Tooth. Artificial.....	C. M. Richmond.....	277,937	May 22	1736	474	23	1944
Tooth. Artificial.....	N. Robbins, 2d.....	279,187	June 12	723	198	23	2257
Tooth. Artificial.....	E. T. Starr.....	276,920	May 1	491	129	23	1712
Tooth. Artificial.....	W. H. Taylor.....	278,468	May 29	2435	664	23	2074
Tooth-crown.....	C. M. Richmond.....	277,940	May 22	1738	474	23	1944
Tooth-crown. Artificial.....	W. S. How.....	282,639	Aug. 7	198	57	24	534
Tooth-crown. Artificial.....	W. S. How.....	288,177	Nov. 6	476	131	25	590
Tooth-crown. Artificial.....	A. E. Matteson.....	280,052	June 26	1782	500	23	2449
Tooth-crown. Artificial.....	S. M. Roach.....	288,492	Nov. 13	894	243	25	671
Tooth-crown. Artificial.....	H. Weston.....	275,554	Apr. 10	899	244	23	1388
Tooth-crown. Artificial.....	H. Weston.....	277,392	May 8	1085	292	23	1819
Tooth-crown. Artificial.....	H. Weston and E. T. Starr.....	287,354	Oct. 23	1990	543	25	380
Tooth-pick package.....	G. R. Schimmel.....	281,731	July 24	1756	476	24	323
Tooth. Spring.....	P. F. Wells.....	280,104	June 26	1841	519	23	2460
Top.....	C. M. Kimball.....	272,707	Feb. 20	1414	397	23	702
Top.....	J. H. Sunderman.....	282,129	July 31	2279	625	24	418
Top.....	J. H. Sunderman.....	287,591	Oct. 30	2305	624	25	448
Top. Musical.....	M. Dannhorn.....	271,428	Jan. 30	1986	573	23	399
Top-prop.....	J. H. Cloyes.....	282,611	Aug. 7	164	49	24	529
Top-prop.....	W. Lepper.....	278,244	May 22	2121	584	23	2011
Top-prop.....	W. Lepper.....	282,992	Aug. 14	626	177	24	618
Top. Spinning.....	T. Claery.....	286,177	Oct. 9	488	135	25	101
Torch.....	H. McPherson.....	270,600	Jan. 16	957	277	23	204
Torch.....	H. Wellington.....	284,346	Sept. 4	228	64	24	943
Torch and lamp opener.....	A. C. Humphreys.....	288,439	Nov. 13	824	223	25	659
Torch for lighting gas. Telescopic safety.....	T. W. Houchin.....	282,522	Aug. 7	58	17	24	510
Torch. Gas-lighting.....	T. W. Houchin.....	273,085	Feb. 27	1894	531	23	793
Tornado-breaker. Automatic.....	W. S. Blunt.....	290,966	Dec. 25	2040	561	25	1265
Torpedo-boat.....	B. B. Hotchkiss.....	278,708	June 5	41	12, 13	23	2132
Torpedo. Floating.....	A. Weeks.....	274,069	Mar. 13	1054	290	23	1022
Torpedo-holding attachment for railway danger-signals.....	J. A. Bonnell.....	290,391	Dec. 18	1268	356	25	1126
Torpedo. Railway.....	J. H. Bevington.....	273,441	Mar. 6	258	70	23	877
Torpedo. Railway.....	W. S. Phelps.....	285,671	Sept. 25	1841	525	24	1246
Torpedo. Rocket.....	A. Weeks.....	274,067	Mar. 13	1049	289	23	1022
Torpedo-signal for railways.....	T. G. Palmer.....	285,920	Oct. 2	180	52	25	35
Torpedo-signal placer.....	G. W. Metcalfe and M. F. Haber.....	284,463	Sept. 4	369	102	24	966
Torpedo. Spar.....	A. Weeks.....	273,413	Mar. 6	224	60	23	872
Torpedo. Submarine.....	J. W. Graydon.....	270,950	Jan. 23	1390	401	23	289
Torpedoes. Device for launching rocket.....	A. Weeks.....	274,068	Mar. 13	1053	290	23	1022
Torpedoes. Manipulating and firing marine.....	T. M. Brasher.....	287,221	Oct. 23	1828	501	25	351
Torpedoes on railway-tracks. Mechanism for placing.....	S. F. Allen.....	286,249	Oct. 9	577	158	25	116
Towel-holder.....	G. S. Gifford.....	280,464	July 3	165	45	24	30
Towel, napkin, &c., holder.....	C. H. Hershey.....	275,040	Apr. 3	209	57	23	1262
Towel-rack. Nursery.....	T. F. Brady.....	274,457	Mar. 27	1570	429	23	1127
Tower.....	B. F. Orton.....	290,099	Dec. 11	895	255	25	1051
Tower and signal-lantern. Watch.....	C. S. Parkhill.....	271,261	Jan. 30	1770	513	23	359
Towers. Constructing.....	E. J. O'Beirne.....	279,422	June 12	1020	283	23	2305
Towing-boat.....	J. Collins.....	283,573	Aug. 21	1336	374	24	753
Toy.....	M. C. Bogia.....	286,379	Oct. 9	755	203	25	147
Toy.....	E. S. Chapelle.....	286,262	Oct. 9	591	162	25	118
Toy.....	W. E. Crandall.....	271,427	Jan. 30	1985	573	23	399
Toy.....	G. S. Crosby.....	276,524	Apr. 24	2124	591	23	1614
Toy.....	J. Fallows.....	278,694	June 5	24	7	23	2129
Toy.....	W. R. Fowler.....	285,354	Sept. 18	1459	411	24	1170
Toy.....	A. Green.....	279,743	June 19	1398	390	23	2376
Toy.....	E. Holden.....	276,586	May 1	55	16	23	1637

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Toy .....	E. R. Ives .....	290,185	Dec. 11	997	281	20	1071
Toy .....	W. Leggett .....	272,275	Feb. 13	858	240	23	601
Toy .....	W. Leggett .....	277,581	May 15	1321	355	23	1864
Toy .....	A. Roelofs .....	262,778	Aug. 7	365	103	24	564
Toy .....	L. Schoenfeld .....	271,278	Jan. 30	1790	519	23	363
Toy .....	C. F. Shonrds .....	278,462	May 29	2427	662	23	2073
Toy .....	C. F. Shonrds .....	288,265	Nov. 13	595	163	25	619
Toy .....	L. F. Smith .....	272,168	Feb. 13	723	199	23	577
Toy .....	J. Stanton and C. Reling .....	275,282	Apr. 3	508	140	23	1313
Toy .....	P. G. Thomson .....	270,511	Jan. 9	842	{ 243 244 245 }	23	174
Toy .....	P. G. Thomson .....	276,097	Apr. 17	1580	436	23	1513
Toy .....	A. Vick .....	281,948	July 24	2031	555	24	373
Toy and game. Combined .....	G. H. Ireland .....	284,965	Sept. 11	986	{ 277 278 }	24	1080
Toy animal .....	C. F. Ritchel .....	289,562	Dec. 4	238	67	25	928
Toy. Bandelore .....	M. Streisguth and E. Schnitzler .....	279,888	June 19	1568	439	23	2406
Toy bank .....	C. S. Barnard .....	272,189	Feb. 13	748	206	23	581
Toy bank .....	C. M. Henn .....	271,200	Jan. 23	1697	490	23	338
Toy bedstead or crib .....	W. S. Reed .....	279,665	June 19	1312	365	23	2361
Toy bird .....	S. R. Scroven .....	278,461	May 29	2427	661	23	2072
Toy block .....	R. H. Ingersoll .....	272,443	Feb. 20	1079	304	23	644
Toy block .....	S. B. Scott .....	274,980	Apr. 3	124	35	23	1247
Toy building .....	M. E. Converse .....	271,603	Feb. 6	25	6	23	445
Toy building-block .....	W. E. Crandall .....	278,224	May 22	2095	577	23	2006
Toy cap-exploder .....	D. H. Murphy .....	273,879	Mar. 13	830	225	23	984
Toy car, wagon, or other vehicle .....	J. Fallows .....	273,046	Feb. 27	1852	519	23	786
Toy catapult .....	I. G. Bower and L. B. Myers .....	271,568	Jan. 30	2166	624	23	429
Toy. Combination .....	W. S. Reed .....	288,664	Nov. 20	1103	302	25	714
Toy dart .....	J. D. Hooker .....	282,638	Aug. 7	198	57	24	534
Toy drum .....	B. Rice .....	266,069	Oct. 2	357	99	25	66
Toy. Electric .....	R. Lembeke .....	278,565	May 29	2548	695	23	2094
Toy for children. Rocking .....	J. A. Crandall .....	270,891	Jan. 23	1314	380	23	276
Toy for the production of loud explosions .....	B. Ober .....	285,917	Oct. 2	178	51	25	34
Toy gun .....	C. C. Curtis and H. G. Lewis .....	287,507	Oct. 30	2184	593	25	424
Toy gun .....	F. M. Lewis .....	287,946	Nov. 6	199	58	25	542
Toy gun .....	H. P. Marks .....	277,496	May 15	1218	{ 327 328 }	23	1848
Toy gun .....	W. S. Reed .....	283,661	Aug. 21	1428	400	24	772
Toy gun .....	P. J. Trieller .....	285,368	Sept. 18	1478	416	24	1173
Toy hoop .....	T. K. Keith .....	275,771	Apr. 10	1181	324	23	1436
Toy hoop. Mechanical .....	W. R. Fowler .....	280,523	Dec. 4	189	53	25	919
Toy horse .....	F. W. Carpenter .....	274,270	Mar. 20	1318	364	23	1077
Toy horse and cart .....	F. W. Carpenter .....	287,095	Oct. 23	1668	456	25	322
Toy house .....	J. L. Dorin .....	282,965	Aug. 14	580	164	24	610
Toy jumping animal .....	C. F. Ritchel .....	280,330	June 26	2112	592	23	2508
Toy kitchen .....	E. Durlach .....	272,665	Feb. 20	1365	383	23	694
Toy kitchen .....	M. Miller .....	289,121	Nov. 27	1685	462	25	821
Toy knitting-machine .....	W. P. Stewart .....	289,578	Dec. 4	259	72	25	933
Toy. Knockdown or building-block .....	W. S. Reed .....	276,539	Apr. 24	2141	595	23	1617
Toy locomotive .....	S. H. Carr .....	273,347	Mar. 6	141	39	23	857
Toy locomotive-engine .....	W. H. Hall .....	281,360	July 17	1276	354	24	238
Toy. Mechanical .....	F. Aberle .....	289,491	Dec. 4	152	41	25	912
Toy. Mechanical .....	C. A. Bailey .....	281,427	July 17	1358	375	24	252
Toy. Mechanical .....	C. A. Crongeyer .....	271,686	Feb. 6	123	34	23	461
Toy. Mechanical .....	J. W. Perkins .....	279,275	June 12	822	227	23	2274
Toy. Mechanical .....	R. H. Ricker .....	271,273	Jan. 30	1783	518	23	362
Toy. Mechanical .....	W. X. Stevens .....	274,148	Mar. 20	1161	320	23	1048
Toy. Mechanical .....	W. X. Stevens. (Reissue) .....	10,319	Apr. 24	2154	539	23	1619
Toy. Mechanical .....	H. Thomass .....	281,320	July 17	1230	340	24	230
Toy milch cow .....	W. H. Mantz and R. Blum .....	275,053	Apr. 3	221	60	23	1264
Toy money-box .....	L. Kyser and A. C. Rex .....	281,377	July 17	1295	359	24	242
Toy money-box .....	W. S. Reed .....	289,140	Nov. 27	1687	468	25	826
Toy mortar .....	J. S. Baldwin .....	283,847	Aug. 28	1667	470	24	826
Toy or musical instrument .....	W. H. Frost .....	270,543	Jan. 9	881	255	23	182
Toy or self-righting egg .....	M. White, Sr. .....	276,109	Apr. 17	1596	441	23	1516
Toy pistol .....	O. C. Butterweck .....	270,738	Jan. 16	1134	325	23	237
Toy pistol .....	O. C. Butterweck .....	279,128	June 12	657	180	23	2246
Toy pistol .....	D. A. Clark .....	273,956	Mar. 13	919	252	23	999
Toy pistol .....	D. A. Clark .....	281,455	July 17	1400	354	24	259
Toy pistol .....	H. S. Lockwood .....	286,455	Oct. 9	845	229	25	164
Toy pistol .....	J. H. Rose .....	287,582	Oct. 30	2295	621	25	446
Toy pistol .....	E. J. Steele .....	288,272	Nov. 13	604	165	25	621
Toy pistol .....	T. J. Young .....	287,987	Nov. 6	255	73	25	552
Toy pistol with numerical combination .....	J. E. Barbé .....	285,099	Sept. 18	1162	325	24	1117
Toy plane. Metal .....	S. R. Rust .....	282,468	July 31	2705	{ 743 744 }	24	491
Toy race-course .....	J. D. O'Donoghue .....	288,476	Nov. 13	874	237	25	668
Toy revolver .....	W. Fredricks and A. Brown .....	278,005	May 22	1825	498	23	1959
Toy. Revolving air .....	T. W. Bartholomew .....	272,846	Feb. 27	1614	451	23	745
Toy. Revolving air .....	T. W. Bartholomew .....	279,630	June 19	1269	{ 352 353 }	23	2354
Toy. Rotating .....	D. Heineke .....	275,209	Apr. 3	423	116	23	1299
Toy savings-bank .....	A. A. Hoffman .....	272,049	Feb. 13	577	156	23	552
Toy savings-bank .....	E. L. Morris .....	275,068	Apr. 3	248	68	23	1268
Toy stove .....	E. Durlach .....	272,664	Feb. 20	1364	382	23	694
Toy target .....	C. I. Snyder .....	270,141	Jan. 2	370	108	23	75
Toy target .....	S. L. Woodruff .....	288,605	Nov. 13	1028	282	25	696
Toy ten-pin table .....	J. Markees .....	270,088	Jan. 2	301	90	23	61
Toy theatrical stage .....	J. H. Singer .....	277,798	May 15	1572	429	23	1900
Toy. Trundle .....	C. A. Bailey .....	281,428	July 17	1359	375	24	252
Toy trundle or hoop .....	J. F. Bahret .....	276,746	May 1	281	71	23	1673
Toy vehicle .....	G. S. Crosby .....	276,327	Apr. 24	1739	482	23	1549



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Toy vehicle.....	W. S. Reed.....	288,663	Nov. 20	1102	302	25	714
Toy velocipede.....	H. S. Lockwood.....	281,894	July 24	1969	538	24	362
Toy wagon.....	J. Murray.....	272,461	Feb. 20	1102	312	23	648
Toy. Wheel.....	J. L. M. Du Four.....	278,109	May 22	1942	533	23	1980
Trace-carrier.....	W. Bellairs.....	288,762	Nov. 20	1232	337	25	736
Trace-carrier.....	D. R. Bize.....	289,211	Nov. 27	1776	492	25	842
Trace-carrier.....	C. A. Brooks.....	274,712	Mar. 27	1892	528	23	1184
Trace-carrier.....	E. G. Latta.....	283,260	Aug. 14	947	264	24	676
Trace-carrier.....	C. F. Miller.....	287,456	Oct. 30	2120	576	25	411
Trace-carrier.....	R. Porter.....	276,461	Apr. 24	2045	568	23	1600
Trace-carrier.....	W. S. Young.....	279,474	June 12	1083	299	23	2315
Trace-coupling.....	J. M. Basinger.....	272,624	Feb. 20	1314	366	23	685
Trace-coupling.....	J. M. Basinger.....	283,320	Aug. 14	1016	285	24	689
Trace-detacher.....	J. D. Blakeman.....	286,767	Oct. 16	1243	336	25	240
Trace-eye guard.....	D. Kaltenbacher.....	281,079	July 10	912	255	24	168
Trace-fastener.....	W. L. Beach.....	289,375	Dec. 4	6	2	25	888
Trace-fastener.....	J. S. Miller.....	275,245	Apr. 3	461	128	23	1305
Trace guide. Rope.....	C. R. Miller.....	290,455	Dec. 18	1365	377	25	1142
Trace. Harness.....	G. S. Gates.....	289,403	Dec. 4	37	11	25	893
Trace-holder.....	B. R. Hughes.....	286,707	Oct. 16	1164	313	25	226
Trace holder and detacher.....	W. Standing.....	276,919	May 1	490	129	23	1712
Trace-holding attachment for bame-clips.....	G. W. Hall.....	287,826	Nov. 6	45	13	25	515
Trace-hook.....	C. H. Allen.....	272,182	Feb. 13	741	205	23	580
Trace-hook.....	C. P. Wakefield.....	272,175	Feb. 13	731	202	23	578
Trace-loop.....	G. F. Eberhard.....	288,626	Nov. 20	1057	291	25	707
Trace, &c., loop-clamp.....	J. Herkimer.....	279,385	June 12	978	271	23	2298
Trace-loop. Harness.....	L. B. Scharringhausen.....	273,163	Feb. 27	2000	563	23	812
Trace-support.....	G. W. Hall.....	284,843	Sept. 11	843	237	24	1054
Trace-supporter.....	G. F. Eberhard and J. E. Renz.....	289,519	Dec. 4	185	51	25	919
Traces. End-connecting device for rope.....	C. R. Miller.....	290,454	Dec. 18	1364	377	25	1142
Track-bolt lock.....	D. F. Blighton.....	278,678	June 5	4	1	23	2125
Track-bolt lock.....	D. F. Blighton.....	269,379	Dec. 4	10	4	25	888
Track-circuit connector.....	G. Westinghouse, Jr.....	282,249	July 31	2423	666	24	443
Track-circuit connector.....	G. Westinghouse, Jr.....	282,250	July 31	2425	667	24	443
Track-cleaner.....	J. Birnbaum and J. T. Richmond.....	287,411	Oct. 30	2066	561	25	401
Track-drill.....	E. S. Hart.....	286,298	Oct. 9	659	176	25	129
Track for traction-engines.....	J. Nixon.....	282,758	Aug. 7	343	97	24	560
Track-laying device.....	J. M. Goodwin.....	279,092	June 5	588	160	23	2224
Track-laying machine.....	F. F. Voigt.....	286,564	Oct. 9	973	263	25	188
Track. Portable transfer.....	L. Ehrlich.....	270,405	Jan. 9	699	207	23	146
Traction-engine.....	R. S. Angell.....	282,944	Aug. 14	559	159	24	607
Traction-engine.....	L. E. Bandelier.....	280,999	July 10	814	226	24	151
Traction-engine.....	J. E. Birch.....	288,763	Nov. 20	1232	337	25	736
Traction-engine.....	W. A. Clarke.....	286,906	Oct. 16	1419	390	25	271
Traction-engine.....	J. H. Elward.....	272,670	Feb. 20	1370	384	23	695
Traction-engine.....	J. H. Elward.....	279,925	June 26	1618	455	23	2421
Traction-engine.....	I. S. Freeman.....	282,299	July 31	2488	683	24	454
Traction-engine.....	A. S. Hanscom.....	270,308	Jan. 9	569	167	23	121
Traction-engine.....	E. Huber.....	271,464	Jan. 30	2043	588	23	408
Traction-engine.....	N. Jackson.....	282,197	July 31	2366	651	24	432
Traction-engine.....	F. F. Landis.....	286,313	Oct. 9	675	180	25	132
Traction-engine.....	L. Lillard.....	278,154	May 22	2002	551	23	1990
Traction-engine.....	D. Lippy and J. Hughes.....	272,447	Feb. 20	1083	305	23	644
Traction-engine.....	P. H. Loud.....	271,343	Jan. 30	1873	543	23	377
Traction-engine.....	J. and H. McLaren.....	289,294	Nov. 27	1868	519	25	860
Traction-engine.....	C. D. Monnot.....	272,743	Feb. 20	1462	411	23	711
Traction-engine.....	W. E. Richardson.....	278,822	June 5	194	56	23	2156
Traction-engine.....	I. G. Rider, W. H. Snyder, and A. O. Frick.....	277,784	May 15	1553	423	23	1907
Traction-engine.....	C. Rowe.....	271,129	Jan. 23	1606	461	23	324
Traction-engine.....	W. N. Rumely.....	280,519	July 3	223	59	24	40
Traction-engine.....	W. N. Rumely.....	284,238	Sept. 4	106	29	24	922
Traction-engine.....	W. N. Rumely.....	284,676	Sept. 11	636	180	24	1017
Traction-engine.....	W. H. Snyder and A. O. Frick.....	275,279	Apr. 3	505	139	23	1312
Traction-engine.....	G. A. Thode.....	287,593	Oct. 30	2310	625	25	449
Traction-engine.....	W. Wilkinson.....	280,428	July 3	113	30	24	21
Traction-engine.....	A. O. Willson.....	281,813	July 24	1867	510	24	344
Traction-engine and stubble harvester and consumer.....	B. S. Benson.....	281,604	July 17	1579	432	24	288
Traction-engine brake.....	R. W. Aitken.....	288,753	Nov. 20	1220	333	25	734
Traction-wheel.....	J. Austin.....	269,990	Jan. 2	197	57	23	41
Traction-wheel.....	J. Enright.....	276,530	Apr. 24	2129	592	23	1615
Traction-wheel.....	O. F. Gilbert.....	275,035	Apr. 3	205	55	23	1260
Traction-wheel.....	L. Hall.....	270,662	Jan. 16	1035	297	23	218
Traction-wheel.....	A. J. Hoag.....	273,532	Mar. 6	373	99	23	898
Traction-wheel.....	F. F. Landis.....	286,312	Oct. 9	672	179	25	132
Traction-wheel.....	J. W. McNeely.....	279,963	June 26	1668	469	23	2429
Traction-wheel.....	F. E. Young.....	282,022	July 24	2118	580	24	386
Train-arrester. Electric.....	H. W. Carlton.....	277,990	May 22	1805	493	23	1956
Train-conveyer. Endless.....	G. Crehore.....	282,959	Aug. 14	574	162	24	609
Train-indicator.....	O. M. Shepard.....	272,783	Feb. 20	1509	425	23	720
Train-order signal.....	J. S. Trites.....	271,547	Jan. 30	2141	616	23	425
Train-stopping and signaling apparatus for land-slides. Electrical.....	W. P. Phelps.....	288,480	Nov. 13	881	238	25	669
Trains and signaling. Automatically stopping.....	W. C. Shaffer and A. M. White.....	276,905	May 1	475	125	23	1706
Trains, signaling, &c. Apparatus for stopping.....	W. C. Shaffer.....	276,904	May 1	474	125	23	1706

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Trammel.....	W. D. Herschel.....	272,047	Feb. 13	576	156	23	552
Tramway.....	R. S. Cunningham, C. V. Houssart, and W. May.....	275,808	Apr. 17	1237	340	23	1453
Tramway, &c. Elevated.....	C. J. Quetill.....	278,819	June 5	189	55	23	2155
Transferring designs.....	J. M. Moss.....	272,575	Feb. 20	1254		23	674
Transferring designs.....	J. W. Osborne.....	282,111	July 31	2239	616 617	24	413
Transferring designs. Method of and apparatus for.....	J. W. Osborne.....	282,112	July 31	2248	617 618	24	414
Transferring figures upon glass. Machine for.....	W. S. Cogswell.....	282,168	July 31	2327	641 642	24	426
Transit-instruments. Solar attachment for.....	R. M. Jones.....	270,679	Jan. 16	1057	302	23	222
Transom-lifter.....	R. J. Carson.....	279,858	June 19	1536	429	23	2400
Transom-lifter.....	H. J. Hardenbergh and G. A. Wein- reich.....	285,811	Oct. 2	37	12	25	9
Transom-lifter.....	G. Hayes.....	280,035	June 26	1762	495	23	2446
Transom-lifter.....	W. Leggett.....	282,334	July 31	2535	694	24	462
Transparency. Microscopic photographic.....	F. B. Gould.....	271,838	Feb. 6	308	84	23	495
Transplanter.....	W. Spitznass.....	273,181	Feb. 27	2019	568	23	815
Transplanter and cutter. Sod.....	C. I. Calvert.....	284,720	Sept. 11	695	195	24	1028
Transplanter and post-hole digger.....	F. E. Kohler.....	281,194	July 10	1059	292	24	194
Transplanter for tobacco and other plants.....	S. S. Neblett.....	275,253	Apr. 3	470	131	23	1306
Transplanting implement.....	J. M. Lindsey.....	275,505	Apr. 10	838	227	23	1377
Transplanting-instrument.....	F. Visscher.....	289,185	Nov. 27	1745	485	25	836
Transplanting-instrument.....	F. Visscher.....	289,186	Nov. 27	1746	485	25	836
Transportable engine.....	C. Sörensen.....	275,089	Apr. 3	275	75	23	1273
Trap:							
See Air and steam trap. Pressure-gage trap.							
Animal-trap. Rat-trap.							
Ball-trap. Roach-trap.							
Fish-trap. Seal-trap.							
Gas-trap. Seal-joint trap.							
Grease-trap. Sewer-trap.							
Hydraulic trap. Sewer and stench trap.							
Insect-trap. Sewer-gas trap.							
Mercury-seal trap. Sink-trap.							
Mole-trap. Steam-trap.							
Moth-trap. Stench-trap.							
Mouse-trap. Waste-trap.							
Plumber's trap.							
Trap.....	R. W. Armstrong.....	277,656	May 15	1408	379	23	1879
Trap.....	J. Bennor.....	272,020	Feb. 13	543	147	23	547
Trap for wash-stands, &c.....	C. F. Pike.....	270,111	Jan. 2	325	96	23	66
Traveling apparatus. Overhead.....	T. W. Capen.....	275,465	Apr. 10	785	211	23	1369
Traveling-bag.....	A. S. Hallidie.....	276,240	Apr. 24	1759	490	23	1532
Traveling-bag.....	D. S. Hammond.....	279,942	June 26	1646	461	23	2425
Traveling-bag.....	J. W. Lieb.....	284,446	Sept. 4	348	96	24	962
Traveling-bag-handle cap.....	H. S. Craus.....	271,803	Feb. 6	262	73	23	486
Trawl-roller.....	T. R. Ferrall.....	272,870	Feb. 27	1644	460	23	750
Tray.....	S. L. Vreeland.....	276,510	Apr. 24	2104	584	23	1611
Tray. Combined jelly and ice-cream.....	J. Carl.....	284,721	Sept. 11	696	195	24	1028
Tray. Table.....	N. D. Swift.....	283,362	Aug. 14	1080	303	24	701
Tread and railway power.....	J. H. Melick and M. J. Colbert.....	274,510	Mar. 27	1657	461	23	1141
Tread-power.....	L. D. Carpenter.....	281,018	July 10	838	233	24	155
Treadle.....	W. O. Johnson.....	289,418	Dec. 4	55	16	25	896
Treadle.....	E. Kilbourn.....	275,829	Apr. 17	1260	346	23	1456
Treadle.....	G. A. Lockwood and D. Orrill.....	279,577	June 19	1210	334	23	2343
Treadle.....	W. L. Perry.....	271,112	Jan. 23	1585	456	23	320
Treadle.....	J. A. Robison.....	283,514	Aug. 21	1265	354	24	740
Treadle and connection.....	J. F. Thayer and F. A. Smith, Jr.....	274,992	Apr. 3	139	39	23	1249
Treadle attachment for sewing and other machinery.....	G. B. Ward.....	270,863	Jan. 16	1273	367	23	264
Treadle for sewing-machines, &c.....	H. Cramer.....	271,426	Jan. 30	1984	573	23	399
Treadle-power.....	A. W. Bush.....	289,216	Nov. 27	1779	493	25	843
Tree:							
See Boot-tree. Pad-tree.							
Boot or shoe tree. Saddle-tree.							
Double-tree. Whiffletree.							
Harness-pad tree.							
Tree-box.....	B. Lensing.....	280,637	July 3	360	100	24	63
Tree-digger.....	L. G. Bragg.....	275,575	Apr. 10	924	251	23	1392
Tree-feller and block-dresser.....	J. F. Bollman.....	285,874	Oct. 2	116	34	25	23
Tree-protector.....	J. M. Wadlington.....	285,186	Sept. 18	1270	357	24	1136
Trees and changing their bearing-years. Producing fruit on barren fruit.....	P. Kimball.....	270,226	Jan. 9	476	140	23	103
Trestle.....	M. Miller.....	288,651	Nov. 20	1089	299	25	712
Trestle. Portable.....	W. F. Marsh.....	284,873	Sept. 11	877	246	24	1060
Tricycle.....	W. Asbury.....	285,946	Oct. 2	216	61	25	41
Tricycle.....	J. Auld.....	289,746	Dec. 4	472	133	25	969
Tricycle.....	J. G. Bailey.....	285,205	Sept. 18	1288	362	24	1139
Tricycle.....	R. H. Charsley.....	284,612	Sept. 11	556	157	24	1004
Tricycle.....	M. Cooper.....	286,120	Oct. 9	492	136	25	102
Tricycle.....	C. F. Handy and W. P. Anthony.....	274,762	Mar. 27	1953	543	23	1194
Tricycle.....	C. E. Hiester.....	271,583	Jan. 30	2183	628	23	432
Tricycle.....	T. O'Brien.....	287,566	Oct. 30	2260	613	25	440
Tricyclo.....	A. H. Overman and C. F. Hadley.....	270,691	Jan. 16	1073	308 309	23	225
Tricyclo.....	A. H. Overman and C. F. Hadley.....	282,358	July 31	2568	704	24	468
Tricyclo.....	J. H. Ray.....	288,114	Nov. 6	401	113	25	577
Tricyclo.....	H. Sachs.....	290,117	Dec. 11	922	262	25	1057
Tricyclo.....	H. K. Shanck.....	289,151	Nov. 27	1699	472	25	828
Tricyclo.....	J. K. Starley.....	274,231	Mar. 20	1270	351	23	1068
Tricyclo.....	A. E. Wallace.....	284,782	Sept. 11	776	216 217	24	1041



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volumo.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Tricycle. Railway-trimmer. See Boot and shoe edge trimmer. Hedge-trimmer. Hoof-trimmer.	H. K. Shanck. Lawn-edge trimmer. Sewing-machine trimmer. Wick-trimmer.	287,732	Oct. 30	2493	671	25	483
Trimming and burnishing machine	C. H. Swan	276,925	May 1	501	{ 130 131 663 669 }	{ 23 23 23 23 }	1713
Trimming and sewing fabrics. Method of and apparatus for	S. Arnold	278,485	May 29	2451	312	25	2077
Trimming-frame	A. Helmus and I. Dreyfuss	286,697	Oct. 16	1159	312	25	226
Trimminings and moldings. Machine for making stitched	C. Knoch	279,257	June 12	798	{ 221 222 }	{ 23 23 }	2270
Trimminings, &c. Former for dress	E. H. Godshalk	287,662	Oct. 30	2398	646	25	466
Tripod	G. S. Chase	281,239	July 17	1125	310	24	212
Tripod or standard	J. D. Richardson and F. L. Manchester.	287,168	Oct. 23	1757	482	25	339
Tripod support or stand. Folding.	W. J. Bishop	284,269	Sept. 4	138	39	24	928
Trough: See Eaves-trough. Feed-trough.	Fish-egg-hatching trough. Stock-trough.						
Truck	F. F. Adams	284,586	Sept. 11	525	149	24	999
Truck	H. Barkow	288,687	Nov. 20	1135	312	25	719
Truck	E. Burnett	281,612	July 17	1592	435	24	290
Truck	A. C. Carpenter	281,017	July 10	837	232	24	155
Truck	J. M. Doty	285,588	Sept. 25	1744	494	24	1228
Truck	R. W. Fisk	290,020	Dec. 11	808	227	25	1036
Truck	C. W. Ford	277,699	May 15	1454	392	23	1888
Truck	C. W. Ford	281,481	July 17	1435	392	24	264
Truck	T. Holt, Jr.	281,071	July 10	904	252	24	167
Truck	P. H. Walsh	280,975	July 10	790	219	24	145
Truck and bench. Combined	N. H. Long	279,778	June 19	1436	402	23	2383
Truck. Bag-holding	J. J. Dunan	281,472	July 17	1419	389	24	262
Truck. Barrel	L. M. Bedell	274,258	Mar. 20	1306	360	23	1074
Truck. Barrel	J. L. Crisp	289,753	Dec. 4	478	135	25	970
Truck. Barrel	J. Holden	283,888	Aug. 28	1714	483	24	834
Truck. Binder	J. Preston	270,841	Jan. 16	1254	361	23	260
Truck. Car	A. A. Brooks	278,495	May 29	2467	673	23	2079
Truck. Car	I. F. Brown	286,776	Oct. 16	1255	339	25	242
Truck. Car	L. Finlay	282,510	Aug. 7	40	12	24	507
Truck. Car	T. J. Furbee	287,374	Oct. 23	2015	548	25	384
Truck. Car	O. S. Holt	287,936	Nov. 6	184	53	25	539
Truck. Car	L. K. Jewett	279,951	June 26	1655	464	23	2427
Truck. Car	J. McLachlan	280,386	July 3	57	15, 16	24	13
Truck. Car	E. B. Meatyard. (Reissue)	10,289	Feb. 20	1606	449	23	737
Truck. Car	I. H. Randall	272,154	Feb. 13	709	194	23	574
Truck. Car	P. Reilly	279,185	June 12	721	197	23	2256
Truck. Car	H. Resley	279,434	June 12	1037	287	23	2308
Truck. Car	R. L. Robertson and O. S. Burdett.	270,985	Jan. 23	1438	415	23	296
Truck. Car	J. E. Squire	289,160	Nov. 27	1710	476	25	830
Truck. Car	I. C. Terry	270,152	Jan. 2	384	111	23	78
Truck. Car	I. C. Terry	270,153	Jan. 2	384	111	23	78
Truck. Car	I. C. Terry	278,292	May 22	2186	{ 601 602 }	{ 23 23 }	2021
Truck. Car	E. Whiting and J. N. Smith	274,160	Mar. 20	1178	325	23	1052
Truck. Car	S. S. Williamson	286,565	Oct. 9	981	264	25	188
Truck for conveying material on an elevated track	J. A. Cross	270,755	Jan. 16	1155	331	23	240
Truck for handling brick	J. S. Armstrong	277,187	May 8	853	227	23	1778
Truck for moving harvesters	O. Simpson	283,290	Aug. 14	980	273	24	682
Truck for moving harvesters	A. Turner	276,734	May 1	267	68	23	1670
Truck for moving plows	J. L. Trexler	278,375	May 29	2321	635	23	2054
Truck for moving reapers	R. Chesnut	271,221	Jan. 30	1722	499	23	352
Truck for portable tracks	R. Baumgartner	271,020	Jan. 23	1478	426	23	303
Truck for railway-cars. Safety	D. M. Kirkpatrick	272,267	Feb. 13	848	236	23	599
Truck for straw-stackers	A. B. Reeves	279,184	June 12	720	196	23	2256
Truck. Hand	W. P. Brown	283,562	Aug. 21	1321	369	24	751
Truck. Hand	J. L. Downing	284,619	Sept. 11	563	159	24	1006
Truck. Hand	C. J. Holman	270,068	Jan. 2	282	83	23	57
Truck. Hand	W. W. Hughes	275,386	Apr. 10	685	182	23	1351
Truck. Hand	A. Sloan	275,951	Apr. 17	1401	386	23	1482
Truck. Hand	J. H. Strugnell	271,152	Jan. 23	1631	470	23	329
Truck. Hand	N. J. Waterman	282,136	July 31	2287	628	24	420
Truck. Hand	T. A. Watrous	272,106	Feb. 13	656	178	23	565
Truck. Hand	E. Wickersham	272,817	Feb. 20	1554	436	23	728
Truck. Harvester	H. Clayton	288,208	Nov. 13	517	144	25	607
Truck. House-moving	W. P. Aylsworth	290,513	Dec. 18	1446	399	25	1156
Truck. Ladder	H. D. Olds	280,227	June 26	1979	556	23	2485
Truck. Market	A. Morrison	284,881	Sept. 11	884	249	24	1062
Truck safety attachment. Car	J. Raddin	273,307	Mar. 6	82	24, 25	23	848
Truck safety attachment. Car	J. Raddin	273,308	Mar. 6	83	25	23	848
Truck. Safety car	S. Brown	280,442	July 3	132	35	24	25
Truck safety-guard. Car	C. T. Emerson	273,973	Mar. 13	938	258	23	1002
Truck. Stove	P. A. Gordon	286,292	Oct. 9	654	174	25	129
Truck. Stove	M. R. Leavenworth	286,715	Oct. 16	1182	318	25	230
Truck. Timber	W. E. Kellogg	285,818	Oct. 2	44	14	25	10
Truck. Tipping	H. Grafton	274,314	Mar. 20	1375	377	23	1086
Truck. Warehouse	W. E. Hoyt	286,303	Oct. 9	664	177	25	131
Trumpet. Ear	S. North. (Reissue)	10,268	Jan. 9	914	263	23	187
Trundle	G. Layng	285,416	Sept. 25	1541	434	24	1190
Trunk	J. A. Ball	281,955	July 24	2038	557	24	374
Trunk	W. F. Bryer	286,383	Oct. 9	760	206	25	148
Trunk	G. Deinel	284,825	Sept. 11	821	229	24	1050
Trunk	H. C. Faber	284,197	Sept. 4	51	14	24	913
Trunk	C. C. Hudson	272,961	Feb. 27	1751	489	23	767

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Trunk	W. Simon	273,175	Feb. 27	2012	566	23	814
Trunk and table. Combined	C. P. Nash	278,036	May 22	1860	508	23	1965
Trunk and wardrobe. Combined	A. Dryfoos	282,865	Aug. 7	469	132	24	583
Trunk-carrier	R. Ball	286,372	Oct. 9	748	200	25	146
Trunk-catch	A. O. Buckins and C. A. Taylor	287,226	Oct. 23	1835	502	25	352
Trunk-catch	G. Crouch	290,977	Dec. 25	2056	566	25	1267
Trunk-catch	J. Wayland	288,284	Nov. 13	614	168	25	623
Trunk-fastener	A. V. Romadka	282,780	Aug. 7	366	104	24	564
Trunk-fastener	G. H. Turner	284,148	Aug. 28	2062	572	24	894
Trunk-fastener	S. J. Wells	283,938	Aug. 28	1778	502	24	846
Trunk-fastening	C. E. Reynolds	284,899	Sept. 11	900	254	24	1065
Trunk-fixture	A. O. Buckins and C. A. Taylor	287,227	Oct. 23	1837	502	25	352
Trunk-lid press. Steam	W. E. Lockman	284,215	Sept. 4	76	22	24	918
Trunk-lock	F. W. Mix	285,916	Oct. 2	176	50, 51	25	34
Trunk or box	F. H. Ransom	270,697	Jan. 16	1083	311	23	227
Trunk-strap	J. W. Putnam	276,466	Apr. 24	2051	570	23	1601
Trunk-top	F. Kukukuck and H. Arnd	275,499	Apr. 10	832	225	23	1377
Trunk-top	F. Kukukuck and H. Arnd	275,500	Apr. 10	833	226	23	1377
Trunk-top support	S. M. Michelson	289,548	Dec. 4	222	62	25	925
Trunk-tops. Manufacture of	F. Kukukuck and H. Arnd	279,258	June 12	800	222	23	2970
Trunk-tray	S. M. Michelson	278,580	May 29	2561	699	23	2096
Trunk-tray	S. M. Michelson	278,994	June 5	462	127	23	2202
Trunk-tray	S. M. Michelson	289,549	Dec. 4	223	62	25	925
Trunk-trays. Elevating and supporting device for	G. S. Willits	290,380	Dec. 18	1254	352	25	1124
Trunks, desks, &c. Supporting device for	A. Montant	272,459	Feb. 20	1099	310	23	647
Truss	I. P. Botsford	288,972	Nov. 27	1484	411	25	790
Truss	J. C. Calhoun	282,268	July 31	2447	673	24	447
Truss	W. B. Kimball	288,945	Nov. 20	1447	399	25	776
Truss	T. G. Owen	273,590	Mar. 6	454	122	23	912
Truss and bandage. Combined	L. C. Bailey	285,545	Sept. 25	1692	477	24	1218
Truss-pad	G. L. Gerard	274,932	Apr. 3	63	17	23	1236
Truss-pad	S. R. Nye	290,095	Dec. 11	892	254	25	1051
Truss-pad	E. Thompson	286,090	Oct. 2	382	105	25	70
Truss. Surgical	J. Edson	273,228	Feb. 27	2081	584	23	826
Tub:							
See Bath and wash tub. Mortar-tub.							
Butter-tub.							
Tub-handle	W. H. Parrish	285,302	Sept. 18	1398	395	24	1160
Tub-stand and clothes-rack. Combined	J. S. Duncan	270,031	Jan. 2	240	70	23	50
Tube:							
See Dispatch-tube. Speaking-tube.							
Radiator-tube. Syringe eduction-tube.							
Sampling-tube. Thermometer-tube.							
Smoking-tube. Wick-tube.							
Tube-coiling machine	E. W. Whitlock	280,983	July 10	797	222	24	146
Tube-coupling	H. E. Boyd	282,960	Aug. 28	1804	511	24	852
Tube-coupling	E. C. Converse	283,971	Aug. 28	1816	513	24	854
Tube-coupling	E. C. Converse	283,972	Aug. 28	1818	514	24	854
Tube-coupling	E. C. Converse	283,973	Aug. 28	1820	514	24	854
Tube-coupling	E. C. Converse	283,974	Aug. 28	1821	514	24	855
Tube-coupling	P. Patterson	273,591	Mar. 6	455	122	23	912
Tube-coupling	J. L. Pease	272,315	Feb. 13	900	252	23	609
Tube-cutter and expander	J. Rose	286,227	Oct. 9	543	149	25	110
Tube-cutting machine	H. O. Lothrop	290,695	Dec. 25	1681	463	25	1203
Tube-expander	C. P. Higgins	275,766	Apr. 10	1177	323	23	1435
Tube-fagot	A. L. Murphy	274,019	Mar. 13	990	272	23	1012
Tube-forming and cord-covering machine	H. S. Bacon	273,217	Feb. 27	2068	581	23	824
Tube-heating furnace	R. H. Brown	273,944	Mar. 13	906	248	23	996
Tube-scraper	C. P. Higgins	272,437	Feb. 20	1073	303	23	643
Tube-stopper	D. J. Morgan	282,006	July 24	2096	574	24	382
Tube-welding machine	T. H. Roberts	284,329	Sept. 4	211	58	24	940
Tubes. Device for making polygonal	A. D. McCarty	271,492	Jan. 30	2077	598	23	415
Tubes from celluloid and other plastic material.	W. E. Sargent	270,342	Jan. 9	614	180	23	130
Making							
Tubes. Making circular disks for	S. Walker	283,727	Aug. 21	1517	.....	24	788
Tubes. Manufacture of compound	T. J. Holmes	275,826	Apr. 17	1256	345	23	1456
Tubing. Die for drawing angular	E. Dewis	282,859	Aug. 7	461	130	24	582
Tubing. Flange-joint for thin-metal	E. C. Converse	283,975	Aug. 28	1822	514	24	855
Tubing. Flexible	M. M. Nichols	284,050	Aug. 28	1933	540	24	872
Tubular boiler. Sectional	G. T. Pillings	276,873	May 1	436	116	23	1703
Tuck-marker	J. S. Sackett	288,120	Nov. 6	407	115	25	579
Tucked fabrics. Machine for finishing	N. E. Borden	287,615	Oct. 30	2344	632 } 25	454	
Tug and trace adjuster. Hame	E. J. Blood	276,555	May 1	12	4	23	1629
Tug attachment. Hame	I. W. Numan	271,260	Jan. 30	1768	512	23	359
Tug attachment. Harness	J. W. Hill	275,043	Apr. 3	212	57	23	1262
Tug box-loop. Hame	W. A. Underwood	277,434	May 8	1137	306	23	1828
Tug-clip	F. Krein	270,082	Jan. 2	296	88	23	60
Tug clip. Hame	J. H. Clear	290,399	Dec. 18	1277	359	25	1128
Tug for harness. Thill or shaft	D. G. Powell	277,927	May 22	1725	471	23	1942
Tug. Hame	A. Arter	284,590	Sept. 11	528	150	24	999
Tug. Hame	J. M. Basinger	288,759	Nov. 20	1223	335	25	735
Tug. Hame	T. Broderick	272,641	Feb. 20	1337	375	23	689
Tug. Hame	W. Fawcett	283,475	Aug. 21	1217	342	24	732
Tug. Hame	A. L. Hill	279,759	June 19	1414	395	23	2379
Tug. Hame	J. J. Hipp	290,427	Dec. 18	1330	368	25	1136
Tug. Hame	M. E. Lasher	273,743	Mar. 13	649	173	23	953
Tug. Hame	E. C. Lelle	287,138	Oct. 23	1716	470	25	332
Tug. Hame	C. C. Schwauer	286,230	Oct. 9	546	150	25	110
Tug. Hame	T. A. Simmons. (Reissue)	10,287	Feb. 13	1022	285	23	628
Tug. Hame	E. P. Waters	278,475	May 29	2441	666	23	2075
Tug hook. Harness	J. E. Evans	281,987	July 24	2076	570	24	381
Tug. Shaft	J. B. Burrell	270,931	Jan. 23	1367	394	23	285
Tug. Shaft	G. Purdy	277,782	May 15	1552	422	23	1906



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Tug-slide	A. Wentling	229,479	Dec. 4	128	37	25	909
Tug. Spring draft	O. Brunk	231,236	July 17	1123	309	24	212
Tug. Thill	B. J. Anrand	269,989	Jan. 2	196	57	23	41
Tumbler-cleaner	E. Percival	273,040	May 22	1864	509	23	1966
Tumbler-washer	J. T. Whittle	289,737	Dec. 4	460	130	25	967
Tuning device for stringed instruments	M. Johnson	288,062	Nov. 6	339	95	25	565
Tuning pin for stringed instruments	W. R. Briggs	277,211	May 8	378	233	23	1782
Tunnel. Gaging	A. S. Diasmore	260,804	July 10	584	163	24	110
Tunnel-working. Metal shield for	T. Dark	286,789	Oct. 16	1269	343	25	245
Tunnels. Apparatus for the construction of	W. R. Kirk	290,989	Dec. 25	2070	570	25	1270
Tunnels. Construction of submarine	D. C. Haskin	286,924	Oct. 16	1439	395	25	274
Tunneling-machine	M. Rothschild	287,728	Oct. 30	2483	669	25	482
Turbine	A. Woodward	280,001	June 26	1713	480	23	2437
Turbine for steam and other motive power	G. De Laval	285,584	Sept. 25	1738	490	24	1227
Turbine wheel	N. F. Burnham	274,884	Mar. 27	2102	584	23	1219
Turbine-wheel gate	E. B. Williams	271,671	Feb. 6	102	28	23	457
Turn-buckles. Manufacture of	E. W. Merrill	282,102	July 31	2227	612	24	411
Turn-buckles. Die for the manufacture of	H. Kimball	285,275	Sept. 18	1368	386	24	1155
Turn-buckles. Die for the manufacture of	H. Kimball	285,276	Sept. 18	1370	386	24	1155
Turn-table. Portable	C. F. Chew	288,408	Nov. 13	789	214	25	653
Turning and boring machine	D. W. Pedrick	288,953	Nov. 20	1457	402	25	778
Turning carriage-seat spindles. Machine for	H. A. Miles	272,073	Feb. 13	608	165	23	557
Turning chair	E. Schmidt	286,641	Oct. 16	1083	292	25	212
Turning round tenons. Machine for	G. W. Foksett	278,118	May 22	1955	535	23	1982
Turning-tool. Hand	J. A. Plummer, Jr., and T. Gainford	270,474	Jan. 9	785	230	23	163
Turning wrist-pins. Device for	F. M. Hazleton	280,471	July 3	174	46	24	32
Turnstile. Registering	G. Wolf and M. Wieser	274,431	Mar. 20	1524	419	23	1112
Turpentine and other wood products and for the manufacture of charcoal. Process of and apparatus for the recovery of	H. M. Pierce	277,505	May 15	1226	330	23	1849
Turpentine. Device for hacking trees in gathering	A. Garner	273,061	Feb. 27	1868	525	23	788
Turpentine. Process of and apparatus for the manufacture of	H. M. Pierce	277,506	May 15	1227	330	23	1850
Turpentine-scraper	J. Mitchell	281,110	July 10	947	265	24	174
Tuyere	N. O. Swenson	285,367	Sept. 18	1476	416	24	1173
Tuyere for blast-furnaces	J. H. Cremer	278,685	June 5	11	3	23	2126
Tuyere for blast-furnaces	G. Hilgenstock	283,107	Aug. 14	758	213	24	642
Tuyere for forges	N. O. Swenson	283,435	Aug. 21	1173	329	24	723
Tuyere. Steam	L. G. Heybrook	270,063	Jan. 2	278	82	23	57
Twine-adjuster	W. J. Greene and J. L. Herlick	284,414	Sept. 4	312	87	24	956
Twine-cutter	W. Miller	286,467	Oct. 9	857	233	25	166
Twine-holder	W. B. Bisbee and G. D. Dudley	282,696	Aug. 7	266	77	24	545
Twine-holder	W. H. Boyden	285,727	Sept. 25	1918	544	24	1259
Twine-holder	R. Melvin	280,060	June 26	1788	502	23	2450
Twine-holder	M. E. Stephenson	274,047	Mar. 13	1019	279	23	1017
Twine holder and lifter	A. B. Tomlin	289,581	Dec. 4	265	74	25	934
Twine or cordage. Machine for making	G. L. Brownell	277,986	May 22	1801	491	23	1955
Twine or cordage. Machine for making	G. L. Brownell	286,258	Oct. 9	586	161	25	117
Twist and fluted drills. Grinding-machine for producing the relief on	H. F. Wheeler	286,663	Oct. 16	1110	299	25	217
Twist-drill	T. Hooker	274,943	Apr. 3	77	21	23	1238
Twist-drills. Die for forming	W. Godley and J. Bolden	285,996	Oct. 2	267	75	25	51
Twist-drills. Machine for cutting helical grooves in	J. Martignoni	270,235	Jan. 9	486	143	23	105
Twist-drills. Machine for making	F. H. Richards	286,150	Oct. 2	451	123	25	84
Twist-drills. Machine for making	J. F. Strange and A. W. Taber	275,791	Apr. 10	1203	330	23	1439
Twist-drills. Manufacture of	E. E. W., and E. C. Strange	273,322	Mar. 6	102	31	23	852
Type	H. H. Thorp	274,993	Apr. 3	140	39	23	1249
Type and space holder	L. K. Johnson	279,168	June 12	704	191	23	2253
Type-case	C. C. Doten	278,782	June 5	146	43	23	2147
Type-case	W. H. Golding	287,430	Oct. 30	2087	567	25	405
Type-case cabinet	W. Piel	285,674	Sept. 25	1843	526	24	1247
Type-case stand. Compositor's	W. P. Harmony	272,243	Feb. 13	818	223	23	594
Type-composing machinery	F. Wicks	276,947	May 1	539	140	23	1718
Type-distributing apparatus	L. K. Johnson and A. A. Low	282,988	Aug. 14	603	171	24	615
Type. Distributing printing	R. H. Davies	283,762	Aug. 28	1569	444	24	809
Type-form furniture, &c	A. B. Auer	278,211	May 22	2080	573	23	2004
Type-grinding machine	A. Neitsch	282,356	July 31	2565	703	24	467
Type holder and separator	L. K. Johnson	277,740	May 15	1499	407	23	1896
Type. Machine for manufacturing	J. C. Blevney	290,628	Dec. 18	1592	437	25	1181
Type making and arranging machinery	F. Wicks	280,699	July 3	432	123	24	77
Type-planer	C. H. Jones	284,638	Sept. 11	584	164	24	1009
Type. Printing	L. B. Benton	290,201	Dec. 18	1026	289	25	1084
Type-robber machine	G. S. Eaton	278,785	June 5	149	44	23	2148
Type setting and distributing machine	L. K. Johnson and A. A. Low	275,664	Apr. 10	1043	282	23	1412
Type setting and distributing machine	J. Thorne	283,934	Aug. 28	1769	500	24	845
Type-setting apparatus	L. K. Johnson and A. A. Low	271,711	Feb. 6	148	41	23	466
Type-writer	B. A. Brooks	273,454	Mar. 6	275	74	23	830
Type-writer	E. E. Horton	285,265	Sept. 18	1357	383	24	1153
Type-writer	E. E. Horton	286,824	Oct. 16	1314	358	25	253
Type-writer	G. W. N. Yost	285,096	Sept. 18	1158	323	24	1116
Type-writer aligner	C. J. Baker	282,253	July 31	2428	668	24	444
Type-writer. Electrical	J. A. Parks and G. V. Sheffield	280,077	June 26	1809	509	23	2454
Type-writer or calligraph indicator	J. W. Rich	284,901	Sept. 11	903	255	24	1066
Type writing and printing machine	M. H. Dement	282,174	July 31	2333	644	24	427

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Type writing and printing machine.....	M. H. Dement.....	282,175	July 31	2336	644	24	427
Type-writing machine.....	B. A. Brooks.....	272,023	Feb. 13	547	148	23	547
Type-writing machine.....	B. A. Brooks.....	274,262	Mar. 20	1309	361	23	1075
Type-writing machine.....	J. B. Hammond.....	290,419	Dec. 18	1309	{ 364 365 366 }	{ 25 25 25 }	{ 1132 1132 1132 }
Type-writing machine.....	J. B. Hammond.....	290,420	Dec. 18	1321	367	25	1135
Type-writing machine.....	A. G. Leming.....	285,141	Sept. 18	1216	{ 342 343 }	{ 24 24 }	{ 1126 1126 }
Type-writing machine.....	H. Orpen.....	279,790	June 19	1448	406	23	2385
Type-writing machine.....	H. Orpen.....	284,570	Sept. 4	502	{ 140 141 }	{ 24 24 }	{ 989 989 }
Type-writing machine.....	W. R. Perce.....	285,840	Oct. 2	69	21	25	15
Type-writing machine.....	A. H. P. S. Wortley.....	286,161	Oct. 2	465	127	25	86
Type-writing machine.....	J. L. Young.....	289,489	Dec. 4	147	40, 41	25	912
Type-writing machines. Platen-shifting attachment for.....	A. W. Pritchard.....	284,231	Sept. 4	96	26	24	921
Type-writing ruler.....	H. B. Mead.....	283,504	Aug. 21	1257	352	24	739
Umbrella.....	H. Bollack and G. Mayer.....	281,827	July 24	1883	514	24	347
Umbrella.....	J. N. Colby.....	289,229	Nov. 27	1793	496	25	846
Umbrella.....	J. Feldman.....	270,041	Jan. 2	252	73	23	52
Umbrella.....	W. S. Hoke.....	276,407	Apr. 24	1977	547	23	1588
Umbrella.....	G. H. Moll.....	284,043	Aug. 28	1924	538	24	871
Umbrella.....	L. Morse.....	270,827	Jan. 16	1236	357	23	257
Umbrella.....	J. Stewart.....	285,702	Sept. 25	1879	535	24	1253
Umbrella and cane. Combined.....	J. N. Colby.....	289,230	Nov. 27	1794	497	25	846
Umbrella and cane. Combined.....	H. A. Whiting and W. J. Winghart.....	288,144	Nov. 6	432	121	25	583
Umbrella and parasol.....	W. L. Fussell.....	288,566	Nov. 13	975	268	25	686
Umbrella and parasol.....	R. Geisler.....	269,746	Jan. 2	33	10, 11	23	9
Umbrella and parasol handle.....	J. T. Smith.....	289,722	Dec. 4	442	124	25	964
Umbrella and parasol rack.....	C. M. Boynton and T. M. Togus.....	288,616	Nov. 20	1040	286	25	704
Umbrella-case fastener.....	W. P. Richards.....	287,474	Oct. 30	2144	583	25	417
Umbrella catch and runner.....	J. B. Powell.....	288,486	Nov. 13	888	241	25	670
Umbrella drip-cup.....	E. Susman.....	288,889	Nov. 20	1381	381	25	764
Umbrella-fixture.....	R. Dugan.....	276,788	May 1	336	89	23	1684
Umbrella. Folding.....	C. P. Whitney.....	274,687	Mar. 27	1866	520	23	1179
Umbrella-frames. Machine for inserting pins or rivets in.....	D. M. Redmond.....	282,668	Aug. 7	230	67	24	539
Umbrella-handle catch.....	W. S. Hoke.....	276,536	Apr. 24	2138	594	23	1616
Umbrella-holder.....	T. A. Gause.....	278,124	May 22	1970	540	23	1984
Umbrella-holder.....	F. S. Hesseltine.....	287,676	Oct. 30	2414	651	25	460
Umbrella or parasol.....	L. Engel.....	285,021	Sept. 18	1071	299	24	1102
Umbrella or parasol.....	W. D. Isaacs.....	269,861	Jan. 2	49	15	23	35
Umbrella or parasol.....	R. P. Knapp.....	280,485	July 3	189	50	24	12
Umbrella or parasol.....	J. B. Seal.....	284,495	Sept. 4	410	117	24	973
Umbrella-runner.....	J. B. Powell.....	288,485	Nov. 13	887	241	25	670
Umbrella-runner.....	J. B. Wilson.....	273,330	Mar. 6	117	34	23	854
Umbrella-runner.....	J. B. Wilson.....	273,331	Mar. 6	118	34	23	854
Umbrella-stick.....	J. Wright and J. M. Bechter.....	288,606	Nov. 13	1029	282	25	696
Umbrella-stick and cane.....	J. T. Smith.....	282,231	July 31	2404	661	24	440
Umbrella-support.....	W. R. Kizer.....	278,973	June 5	438	119	23	2188
Umbrella-tie.....	D. W. Odiorno.....	276,457	Apr. 24	2036	566	23	1599
Umbrellas and parasols. Retention device for.....	V. D. Stockbridge.....	286,501	Oct. 9	899	242	25	173
Uncoupler. Automatic.....	W. R. Funk.....	286,920	Oct. 16	1436	394	25	273
Under-garment.....	M. Loewenthal.....	278,805	June 5	173	51	23	2152
Underground conductor.....	R. M. Hunter.....	275,387	Apr. 10	688	122	23	1352
Underground conduit.....	J. S. Du Bois.....	287,509	Oct. 30	2186	594	25	424
Underground conduit.....	J. Lynch.....	275,233	Apr. 3	450	125	23	1303
Underground line.....	D. N. Hurlbut.....	276,415	Apr. 24	1987	550	23	1590
Underground line.....	F. X. Taaffe and C. H. Koyl.....	278,627	May 29	2625	717	23	2107
Underground wires, &c. Carrier for.....	T. A. B. Putnam.....	282,010	July 24	2100	576	24	384
Undershirt.....	A. Conger. (Reissue).....	10,378	Sept. 4	523	147	24	992
Undershoe.....	H. E. Pond.....	272,470	Feb. 20	1112	314	23	649
Underwaist.....	M. E. Higgins.....	288,802	Nov. 20	1275	349	25	744
Underwaist.....	M. E. Higgins.....	288,803	Nov. 20	1276	350	25	744
Underwaist. Child's.....	M. E. Higgins.....	277,726	May 15	1484	402	23	1893
Uniting sheets of fibrous and other materials.....	W. S. Seymour.....	289,455	Dec. 4	96	28	25	903
Universal joint.....	G. Carlisle.....	285,906	Oct. 2	236	66	25	45
Universal joint.....	R. Edmonds.....	281,850	July 24	1913	522	24	352
Universal joint.....	P. Lord.....	276,186	Apr. 24	1691	467	23	1540
Universal joint.....	W. K. Miller.....	279,415	June 12	1013	281	23	2304
Universal joint.....	E. W. Vogel.....	277,176	May 8	843	223	23	1776
Universal joint coupling.....	C. Shuman.....	272,339	Feb. 13	932	259	23	613
Upholstering cushioned seats. Apparatus for.....	G. Coil.....	280,911	July 10	705	198	24	131
Upholstery purposes. Fiber for.....	J. G. Stephens.....	283,161	Aug. 14	817	228	24	651
Upholstery purposes. Method of and apparatus for curling fibers for.....	J. G. Stephens.....	283,162	Aug. 14	818	228	24	651
Upper-protectors. Fastener for.....	J. H. Moulton.....	269,875	Jan. 2	61	19	23	15
Urethral-stricture instrument.....	P. B. Tucker.....	282,500	Aug. 7	140	42	24	525
Urinal.....	J. McGinley.....	276,261	Apr. 24	1783	496	23	1556
Urinal. Flexible.....	C. S. Murphey.....	285,056	Sept. 18	1112	310	24	1109
Urn. Coffee.....	C. Halstead.....	270,788	Jan. 16	1192	344	23	248
Urn. Coffee.....	C. Halstead.....	273,067	Feb. 27	1874	526	23	789
Uterine displacement and hernia. Apparatus for the treatment of.....	H. H. De Pew.....	275,368	Apr. 10	657	{ 175 176 }	{ 23 23 }	{ 1347 1347 }
Uterine supporter.....	H. G. Farr.....	286,798	Oct. 16	1282	346	25	247
Vaccine. Preserving.....	H. Protze.....	273,390	Mar. 6	198	.....	23	868
Vacuum apparatus.....	E. Weston.....	283,544	Aug. 21	1295	362	24	746
Vacuums. Apparatus for producing.....	E. Weston.....	283,449	Aug. 21	1301	364	24	747
Vacuum-pan.....	W. A. Hoeveler.....	277,280	May 8	955	257	23	1797
Vacuum-pan.....	J. Kelly.....	278,150	May 22	1999	550	23	1990
Vacuum-pans. Device for cleaning.....	G. Dunkel.....	277,012	May 8	626	164	23	1739
Vagina and uterus. Instrument for treating the.....	C. C. Parker.....	275,405	Apr. 10	712	190	23	1357
Valise. Folding.....	W. S. Marshall.....	277,497	May 15	1219	328	23	1848



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Valve. Hand and saddle.	W. G. Strubbe.	271,540	Jan. 30	2132	614	23	424
Valve.							
See Flush-valve. Vapor-burner valve.							
Flushing-valve. Water-closet valve.							
Pump-valve.							
Valve.	A. G. Alexander.	284,587	Sept. 11	526	149	24	999
Valve.	C. F. Barrett.	285,871	Oct. 2	112	33	25	22
Valve.	J. H. Blessing.	272,634	Feb. 20	1327	372	23	687
Valve.	H. R. Frisbie.	275,184	Apr. 3	391	107	23	1294
Valve.	T. and J. Galvin.	283,479	Aug. 21	1222	344	24	732
Valve.	C. S. Haskell and W. B. Fleming.	288,331	Nov. 13	680	187	25	633
Valve.	C. B. Hitchcock.	284,635	Sept. 11	581	163	24	1008
Valve.	S. W. Hoag, Sr.	272,879	Feb. 27	1662	464	23	753
Valve.	T. Holland.	282,894	Aug. 7	503	141	24	589
Valve.	C. Jenkins.	271,073	Jan. 23	1542	444	23	314
Valve.	J. Johnson and L. Wagner.	283,788	Aug. 28	1603	453	24	815
Valve.	L. J. Kolar.	277,492	May 15	1215	326	23	1848
Valve.	R. Lauckner.	288,350	Nov. 13	704	193	25	638
Valve.	S. Lloyd and D. E. Pierce.	275,395	Apr. 10	701	187	23	1354
Valve.	S. Lloyd and D. E. Pierce.	275,396	Apr. 10	702	187	23	1355
Valve.	H. Oldendorph.	274,364	Mar. 20	1443	396	23	1098
Valve.	W. A. Pendry.	282,766	Aug. 7	354	100	24	562
Valve.	J. E. Sinclair.	279,451	June 12	1054	291	23	2310
Valve.	H. Sullings.	279,459	June 12	1062	294	23	2312
Valve.	P. White.	270,355	Jan. 9	629	185	23	133
Valve.	M. M. Zellers.	272,827	Feb. 20	1565	440	23	730
Valve. Air.	J. S., T. A., and E. R. Walker.	289,192	Nov. 27	1750	487	25	837
Valve and apparatus connected therewith. Automatic check.	M. Merichenski.	273,575	Mar. 6	436	117	23	909
Valve and expansion-gear. Steam-actuated.	E. Sonntag.	270,854	Jan. 16	1265	{ 364 } { 365 }	{ 23 } { 23 }	262
Valve and spigot wrench for barrels.	G. F. Hildenbrand.	290,133	Dec. 11	994	281	25	1070
Valve attachment for gravity-lubricators.	R. Baird.	274,894	Apr. 3	5	1	23	1227
Valve. Back-pressure.	C. F. Copeland.	270,890	Jan. 23	1314	379	23	276
Valve-balance.	J. B. Miller.	281,907	July 24	1984	543	24	364
Valve. Balance puppet.	C. O. Small.	275,722	Apr. 10	1113	304	23	1424
Valve. Balance slide.	S. S. Williamson.	272,393	Feb. 13	1014	283	23	627
Valve. Balanced.	W. S. Canaday.	280,346	July 3	10	3	24	4
Valve. Balanced.	E. Stewart.	278,058	May 22	1883	515	23	1970
Valve. Balanced.	C. F. Taylor.	283,532	Aug. 21	1281	358	24	743
Valve. Balanced rotary.	B. T. Babbitt.	269,992	Jan. 2	200	58	23	42
Valve. Balanced rotary.	A. E. Wilson.	278,648	May 29	2652	725	23	2111
Valve. Balanced slide.	J. B. Allfree.	280,993	July 10	807	224	24	149
Valve. Balanced slide.	J. E. Baker.	286,573	Oct. 16	996	269	25	197
Valve. Balanced slide.	T. Calver and S. H. Stout.	281,015	July 10	834	232	24	155
Valve. Balanced slide.	N. W. Condict, Jr.	275,356	Apr. 10	639	171	23	1344
Valve. Balanced slide.	E. T. Conrad.	273,961	Mar. 13	922	253	23	999
Valve. Balanced slide.	J. J. De Lancey.	284,395	Sept. 4	291	81	24	953
Valve. Balanced slide.	W. M. Deal.	283,216	Aug. 14	888	247	24	665
Valve. Balanced slide.	S. E. Jarvis.	278,020	May 22	1843	503	23	1962
Valve. Balanced slide.	W. Jones.	270,809	Jan. 16	1216	351	23	253
Valve. Balanced slide.	J. C. Knecht.	282,906	Aug. 7	514	144	24	591
Valve. Balanced slide.	J. P. McCook.	289,678	Dec. 4	380	109	25	954
Valve. Balanced slide.	J. Murphy.	277,328	May 8	1017	273	23	1807
Valve. Balanced slide.	H. Otto and P. F. Bell.	290,650	Dec. 18	1616	445	25	1186
Valve. Balanced slide.	W. T. Reaser.	273,891	Mar. 13	841	228	23	986
Valve. Balanced slide.	W. T. Reaser.	273,892	Mar. 13	842	229	23	986
Valve. Balanced slide.	F. Roehow.	270,926	Jan. 23	1439	415	23	296
Valve. Balanced slide.	G. Selden.	276,721	May 1	246	62	23	1667
Valve. Balanced slide.	G. Shone.	277,795	May 15	1566	427	23	1909
Valve bodies. Machine for finishing globe.	F. H. Richards.	281,138	July 10	984	{ 275 } { 276 }	{ 24 } { 24 }	180
Valve. Check.	G. F. Blake.	270,573	Jan. 16	921	265	23	197
Valve. Check.	J. H. Blessing.	281,439	July 17	1370	378	24	254
Valve. Check.	J. H. Blessing.	290,314	Dec. 18	1171	328	25	1109
Valve. Check.	H. A. Hall.	283,777	Aug. 28	1587	448	24	813
Valve. Check.	J. P. Pfau.	274,222	Mar. 20	1259	747	23	1066
Valve. Check.	A. Riegler.	277,509	May 15	1230	331	23	1850
Valve. Combined check and stop.	L. B. Snow.	284,770	Sept. 11	758	211	24	1039
Valve-cover. Removable.	E. E. Carter.	277,227	May 8	593	238	23	1785
Valve. Drop check.	M. D. Temple.	290,281	Dec. 18	1128	317	25	1101
Valve for compound engines. Slide.	E. G. Davis.	274,571	Mar. 27	1229	480	23	1154
Valve for compound engines. Slide.	E. G. Davis.	279,544	June 19	1170	324	23	2336
Valve for engine-cylinders. Relief.	J. Wheelock.	269,973	Jan. 2	181	53	23	38
Valve for gas, water, &c. Safety.	G. W. Richardson.	291,013	Dec. 25	2100	579	25	1275
Valve for locomotive-engines. Relief.	R. C. Blackall.	283,749	Aug. 28	1555	438	24	807
Valve for steam fire-engines. Relief.	R. H. Atwell.	277,189	May 8	856	228	23	1778
Valve. Gate.	W. G. Abel.	287,788	Nov. 6	1	1	25	507
Valve. Gate.	P. G. Neisendorfer.	286,475	Oct. 9	865	235	25	168
Valve-gear.	M. N. Cumiskey.	270,395	Jan. 9	688	204	23	144
Valve-gear.	H. E. Depp.	278,689	June 5	18	5	23	2128
Valve-gear.	R. H. Fletcher.	286,803	Oct. 16	1287	348	25	248
Valve-gear.	H. K. Kriebel.	290,645	Dec. 18	1611	443	25	1184
Valve-gear.	R. M. Hunter.	272,053	Feb. 13	585	158	23	553
Valve-gear.	F. V. Matton.	285,286	Sept. 18	1379	390	24	1157
Valve-gear.	A. Morton.	281,548	July 17	1506	{ 414 } { 415 }	{ 24 } { 24 }	277
Valve-gear.	F. Ogden.	281,122	July 10	962	270	24	177
Valve-gear.	J. D. Olds.	281,123	July 10	964	{ 270 } { 271 }	{ 24 } { 24 }	177
Valve-gear.	L. Skinner.	287,877	Nov. 6	107	32, 33	25	526
Valve-gear.	J. E. Sweet.	275,871	Apr. 17	1314	362	23	1466
Valve-gear for steam-engines. Electric.	G. W. Storer.	281,579	July 17	1544	{ 423 } { 424 }	{ 24 } { 24 }	283

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Valve-gear for steam pumping-engines	A. J. Blakeslee	270,576	Jan. 16	924	267	23	198
Valve-gear. Reversing and expansion	C. W. Finger	282,787	Nov. 20	1261	345	25	741
Valve-gear. Steam-engine	J. Braunwalder	286,585	Oct. 16	1011	273	25	200
Valve-gear. Steam-engine	D. Clark and T. G. Blatch	276,773	May 1	316	82	23	1681
Valve-gear. Steam-engine	J. Frazier	271,577	Jan. 30	2174	626	23	431
Valve-gear. Steam-engine	A. C. Gallahue	275,376	Apr. 10	668	178	23	1348
Valve-gear. Steam-engine	N. G. Herreshoff	280,311	June 26	2085	587	23	2504
Valve-gear. Steam-engine	G. L. and E. Hoxsie	273,846	Mar. 13	784	213	23	977
Valve-gear. Steam-engine	A. Morton	274,810	Mar. 27	2006	558 559	23	1203
Valve-gear. Steam-engine	E. O'Neill	278,451	May 29	2413	658	23	2070
Valve-gear. Steam-engine	R. W. Peck	286,062	Oct. 2	347	97	25	64
Valve-gear. Steam-engine	G. T. Pillings	273,597	Mar. 6	461	124	23	913
Valve-gear. Steam-engine	C. Schinke	280,672	July 3	402	112	24	71
Valve-gear. Steam-engine	A. J. Stevens	288,133	Nov. 6	422	119	25	581
Valve-gear. Steam-engine	F. M. Stevens	285,084	Sept. 18	1141	319	24	1113
Valve-gear. Steam-engine	W. B. Turman	283,538	Aug. 21	1287	360	24	744
Valve. Globe or similar	J. L. Phillips	281,394	July 17	1316	364	24	245
Valve. Globe or stop	F. H. Hambleton	277,713	May 15	1472	398	23	1891
Valve-grinder	J. D. Waldran	286,095	Oct. 2	391	107	25	72
Valve-grinding attachment	A. W. Case	285,568	Sept. 25	1716	485	24	1223
Valve handle. Steam	F. I. Maule	271,887	Feb. 6	362	100	23	504
Valve. Hydraulic	E. Thayer	274,155	Mar. 20	1170	323	23	1050
Valve mechanism	C. Belknap and J. W. Bradley	286,676	Oct. 16	1128	303 304	25	220
Valve mechanism	J. W. Bradley	280,011	June 26	1727	484	23	2440
Valve. Oscillating	M. R. Moore	271,729	Feb. 6	170	46	23	470
Valve. Oscillating-engine	A. W. Harrison	271,449	Jan. 30	2018	582	23	404
Valve. Oscillating steam	J. M. Buckley	284,719	Sept. 11	694	195	24	1028
Valve. Piston	C. H. Hyssong	284,964	Sept. 11	985	277	24	1080
Valve. Piston	F. Stitzel	279,887	June 19	1566	439	23	2406
Valve. Plug stop	L. D. Craig	274,724	Mar. 27	1904	532	23	1186
Valve. Pop safety	C. and A. H. Jarecki	281,369	July 17	1287	357	24	240
Valve. Pressure-regulating	H. F. Hodges	290,429	Dec. 18	1331	369	25	1136
Valve. Reducing	R. Newton	282,557	Aug. 7	103	31	24	518
Valve. Regulating	P. O'Reilly	274,512	Mar. 27	1659	461	23	1141
Valve. Reversing	C. S. Crane	279,921	June 26	1614	453 454	23	2420
Valve. Reversing and cut-off	F. Chase	279,912	June 26	1603	450	23	2419
Valve. Rotary	W. F. Goodwin	278,790	June 5	154	45, 46	23	2149
Valve. Safety	A. H. Jarecki	287,131	Oct. 23	1709	468	25	330
Valve. Safety	A. D. Kilborn	274,787	Mar. 27	1984	552	23	1199
Valve. Safety	A. C. Meady	274,133	Mar. 20	1144	315	23	1045
Valve. Safety	E. Medden	290,450	Dec. 18	1360	375	25	1141
Valve. Safety	A. Orme	286,148	Oct. 2	449	122	25	83
Valve. Safety	G. W. Richardson	283,146	Aug. 14	799	223	24	648
Valve. Safety	G. W. Richardson	287,167	Oct. 23	1755	481 482	25	338
Valve. Safety	H. C. Wilder	272,926	Feb. 27	1713	479	23	761
Valve-seat for steam-engines	I. H. Congdon	282,058	July 31	2168	595	24	401
Valve-seats of globe-valves. Device for dressing	P. J. Wright and S. Rust	278,478	May 29	2445	667	23	2076
Valve. Slide	B. Carley	282,162	July 31	2313	635	24	424
Valve. Slide	R. Doty	285,737	Sept. 25	1935	548	24	1261
Valve. Steam	T. P. Barry	285,955	Oct. 2	226	63	25	43
Valve. Steam	A. B. Jenkins	273,284	Mar. 6	45	14	23	842
Valve. Steam-actuated	L. S. Allison, H. John, and T. E. Evans	274,247	Mar. 20	1292	356	23	1072
Valve. Steam-actuated	R. B. Angus	275,746	Apr. 10	1142	313	23	1429
Valve. Steam-actuated	G. Clarke	281,836	July 24	1893	516	24	349
Valve. Steam-actuated	G. E. Elliott	283,226	Aug. 14	897	250	24	667
Valve. Steam-actuated	W. Haehulen	279,378	June 12	970	269	23	2296
Valve. Steam-actuated	H. Kessler	290,063	Dec. 11	856	243	25	1044
Valve. Steam-actuated	S. F. Locke	288,460	Nov. 13	853	231	25	664
Valve. Steam-actuated	W. J. McLean	285,827	Oct. 2	56	17	25	12
Valve. Steam-actuated	W. K. Miller	287,845	Nov. 6	65	19, 20	25	519
Valve. Steam-actuated	J. P. Northey	274,647	Mar. 27	1820	505	23	1171
Valve. Steam-actuated	T. Northey	287,706	Oct. 30	2457	661 662	25	477
Valve. Steam-actuated	G. W. Price	290,354	Dec. 18	1219	343	25	1117
Valve. Steam-actuated	J. W. Russell	283,359	Aug. 14	1075	302	24	700
Valve. Steam-actuated	L. Wiennan	273,655	Mar. 6	530	142	23	925
Valve. Steam-balanced	J. Dutot and H. B. Anderson	275,610	Apr. 10	971	264	23	1400
Valve. Steam-cylinder relief	W. B. Coulter	289,071	Nov. 27	1607	445	25	811
Valve. Steam-engine	G. H. Burley	281,665	July 24	1664	454	24	308
Valve. Steam-engine	R. Doty	283,978	Aug. 28	1826	515	24	855
Valve. Steam-engine	F. Fosdick	279,484	June 12	1004	302	23	2316
Valve. Steam-engine	N. G. Herreshoff	280,312	June 26	2066	587	23	2504
Valve. Steam-engine reversing	C. H. Upton	283,046	Aug. 14	684	192	24	629
Valve. Steam-engine slide	L. Skinner	287,878	Nov. 6	109	33	25	526
Valve. Steam-engine slide	J. M. Smith	275,725	Apr. 10	1116	305	23	1425
Valve. Steam-trap	R. Newton	284,469	Sept. 4	375	104	24	967
Valve. Stop	R. Beaumont	275,798	Apr. 17	1226	335	23	1451
Valve. Stop	F. H. Hambleton	290,044	Dec. 11	837	236 237	25	1041
Valve. Stop	M. Hastings	271,067	Jan. 23	1533	442	23	312
Valve. Stop	T. Hennessy	273,539	Mar. 13	776	210	23	975
Valve. Stop	S. W. Martin	271,491	Jan. 30	2075	598	23	415
Valve. Stop	J. Old	286,479	Oct. 9	869	236	25	169
Valve. Stop	M. D. L. Swank and J. T. Thornley	280,413	July 3	91	24	24	19
Valve, stop-cock, and blow-off valve. Combined check	J. H. Blessing	272,635	Feb. 20	1329	373	23	688
Valve. Straight-way	J. H. Bacon and W. H. Paige	281,228	July 17	1109	306	24	209
Valve. Straight-way	D. R. Burns	270,009	Jan. 2	217	63	23	45
Valve. Straight-way	S. B. Dover	284,122	Aug. 28	2027	564	24	889



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Valve. Straight-way .....	M. J. Gibbons .....	273,271	Mar. 6	32	10	23	840
Valve. Straight-way .....	B. J. Kelly .....	281,081	July 10	913	255	24	168
Valve. Straight-way .....	J. Richter .....	273,607	Mar. 6	472	127	23	915
Valve. Straight-way .....	P. G. Van Wie .....	279,617	June 19	1251	347	23	2351
Valve. Straight-way .....	P. G. Van Wie .....	286,656	Oct. 16	1102	297	25	216
Valve. Straight-way check .....	J. H. Blessing .....	281,438	July 17	1369	373	24	254
Valve. Three-way .....	B. Fitts .....	272,421	Feb. 20	1057	297	23	639
Valve. Tube .....	W. Kennish .....	274,447	Mar. 20	1555	426	23	1117
Valve. Vacuum .....	W. C. Mackinney .....	284,452	Sept. 4	355	98	24	964
Valve. Water-protected .....	J. E. Leadley .....	289,277	Nov. 27	1844	509	25	855
Valve weights. Automatically releasing safety .....	W. T. King .....	288,710	Nov. 20	1161	319	25	734
Valves. Device for proving globe .....	F. Lunkenheimer .....	277,756	May 15	1525	413	23	1901
Valves. Handle for steam and other .....	H. M. Hall .....	290,575	Dec. 18	1537	421	25	1171
Valves. Locking .....	P. Connolly .....	280,912	July 10	706	199	24	131
Valves. Mechanism for operating discharge .....	A. G. Alexander .....	275,344	Apr. 10	621	167	23	1341
Valvular apparatus .....	F. S. Guerber .....	273,680	Mar. 6	567	150	23	931
Vapor-bath .....	J. M. Chadwick .....	280,348	July 3	12	4	24	4
Vapor-bath. Medicated .....	L. Schulze .....	280,675	July 3	404	113	24	72
Vapor-burner .....	H. S. Belden .....	271,772	Feb. 6	223	62	23	479
Vapor-burner .....	H. S. Belden .....	272,195	Feb. 13	755	208	23	582
Vapor-burner .....	C. V. Best .....	283,956	Aug. 28	1800	510	24	851
Vapor-burner .....	E. P. Corby .....	282,612	Aug. 7	165	50	24	529
Vapor-burner .....	E. P. Corby .....	286,266	Oct. 9	596	163	25	119
Vapor-burner .....	E. P. Corby .....	286,267	Oct. 9	596	163	25	119
Vapor-burner .....	Z. Davis .....	269,833	Jan. 2	18	6	23	6
Vapor-burner .....	Z. Davis .....	269,834	Jan. 2	19	6	23	6
Vapor-burner .....	Z. Davis .....	287,911	Nov. 6	151	44	25	534
Vapor-burner .....	J. E. Donovan .....	283,977	Aug. 28	1824	515	24	855
Vapor-burner .....	B. Fisher .....	282,820	Aug. 7	412	116	24	573
Vapor-burner .....	W. Heston .....	270,587	Jan. 16	936	271	23	201
Vapor-burner .....	A. Kindermann .....	288,343	Nov. 13	693	191	25	636
Vapor-burner .....	C. A. Koehler .....	270,191	Jan. 2	427	123	23	87
Vapor-burner .....	O. B. Peck .....	286,328	Oct. 9	699	186	25	137
Vapor-burner .....	W. Scherer, W. Moll, and J. A. Marsb. .....	270,253	Jan. 9	506	149	23	109
Vapor-burner .....	A. Stevens .....	284,085	Aug. 28	1977	551	24	880
Vapor-burner .....	C. and J. Whittingham .....	270,268	Jan. 9	521	153	23	112
Vapor-burner .....	W. H. Woodard .....	281,423	July 17	1354	373	24	251
Vapor-burner .....	T. T. Woodward .....	270,194	Jan. 2	431	125	23	88
Vapor-burner .....	T. T. Woodward .....	272,998	Feb. 27	1793	502	23	775
Vapor-burner .....	T. T. Woodward .....	272,999	Feb. 27	1794	502	23	775
Vapor-burner valve .....	D. E. Bangs .....	277,661	May 15	1413	382	23	1880
Vapor-burning heating and cooking apparatus .....	J. S. Hull .....	283,246	Aug. 14	927	258	24	672
Vapor-burning heating and cooking apparatus .....	J. S. Hull .....	283,247	Aug. 14	929	259	24	672
Vapor. Device for automatically regulating quality of illuminating .....	E. J. Frost .....	282,069	July 31	2184	600	24	404
Vapor-engines. Regulating the supply of oil to .....	G. B. Brayton .....	270,927	Jan. 23	1361	392	23	284
Vapor for engines. Generating motor .....	J. T. Wainwright .....	274,423	Mar. 20	1515	416	23	1111
Vapor from liquid hydrocarbons. Apparatus for generating .....	H. F. Hayden .....	278,792	June 5	158	46	23	2149
Vapor from liquid hydrocarbons. Apparatus for generating .....	H. F. Hayden .....	278,793	June 5	159	47	23	2149
Vapor from liquid hydrocarbons. Apparatus for generating .....	H. F. Hayden .....	279,154	June 12	692	189	23	2251
Vapor generator and diantion burner. Hydrocarbon .....	I. R. Blumenburg and H. W. Whiting .....	278,860	June 5	257	74, 75	23	2167
Vapor generator and motor .....	I. R. Blumenburg .....	290,962	Dec. 25	2024	559	25	1263
Vapor generator and motor .....	I. R. Blumenburg .....	290,963	Dec. 25	2029	560	25	1264
Vapor generator and motor .....	I. R. Blumenburg .....	290,964	Dec. 25	2034	560	25	1264
Vapor or gas. Apparatus for generating and utilizing .....	H. F. Hayden .....	274,595	Mar. 27	1759	488	23	1151
Vapor or gas generator. Hydrocarbon .....	H. F. Hayden .....	274,596	Mar. 27	1761	488	23	1159
Vapor. Process of and apparatus for manufacturing heating .....	J. P. Gill .....	275,634	Apr. 10	1005	272	23	1405
Vapors. Process of and apparatus for manufacturing lighting or heating .....	J. P. Gill .....	275,635	Apr. 10	1008	272	23	1406
Vaporizer .....	S. Marcus .....	275,238	Apr. 3	456	127	23	1304
Varnish .....	C. M. Ely .....	289,766	Dec. 4	489	25	25	971
Varnish, &c. Apparatus for making .....	W. M. Bailey .....	277,534	May 15	1263	339	23	1855
Varnish. Apparatus for manufacturing .....	B. Borowsky .....	286,528	Oct. 9	932	251	25	180
Varnish. Furniture .....	G. Wright .....	283,450	Aug. 21	1190	24	24	727
Varnishing machines. Automatic hanging-up attachment for label .....	M. Schmidt and C. Rahsskopff .....	278,607	May 29	2594	708	23	2102
Vase. Self-watering flower .....	E. B. Chappell .....	283,966	Aug. 28	1811	512	24	853
Vat: See Cheese-vat. Tan-vat. ....							
Vault. Burial .....	J. G. Meyers .....	285,914	Oct. 2	172	49, 50	25	33
Vault-cover .....	E. Omensetter .....	275,785	Apr. 10	1196	328	23	1439
Vault cover and ventilator .....	A. W. Herr .....	284,203	Sept. 4	60	17	24	915
Vault cover and ventilator. Combined .....	T. W. Langill .....	289,663	Dec. 4	360	102	25	950
Vault-cover fastening .....	C. H. Ross .....	283,517	Aug. 21	1268	355	24	741
Vault-cover or grating-tile and surfaces made of the same. Illuminating .....	T. Hyatt .....	272,383	Feb. 13	998	278, 279, 280	23	624
Vault-cover or grating-tile and surfaces made of the same. Illuminating .....	T. Hyatt .....	272,551	Feb. 20	1213	339, 340	23	667
Vault-cover or grating-tile and surfaces made of the same. Illuminating .....	T. Hyatt .....	286,542	Oct. 9	951	256	25	183
Vault-cover or grating-tile, &c. Illuminating .....	T. Hyatt .....	286,012	Oct. 2	225	80	25	54
Vault-cover or illuminating grating-tile and surface made thereof .....	T. Hyatt .....	288,571	Nov. 13	981	270	25	687
Vault-covering or illuminating-grating and surface made therefrom .....	T. Hyatt .....	288,572	Nov. 13	982	271	25	687
Vault. Grave .....	J. Coover .....	285,233	Sept. 18	1321	372	24	1145

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Vault. Grave.....	F. Miller.....	278,354	May 29	2296	628	23	2049
Vault-light lens.....	M. J. Daly.....	274,086	Mar. 13	1077	297	23	1026
Vault. Receiving and burial.....	R. B. Lanum.....	284,027	Aug. 28	1908	534	24	869
Vegetable and fruit drying apparatus.....	F. Cook.....	281,838	July 24	1895	517	24	349
Vegetable-cutter.....	J. M. Butler.....	275,136	Apr. 3	339	93	23	1284
Vegetable-cutter.....	E. L. Byron.....	283,406	Aug. 21	1208	339	24	730
Vegetable-cutter.....	E. Fishel.....	285,985	Oct. 2	254	72	25	49
Vegetable-cutter.....	J. C. Green.....	272,041	Feb. 13	568	154	23	550
Vegetable-cutter.....	C. L. Heisler.....	287,127	Oct. 23	1704	467	25	399
Vegetable-cutter.....	C. Schreiber.....	278,827	June 5	205	60, 61	23	2158
Vegetable-cutter.....	J. A. Smith.....	290,363	Dec. 18	1231	{ 346 347 }	25	1120
Vegetable-cutter. Rotary.....	H. L. Goodwin.....	271,701	Feb. 6	137	38	23	464
Vegetable grinder and slicer.....	E. Schmitz.....	290,120	Dec. 11	926	263	25	1058
Vegetable matter. Treating.....	R. R. Roberts.....	279,435	June 12	1038	{ 287 288 }	23	2308
Vegetable-slicer.....	A. B. Batson.....	279,212	June 12	747	205	23	2261
Vegetable-slicer.....	F. Espel.....	280,161	June 26	1899	534	23	2471
Vegetable-slicer.....	S. E. Massari.....	279,782	June 19	1440	403	23	2384
Vegetable-slicer.....	L. Sherman.....	284,078	Aug. 28	1969	548	24	879
Vegetable slicer and grater.....	J. Brinkhoff.....	290,390	Dec. 18	1267	356	25	1126
Vehicle.....	C. M. Blydenburgh.....	289,883	Dec. 11	641	{ 178 179 }	25	1005
Vehicle.....	G. J. Dickson.....	280,361	July 3	26	7, 8	24	7
Vehicle.....	C. B. James.....	270,076	Jan. 2	290	86	23	59
Vehicle.....	L. G. Mayer.....	271,092	Jan. 23	1563	451	23	317
Vehicle.....	F. M. and W. F. Pennebaker.....	280,854	July 10	640	181	24	119
Vehicle.....	C. W. Saladee.....	272,331	Feb. 13	922	257	23	612
Vehicle.....	J. F. Smith.....	280,870	July 10	660	186	24	123
Vehicle.....	J. M. Terras.....	287,886	Nov. 6	118	35	25	528
Vehicle.....	G. White.....	285,863	Oct. 2	105	31	25	21
Vehicle-body.....	F. K. and S. K. Herr.....	274,769	Mar. 27	1963	545	23	1196
Vehicle-body.....	J. C. F. Pagel.....	284,754	Sept. 11	735	205	24	1035
Vehicle bolster-plate.....	H. James.....	281,076	July 10	909	254	24	168
Vehicle bolster-plate.....	H. L. Treman.....	270,265	Jan. 9	518	152	23	111
Vehicle bolster-spring.....	C. A. Howard.....	282,987	Aug. 14	603	170	24	615
Vehicle-brake.....	E. G. Beebe.....	273,765	June 5	108	31	23	2142
Vehicle-brake.....	H. M. Crippen.....	290,543	Dec. 18	1483	410	25	1163
Vehicle-brake.....	J. T. Dillehay.....	290,868	Dec. 25	1902	525	25	1243
Vehicle-brake.....	G. R. Duval.....	271,047	Jan. 23	1507	435	23	307
Vehicle-brake.....	D. Green.....	282,717	Aug. 7	302	85	24	552
Vehicle-brake.....	E. R. Kugler.....	270,615	Jan. 16	1224	354	23	254
Vehicle-brake.....	M. Mais.....	280,939	July 10	751	209	24	158
Vehicle-brake.....	F. I. Meyers.....	270,328	Jan. 9	596	176	23	126
Vehicle brake and starter.....	H. Marneffe.....	277,308	May 8	993	267	23	1803
Vehicle-brake. Automatic.....	R. R. Pace.....	289,698	Dec. 4	419	117	25	959
Vehicle chafe-iron.....	E. P. Roche.....	279,816	June 19	1478	415	23	2390
Vehicle dash-board.....	J. F. Fowler.....	282,511	Aug. 7	42	12	24	507
Vehicle dash-board.....	W. A. Packard.....	275,257	Apr. 3	477	133	23	1307
Vehicle-dash fastening.....	F. C. Ayer.....	271,017	Jan. 23	1475	425	23	302
Vehicle-dash fastening.....	W. H. Sparks.....	285,519	Sept. 25	1662	467	24	1212
Vehicle-dash frames. Foot-iron for.....	W. F. Elliott and S. D. Lance.....	275,811	Apr. 17	1242	342	23	1454
Vehicle drop-perch.....	J. Herbrand.....	276,967	May 1	567	148	23	1723
Vehicle. Electric.....	J. R. Finney.....	270,186	Jan. 2	420	122	23	86
Vehicle-hound socket.....	H. McFarlane.....	277,313	May 8	999	268	23	1804
Vehicle jump-seat.....	C. Bauer.....	283,370	Aug. 21	1097	308	24	710
Vehicle platform-gear.....	P. B. Cunningham.....	277,834	May 15	1610	440	23	1916
Vehicle propelled by electricity.....	E. Fox.....	281,859	July 24	1922	525	24	354
Vehicle-reach.....	C. K. Robinson.....	271,520	Jan. 30	2111	607	23	490
Vehicle-reach.....	J. F. A. Winkelmann and M. L. Stewart.....	272,929	Feb. 27	1717	480	23	762
Vehicle-reach coupling.....	S. E. Foster.....	273,056	Feb. 27	1864	523	23	788
Vehicle rub-iron.....	C. C. and F. G. Keen.....	278,149	May 22	1999	549	23	1989
Vehicle rub-iron.....	D. Shelton.....	275,865	Apr. 17	1306	359	23	1465
Vehicle running-gear.....	A. J. Beach.....	279,213	June 12	748	205	23	2261
Vehicle running-gear.....	H. W. Chamberlain and F. G. Harris.....	285,227	Sept. 18	1315	370	24	1144
Vehicle running-gear.....	J. T. Gurney.....	272,238	Feb. 13	810	{ 225 226 }	23	593
Vehicle running-gear.....	J. Herbrand.....	277,725	May 15	1483	401	23	1893
Vehicle running-gear.....	T. B. Jones.....	282,733	Aug. 7	317	90, 91	24	555
Vehicle running-gear.....	G. Kelly.....	284,640	Sept. 11	586	165	24	1010
Vehicle running-gear.....	J. McLaughlin.....	275,400	Apr. 10	706	188	23	1356
Vehicle running-gear.....	O. M. Phelps and C. Hanson.....	290,104	Dec. 11	901	256	25	1053
Vehicle running-gear.....	B. M. Soule.....	283,293	Aug. 14	984	{ 274 275 }	24	683
Vehicle sand-band.....	W. Cole.....	287,364	Oct. 23	2003	546	25	382
Vehicle sand-band.....	W. M. Farr.....	273,832	Mar. 13	768	208	23	974
Vehicle-seat.....	J. W. Anderson.....	288,610	Nov. 20	1035	285	25	703
Vehicle-seat.....	F. A. Comstock.....	279,637	June 19	1278	355	23	2355
Vehicle-seat.....	F. A. Comstock.....	286,178	Oct. 9	489	135	25	101
Vehicle-seat.....	J. Newman.....	279,266	June 12	811	224	23	2272
Vehicle-seat.....	J. Robinson.....	283,922	Aug. 28	1754	495	24	841
Vehicle-seat.....	F. Thomas.....	290,223	Dec. 18	1130	{ 317 318 }	25	1101
Vehicle-seat.....	W. J. Ulrich.....	279,288	June 12	835	231	23	2276
Vehicle-seat bar.....	A. C. Evans.....	282,181	July 31	2347	646	24	429
Vehicle-seat lock.....	R. D. Woodford.....	281,600	July 17	1576	431	24	287
Vehicle-seat spring.....	J. W. Wetmore.....	275,440	Apr. 10	766	204	23	1365
Vehicle-seat spring.....	J. W. Wetmore.....	275,555	Apr. 10	901	244	23	1388
Vehicle shifting-rail.....	N. Leunon.....	289,845	Dec. 11	569	{ 165 166 }	25	998
Vehicle shifting-rail.....	F. Schreidt.....	280,674	July 3	403	113	24	72
Vehicle shifting-rail.....	F. Schreidt.....	288,597	Nov. 13	1018	279	25	694



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Vehicle shifting seat .....	R. Fawcett .....	272,420	Feb. 20	1056	{ 296 297 }	23	639
Vehicle. Side-bar .....	F. G. Bippus .....	281,962	July 24	2051	562	24	376
Vehicle. Side-bar .....	J. Geibel and E. G. Price .....	287,016	Oct. 23	1567	432	25	302
Vehicle. Side-spring .....	C. Fish .....	287,918	Nov. 6	162	47	25	536
Vehicle. Side-spring .....	J. Kengel .....	273,289	Mar. 6	54	16	23	844
Vehicle. Side-spring .....	C. W. Saladee .....	274,390	Mar. 20	1474	405	23	1104
Vehicle side spring .....	E. Tecktonius .....	279,507	June 12	1124	311	23	2321
Vehicle. Spring .....	C. M. Blydenburgh .....	275,572	Apr. 10	922	{ 249 250 }	23	1391
Vehicle. Spring .....	A. E. Hermann .....	277,032	May 8	655	171	23	1744
Vehicle. Spring .....	A. E. Herman .....	288,634	Nov. 20	1066	293	25	708
Vehicle. Spring .....	C. Huffsteter .....	284,206	Sept. 4	63	17	24	915
Vehicle. Spring .....	G. W. Mart .....	284,455	Sept. 4	359	99	24	965
Vehicle. Spring .....	D. P. Sharp .....	276,906	May 1	477	126	23	1709
Vehicle-spring .....	D. Argerbright .....	279,686	June 19	1338	372	23	2365
Vehicle-spring .....	V. M. Backus .....	274,547	Mar. 27	1700	472	23	1148
Vehicle-spring .....	V. M. Backus .....	287,404	Oct. 30	2059	559	25	400
Vehicle-spring .....	S. A. Bailey .....	271,187	Jan. 23	1683	485	23	336
Vehicle-spring .....	W. D. Bartlett .....	280,117	June 26	1852	522	23	2463
Vehicle-spring .....	L. F. Betts .....	277,204	May 8	672	231	23	1781
Vehicle-spring .....	C. C. Bishop .....	274,880	Mar. 27	2099	583	23	1218
Vehicle-spring .....	W. Boughton .....	273,449	Mar. 6	269	72	23	879
Vehicle-spring .....	J. Carroll .....	289,067	Nov. 27	1602	444	25	810
Vehicle-spring .....	P. G. Clancy .....	289,981	Dec. 11	757	{ 213 214 }	25	1027
Vehicle-spring .....	W. Cole .....	286,532	Oct. 9	938	252	25	181
Vehicle-spring .....	H. B. Cornish and S. E. Hall .....	288,312	Nov. 13	646	177	25	628
Vehicle-spring .....	J. Hanser .....	280,613	July 3	329	92	24	59
Vehicle-spring .....	J. R. Hunzinger .....	275,769	Apr. 10	1180	324	23	1436
Vehicle-spring .....	J. Kengel .....	278,971	June 5	436	119	23	2197
Vehicle-spring .....	C. C. King .....	282,904	Aug. 7	512	143	24	591
Vehicle-spring .....	F. J. Larkin .....	284,214	Sept. 4	75	21	24	918
Vehicle-spring .....	S. W. Ludlow .....	290,251	Dec. 18	1085	303	25	1095
Vehicle-spring .....	N. L. McAdam .....	284,748	Sept. 11	723	204	24	1034
Vehicle-spring .....	W. H. McDaniel and U. Perrine .....	279,783	June 19	1440	403	23	2384
Vehicle-spring .....	W. H. McDaniel, U. Perrine, and F. S. Peck .....	280,204	June 26	1946	547	23	2479
Vehicle-spring .....	J. T. McIntyre and J. G. Parsons .....	276,700	May 1	210	54	23	1660
Vehicle-spring .....	D. McVaw .....	284,649	Sept. 11	598	{ 168 169 }	24	1011
Vehicle-spring .....	M. Medart .....	278,033	May 22	1837	507	23	1965
Vehicle-spring .....	J. H. Moran .....	277,770	May 15	1542	419	23	1904
Vehicle-spring .....	W. J. Moran .....	280,391	July 3	64	17	24	14
Vehicle-spring .....	W. G. Mowry .....	290,461	Dec. 18	1375	380	25	1144
Vehicle-spring .....	R. Mulholland .....	289,438	Dec. 4	70	22, 23	25	900
Vehicle-spring .....	C. M. Murch .....	286,725	Oct. 16	1193	321	25	231
Vehicle-spring .....	J. Nutt .....	290,701	Dec. 25	1081	465	25	1205
Vehicle-spring .....	J. M. Payne .....	280,852	July 10	638	180	24	119
Vehicle-spring .....	W. M. Peck .....	273,242	Feb. 27	2097	588	23	828
Vehicle-spring .....	G. Penn and J. D. Whitney .....	277,504	May 15	1225	330	23	1849
Vehicle-spring .....	L. Pentz .....	282,563	Aug. 7	109	33	24	519
Vehicle-spring .....	G. F. Putman .....	281,728	July 24	1753	476	24	323
Vehicle-spring .....	W. J. and G. W. Rose .....	290,934	Dec. 25	1990	549	25	1258
Vehicle-spring .....	C. W. Saladee .....	275,417	Apr. 10	725	193	23	1359
Vehicle-spring .....	C. W. Saladee .....	281,561	July 17	1524	418	24	280
Vehicle-spring .....	J. B. Sliter and C. T. Bazzett .....	281,934	July 24	2013	551	24	370
Vehicle-spring .....	F. C. Smith and J. W. Weitzell .....	283,525	Aug. 21	1276	357	24	742
Vehicle-spring .....	A. J. Spalding .....	287,063	Oct. 23	1627	447	25	314
Vehicle-spring .....	F. J. Springer .....	280,874	July 10	665	187	24	124
Vehicle-spring .....	W. H. Sticklee. (Reissue) .....	10,372	Aug. 21	1533	432	24	791
Vehicle-spring .....	W. F. Sweet .....	289,361	Nov. 27	1952	{ 542 543 }	25	876
Vehicle-spring .....	W. H. Tarbell .....	274,098	Mar. 13	1090	300	23	1029
Vehicle-spring .....	I. F. Tucker .....	275,439	Apr. 10	758	202	23	1364
Vehicle-spring .....	M. W. Tucker .....	272,922	Feb. 27	1709	478	23	760
Vehicle-spring .....	J. W. Wetmore .....	289,046	Nov. 27	1578	{ 435 436 }	25	806
Vehicle-spring .....	S. H. Wooldridge .....	284,582	Sept. 4	517	145	24	991
Vehicle-spring attachment .....	J. B. Whitcomb .....	288,604	Nov. 13	1027	282	25	695
Vehicle-spring brace .....	S. R. Bergen .....	276,213	Apr. 24	1725	477	23	1546
Vehicle-spring center-bar .....	B. F. Lewis .....	285,420	Sept. 25	1550	436	24	1192
Vehicle-spring coupling .....	T. D. Lines .....	277,583	May 15	1323	355	23	1864
Vehicle-spring coupling .....	T. D. Lines .....	277,584	May 15	1324	355	23	1865
Vehicle-spring coupling .....	T. D. Lines .....	277,585	May 15	1324	356	23	1865
Vehicle spring-seat .....	J. Burleigh .....	200,743	Dec. 25	1753	484	25	1217
Vehicle spring-seat .....	G. W. Heartley .....	285,617	Sept. 25	1781	506	24	1235
Vehicle spring-seat .....	C. F. Lancaster .....	290,437	Dec. 18	1340	371	25	1138
Vehicle spring. Two-wheeled .....	F. Schelp, Jr .....	285,167	Sept. 18	1248	350	24	1132
Vehicle. Steam road .....	G. A. Long .....	281,091	July 10	923	258	24	170
Vehicle. Three-wheeled .....	M. A. Stevens .....	281,575	July 17	1540	422	24	282
Vehicle-top .....	D. Bullock .....	276,957	May 1	556	145	23	1721
Vehicle-top bow .....	S. H. Raymond .....	279,016	June 5	493	134	23	2207
Vehicle-top bow .....	S. H. Raymond. (Reissue) .....	10,422	Dec. 11	1010	284	25	1073
Vehicle-tops. Hood for .....	C. T. Shreve .....	276,908	May 1	478	126	23	1710
Vehicle. Two-wheeled .....	W. T. Adel .....	271,294	Jan. 30	1812	526	23	367
Vehicle. Two-wheeled .....	D. Argerbright .....	285,202	Sept. 18	1284	361	24	1139
Vehicle. Two-wheeled .....	J. C. Bach .....	288,737	Nov. 20	1225	335	25	735
Vehicle. Two-wheeled .....	J. B. Barnes .....	283,061	Aug. 14	701	197	24	632
Vehicle. Two-wheeled .....	M. Barnes .....	281,429	July 17	1360	375	24	252
Vehicle. Two-wheeled .....	C. S. Beebe .....	281,434	July 17	1365	377	24	253
Vehicle. Two-wheeled .....	S. H. Bell .....	278,855	June 5	251	72, 73	23	2166
Vehicle. Two-wheeled .....	J. A. Bilz .....	273,804	Mar. 13	730	198	23	968

## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Vehicle. Two-wheeled	R. F. Briggs	279,531	June 19	1159	321	23	2334
Vehicle. Two-wheeled	J. M. Bromley	281,337	July 17	1247	346	24	233
Vehicle. Two-wheeled	T. H. Brown	286,174	Oct. 9	483	134	25	100
Vehicle. Two-wheeled	C. W. Burgdorf	285,793	Oct. 2	15	5	25	5
Vehicle. Two-wheeled	A. Burkhard	275,133	Apr. 3	335	92	23	1284
Vehicle. Two-wheeled	J. H. Bustin	283,698	Aug. 21	1477	416	24	781
Vehicle. Two-wheeled	A. K. Caverly	278,222	May 22	2093	576	23	2006
Vehicle. Two-wheeled	D. E. Chandler and J. C. Williams	279,080	June 5	572	157	23	2222
Vehicle. Two-wheeled	D. E. Chandler and J. C. Williams	281,971	July 24	2059	564	24	377
Vehicle. Two-wheeled	D. E. Chandler and J. C. Williams	281,972	July 24	2060	565	24	377
Vehicle. Two-wheeled	J. A. Chapman	277,409	May 8	1103	296	23	1822
Vehicle. Two-wheeled	J. A. Chapman	280,794	July 10	575	160	24	108
Vehicle. Two-wheeled	J. A. Chapman	280,795	July 10	576	161	24	108
Vehicle. Two-wheeled	L. Christy	281,670	July 24	1672	456	24	309
Vehicle. Two-wheeled	L. S. Clark	286,905	Oct. 16	1419	389	25	271
Vehicle. Two-wheeled	J. T. Clarkson	272,208	Feb. 13	773	214	23	585
Vehicle. Two-wheeled	N. B. Clinch	287,000	Oct. 23	1543	425	25	297
Vehicle. Two-wheeled	J. W. Coe and D. Merritt	281,457	July 17	1402	385	24	250
Vehicle. Two-wheeled	J. Collins	281,023	July 10	843	234	24	156
Vehicle. Two-wheeled	E. F. Conner	274,722	Mar. 27	1902	531	23	1186
Vehicle. Two-wheeled	G. W. Crofoot	290,976	Dec. 25	2035	565	25	1267
Vehicle. Two-wheeled	F. G. Davis	270,285	Jan. 9	543	160	20	116
Vehicle. Two-wheeled	A. H. Dickey	274,739	Mar. 27	1918	535	23	1189
Vehicle. Two-wheeled	F. Doherty and E. L. Sies	286,184	Oct. 9	498	137	25	103
Vehicle. Two-wheeled	T. Duke	283,592	Sept. 25	1749	496	24	1229
Vehicle. Two-wheeled	G. W. Dutton	274,183	Mar. 20	1205	331	23	1057
Vehicle. Two-wheeled	J. J. Folmer and C. E. Bradley	284,198	Sept. 4	53	15	24	913
Vehicle. Two-wheeled	A. G. W. Foster	279,931	June 26	1631	457	23	2423
Vehicle. Two-wheeled	C. A. Foster	290,563	Dec. 18	1517	417	25	1168
Vehicle. Two-wheeled	J. G. Gay	272,678	Feb. 20	1378	387	23	696
Vehicle. Two-wheeled	L. Green	281,994	July 24	2082	571	24	381
Vehicle. Two-wheeled	M. Halfpenny	277,482	May 15	1200	322	23	1845
Vehicle. Two-wheeled	G. P. Kimball	272,557	Feb. 20	1321	341	23	668
Vehicle. Two-wheeled	G. Larsen	286,314	Oct. 9	679	181	25	133
Vehicle. Two-wheeled	J. R. Locke	290,248	Dec. 18	1083	303	25	1094
Vehicle. Two-wheeled	P. Lugenbell	272,260	Feb. 13	863	241	23	602
Vehicle. Two-wheeled	F. A. Maus	281,896	July 24	1971	539	24	362
Vehicle. Two-wheeled	J. H. McKenzie and J. Keller	278,720	June 5	60	18	23	2135
Vehicle. Two-wheeled	H. G. Mickle	279,968	June 26	1674	470	23	2430
Vehicle. Two-wheeled	R. C. Morse	274,636	Mar. 27	1805	501	23	1168
Vehicle. Two-wheeled	C. M. Murch	281,783	July 24	1828	499	24	337
Vehicle. Two-wheeled	J. P. Muttersbach	285,153	Sept. 18	1231	346	24	1128
Vehicle. Two-wheeled	A. P. Nelson	288,256	Nov. 13	580	161	25	617
Vehicle. Two-wheeled	W. O'Brien	275,512	Apr. 10	848	230	23	1379
Vehicle. Two-wheeled	C. K. Paddock	278,358	May 29	2301	630	23	2050
Vehicle. Two-wheeled	H. D. Page and W. E. Raynor	274,217	Mar. 20	1254	346	23	1065
Vehicle. Two-wheeled	F. L. Perry	278,041	May 22	1864	509	23	1966
Vehicle. Two-wheeled	F. L. Perry	280,235	June 26	1990	559	23	2487
Vehicle. Two-wheeled	F. L. Perry	283,811	Aug. 28	1628	458	24	819
Vehicle. Two-wheeled	N. Peterson	279,428	June 12	1031	286	23	2306
Vehicle. Two-wheeled	B. S. Porter	286,483	Oct. 9	875	237	25	170
Vehicle. Two-wheeled	J. Price	286,733	Oct. 16	1203	324	25	233
Vehicle. Two-wheeled	A. Rasmussen	272,322	Feb. 13	909	254	23	610
Vehicle. Two-wheeled	A. Reichle	286,734	Oct. 16	1204	325	25	234
Vehicle. Two-wheeled	G. Renick and J. A. Curtis	279,809	June 19	1470	412	23	2389
Vehicle. Two-wheeled	C. W. Saladee	270,700	Jan. 16	1087	311	23	227
Vehicle. Two-wheeled	C. W. Saladee	282,378	July 31	2587	710	24	471
Vehicle. Two-wheeled	A. F. Sargent	273,610	Mar. 6	476	128	23	915
Vehicle. Two-wheeled	L. G. Sayre	281,304	July 17	1204	333	24	226
Vehicle. Two-wheeled	H. C. Sears	280,524	July 3	928	60	24	41
Vehicle. Two-wheeled	H. T. Seeley	275,084	Apr. 3	270	74	23	1272
Vehicle. Two-wheeled	D. P. Sharp	280,962	July 10	775	215	24	142
Vehicle. Two-wheeled	W. Shimp	290,123	Dec. 11	930	264	25	1059
Vehicle. Two-wheeled	F. M. Simmonds	281,309	July 17	1211	335	24	227
Vehicle. Two-wheeled	G. E. Spare	274,401	Mar. 20	1487	409	23	1106
Vehicle. Two-wheeled	F. J. and O. J. Springer	280,875	July 10	666	188	24	124
Vehicle. Two-wheeled	H. F. Stahmer	271,532	Jan. 30	2122	611	23	422
Vehicle. Two-wheeled	E. Stern	270,504	Jan. 9	821	239	23	170
Vehicle. Two-wheeled	C. H. Straight	276,500	Apr. 24	2090	581	23	1608
Vehicle. Two-wheeled	C. Trewwiler and T. Bast	276,309	Apr. 24	1844	513	23	1566
Vehicle. Two-wheeled	H. Watts	275,965	Apr. 17	1417	391	23	1486
Vehicle. Two-wheeled	E. Whitmore	272,815	Feb. 20	1551	435	23	727
Vehicle. Two-wheeled	B. P. Whitney	272,177	Feb. 13	734	203	23	579
Vehicle. Two-wheeled	S. M. Wier	275,307	Apr. 3	540	147	23	1318
Vehicle. Two-wheeled	O. Willson	272,928	Feb. 27	1715	480	23	761
Vehicle. Two-wheeled	P. Wineman	281,328	July 17	1239	343	24	231
Vehicle. Two-wheeled	A. Woeber	277,968	May 22	1776	484	23	1950
Vehicle. Two-wheeled	J. M. Wood	272,396	Feb. 13	1016	284	23	627
Vehicle. Two-wheeled	R. G. Wood	288,538	Nov. 13	945	258	25	680
Vehicle. Two-wheeled	G. A. Wright, L. H. Fowler, and S. Shaw	269,982	Jan. 2	187	54	23	39
Vehicle-wheel	L. and F. Burnett	275,120	Apr. 3	317	88	23	1280
Vehicle-wheel	J. J. Bush	283,563	Aug. 21	1323	370	24	751
Vehicle-wheel	J. Clark	269,919	Jan. 2	112	33	23	23
Vehicle-wheel	S. and R. Day	284,724	Sept. 11	701	196	24	1029
Vehicle-wheel	A. L. Engelbach	284,621	Sept. 11	566	160	24	1006
Vehicle-wheel	E. G. Ferguson	277,252	May 8	926	248	23	1791
Vehicle-wheel	J. Frenier	285,401	Sept. 25	1524	439	24	1187
Vehicle-wheel	F. M. Gideon	278,534	May 29	2513	686	23	2088
Vehicle-wheel	J. Harris, Jr.	272,133	Feb. 13	688	187	23	570
Vehicle-wheel	M. C. Johnson	273,850	Mar. 13	790	214	23	978



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.'s	Vol.	Page.
Vehicle-wheel.....	J. Lane.....	278,438	May 29	2398	{ 653 654 }	23	2067
Vehicle-wheel.....	J. Lane.....	278,665	May 29	2669	730	23	2115
Vehicle-wheel.....	E. Lawson.....	280,634	July 3	357	99	24	63
Vehicle-wheel.....	O. Look.....	281,279	July 17	1172	324	24	220
Vehicle-wheel.....	W. Netley.....	286,476	Oct. 9	866	235	25	168
Vehicle-wheel.....	E. H. Scott and J. Frenier.....	276,899	May 1	468	123	23	1708
Vehicle-wheel.....	B. C. Seaton.....	285,515	Sept. 25	1657	466	24	1211
Vehicle-wheel.....	G. S. Sheffield.....	279,449	June 12	1052	291	23	2310
Vehicle-wheel.....	B. N. Shelley.....	270,493	Jan. 9	805	235	23	167
Vehicle-wheel.....	C. Snyder.....	271,935	Feb. 6	426	116	23	515
Vehicle-wheel.....	Z. Sprague.....	271,531	Jan. 30	2121	610	23	422
Vehicle-wheel.....	A. Vreeland.....	284,990	Sept. 11	1017	286	24	1086
Vehicle-wheel.....	T. Warwick.....	289,733	Dec. 4	455	{ 127 128 }	25	966
Vehicle-wheel.....	M. I. Winters.....	287,075	Oct. 23	1642	451	25	317
Vehicle-wheel.....	A. Wyckoff.....	278,479	May 29	2445	667	23	2076
Vehicle. Wheeled.....	W. Boyd.....	279,529	June 19	1157	320	23	2334
Vehicle. Wheeled.....	T. F. Krajewski.....	289,421	Dec. 4	58	17	25	897
Vehicles. Mechanism for propelling.....	W. S. Mitchell.....	271,899	Feb. 6	378	{ 104 105 }	23	507
Vehicles. Sand-protector for.....	W. M. Farr.....	270,650	Jan. 16	1022	294	23	216
Velocipede.....	W. F., J. P., and J. G. Ahlert.....	287,989	Nov. 6	257	73	25	552
Velocipede.....	C. R. Baillie-Hamilton.....	270,896	Jan. 23	1322	{ 381 382 }	23	278
Velocipede.....	J. Baker.....	273,007	Feb. 27	1805	{ 505 506 }	23	777
Velocipede.....	W. P. Benham.....	277,870	May 22	1663	454	23	1931
Velocipede.....	H. Blume.....	276,979	Apr. 17	1433	395	23	1489
Velocipede.....	A. J. Branham.....	283,697	Aug. 21	1476	416	24	781
Velocipede.....	J. O. Brown. (Reissue).....	10,307	Apr. 10	1209	331	23	1440
Velocipede.....	J. S. Carr.....	273,815	Mar. 13	748	{ 203 204 }	23	970
Velocipede.....	J. J. Cox.....	271,800	Feb. 6	259	72	23	486
Velocipede.....	L. D. Cox.....	279,541	June 19	1168	{ 323 324 }	23	2336
Velocipede.....	T. A. Davies.....	276,786	May 1	334	88, 89	23	1684
Velocipede.....	W. B. Denton.....	279,356	June 12	931	260	23	2291
Velocipede.....	J. J. Deputy.....	286,593	Oct. 16	1021	277	25	202
Velocipede.....	D. E. Dntrow.....	277,246	May 8	918	246	23	1790
Velocipede.....	L. W. Elliott.....	288,219	Nov. 13	527	147	25	609
Velocipede.....	J. L. Ellis.....	280,299	June 26	2072	583	23	2502
Velocipede.....	O. T. Gleason.....	280,907	Dec. 11	672	187	25	1011
Velocipede.....	M. Grabser.....	287,825	Nov. 6	43	13	25	515
Velocipede.....	C. W. Hays.....	280,927	July 10	733	204	24	135
Velocipede.....	Z. Hendrickson.....	280,473	July 3	175	46	24	32
Velocipede.....	C. E. Hiester.....	285,130	Sept. 18	1200	{ 330 337 }	24	1123
Velocipede.....	W. S. Holland.....	285,035	Sept. 18	1091	304	24	1105
Velocipede.....	C. T. Holloway.....	274,196	Mar. 20	1219	335	23	1059
Velocipede.....	T. B. Jeffery.....	275,917	Apr. 17	1364	376	23	1475
Velocipede.....	T. B. Jeffery.....	283,528	Aug. 7	65	19	24	511
Velocipede.....	S. H. Kimball.....	278,972	June 5	437	119	23	2198
Velocipede.....	J. J. A. Larroque.....	288,821	Nov. 20	1298	{ 355 356 }	25	748
Velocipede.....	J. W. and C. F. Post.....	285,513	Sept. 25	1652	{ 464 465 }	24	1210
Velocipede.....	L. Schmetzer.....	271,524	Jan. 30	2114	608	23	421
Velocipede.....	G. N. Spencer.....	270,913	Jan. 23	1345	388	23	282
Velocipede.....	J. J. Stassen.....	284,509	Sept. 4	429	122	24	976
Velocipede.....	C. F. Walde.....	284,781	Sept. 11	769	{ 215 216 }	24	1040
Velocipede.....	C. H. Warner.....	282,938	Aug. 7	544	{ 154 155 }	24	597
Velocipede.....	C. H. Warner.....	283,306	Aug. 14	998	280	24	686
Velocipede.....	C. V. Woerd.....	288,537	Nov. 13	944	258	25	680
Velocipede-brake.....	J. Knous.....	279,956	June 26	1662	467	23	2428
Velocipede-driving-gear.....	G. W. Quatremaine.....	287,960	Nov. 6	217	61, 62	25	545
Velocipede-gearing.....	W. P. Anthony.....	277,974	May 22	1781	486	23	1951
Velocipede. Marine.....	F. A. Coomans.....	271,799	Feb. 6	257	72	23	485
Velocipede-pedal.....	J. Knous.....	281,889	July 24	1961	537	24	361
Velocipede. Railway.....	I. W. McGaffey.....	286,623	Oct. 16	1064	286	25	209
Velocipede. Railway.....	G. W. Miller.....	289,017	Nov. 27	1533	424	25	798
Velocipede. Railway.....	F. W. Randall.....	270,480	Jan. 9	791	231	23	164
Velocipede. Railway.....	G. N. Spencer.....	288,507	Nov. 13	912	249	25	674
Velocipede-wheel.....	A. H. Overman and C. F. Hadley.....	283,413	Aug. 21	1140	322	24	718
Veneer.....	F. Koskul.....	289,005	Nov. 27	1520	421	25	797
Veneer. Brilliant.....	F. Koskul.....	288,712	Nov. 20	1163	319	25	724
Veneer-cutting knife.....	H. J. Mark.....	288,463	Nov. 13	857	232	25	664
Veneer-cutting machine.....	H. J. Mark.....	288,585	Nov. 13	1001	{ 275 276 }	25	691
Veneer-dish machine.....	R. Bowers.....	269,822	Jan. 2	2	1	23	3
Veneer fabric.....	F. Koskul.....	288,453	Nov. 13	843	228	25	662
Veneer-press.....	R. Goff.....	273,723	Mar. 13	615	{ 165 166 }	23	947
Veneering or covering articles with pyroxyline, &c. Apparatus for.....	J. A. McClelland.....	271,495	Jan. 30	2080	599	23	415
Veneering or covering articles with pyroxyline compounds, &c.....	J. A. McClelland.....	271,494	Jan. 30	2078	598	23	415
Veneering or covering articles with pyroxyline or other plastic material. Mold for.....	J. A. McClelland.....	271,496	Jan. 30	2082	599	23	410
Veneering to buildings. Securing slabs of.....	B. Morton and A. Tilley.....	283,012	Ang. 14	641	181	24	621
Vent for beer-barrels.....	G. Hopf.....	281,694	July 24	1707	464	24	315
Vent for casks.....	J. Poznanski.....	289,555	Dec. 4	230	64	25	927

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Vent for water-pipes. Automatic.....	J. D. Westgate.....	290,824	Dec. 25	1854	513	25	1235
Vent or vent-bung.....	J. P. Gruber.....	271,236	Jan. 30	1739	503	23	355
Vent-plug.....	F. L. Polle.....	284,479	Sept. 4	385	107	24	969
Ventilating and apparatus therefor.....	T. Rowan.....	283,148	Aug. 14	801	224	24	649
Ventilating and heating apparatus. Combined.....	C. Wheat.....	285,533	Sept. 25	1679	472	24	1215
Ventilating apartments. Apparatus for.....	J. Fernie.....	280,595	July 3	310	86	24	55
Ventilating apparatus.....	J. Fernie.....	280,594	July 3	309	86	24	55
Ventilating apparatus.....	L. J. Wing.....	285,865	Oct. 2	107	32	25	21
Ventilating buildings and chimney-stacks. Apparatus for.....	A. W. Kershaw.....	281,082	July 10	914	255	24	169
Ventilating buildings, ships, vessels, railway-carriages, &c. Method of and apparatus for.....	T. Rowan.....	272,158	Feb. 13	713	196	23	575
Ventilating-door for mines.....	C. P. Moyer.....	286,549	Oct. 9	958	258	25	184
Ventilating, heating, and cooling buildings. Apparatus for.....	T. McGrory.....	284,140	Aug. 28	2053	569	24	892
Ventilating-screen for windows.....	E. W. Philbrook.....	286,555	Oct. 9	968	260	25	186
Ventilating-screen for windows.....	S. B. Stearns.....	271,146	Jan. 23	1623	467	23	327
Ventilating sewers and drains. Apparatus for.....	T. Rowan.....	284,761	Sept. 11	746	207	24	1036
Ventilating water-closets. Apparatus for.....	F. Hainsworth. (Reissue).....	10,346	June 26	2122	596	23	2510
Ventilation.....	W. T. Cottier.....	281,027	July 10	847	235	24	157
Ventilation.....	A. J. Hendry.....	287,434	Oct. 30	2093	569	25	406
Ventilator: See Blast-pipe ventilator. Millstone-ventilator. Car-ventilator. Stove-ventilator. Car-window ventilator. Suction-ventilator. tilator. Window-ventilator. Chimney-ventilator. Window-sash ventilator. Kitchen-ventilator.							
Ventilator.....	J. M. Blackman.....	273,805	Mar. 13	731	198	23	968
Ventilator.....	W. P. Buchan.....	288,004	Nov. 6	277	78	25	555
Ventilator.....	R. Foulsham.....	288,564	Nov. 13	973	268	25	685
Ventilator.....	D. Groesbeck.....	290,041	Dec. 11	832	235	25	1040
Ventilator.....	M. A. W. Louis.....	289,426	Dec. 4	65	19	25	898
Ventilator.....	W. E. Moore.....	281,286	July 17	1180	326	24	222
Ventilator.....	W. Schmolz.....	287,477	Oct. 30	2147	584	25	418
Ventilator.....	F. R. Siltz.....	280,092	June 26	1826	513	23	2458
Ventilator.....	G. Smart.....	280,526	July 3	230	61	24	41
Ventilator.....	D. B. Taylor.....	282,800	Aug. 7	390	110	24	568
Ventilator.....	R. Waide.....	279,291	June 12	837	232	23	2276
Vermin. Strip for repelling and destroying.....	S. Curtiss.....	274,284	Mar. 20	1336	368	23	1079
Vertical multitubular boiler.....	W. Wilkinson.....	279,470	June 12	1073	297	23	2314
Vessel-hull.....	D. Bainbridge.....	272,621	Feb. 20	1309	365	23	684
Vessel. Iron-clad.....	A. Alfson.....	277,972	May 22	1779	485	23	1951
Vessel-unloading apparatus.....	O. Sherwood.....	274,983	Apr. 3	128	36	23	1247
Vessels. Apparatus for raising sunken.....	H. Schuyler.....	287,586	Oct. 30	2299	622	25	447
Vessels. Apparatus for unloading coal from.....	W. S. Boyler.....	280,284	June 26	2047	575	23	2497
Vessels. Auxiliary steam-power for sailing.....	G. H. Reynolds.....	278,182	May 22	2040	500	23	1997
Vessels. Construction of.....	J. S. Birch.....	277,443	May 15	1155	310	23	1837
Vessels. Construction of sea-going.....	J. L. Eshelman.....	279,563	June 19	1539	430	23	2400
Vessels for carrying railway-cars. Adjustable elevator-platform for.....	J. J. De Rycke.....	283,218	Aug. 14	889	248	24	666
Vessels. Headway and leeway indicator for.....	B. E. Blakeslee.....	290,840	Dec. 25	1868	516	25	1237
Vessels in water. Reducing friction of.....	G. De Laval.....	280,913	July 10	707	199	24	131
Vessels. Lighter for loading.....	J. C. Gibbs.....	275,479	Apr. 10	809	219	23	1372
Vessels. Steadying floating.....	J. F. C. Farquhar.....	283,091	Aug. 14	733	206	24	638
Vial or bottle.....	C. Toussaint.....	274,995	Apr. 3	142	40	23	1250
Vignetting attachment.....	O. H. Park and W. H. Elliott.....	286,632	Oct. 16	1074	289	25	211
Vinegar-generator.....	R. H. Herder.....	288,055	Nov. 6	333	93	25	564
Vinegar-generators. Automatic feeder for.....	P. and J. Spielmann.....	287,064	Oct. 23	1627	448	25	314
Vines. Twine-setter for.....	A. P. Root.....	283,516	Aug. 21	1267	355	24	740
Violin-bow retainer.....	C. F. Albert.....	277,653	May 15	1406	378	23	1879
Violin-bridge.....	P. Topham.....	278,634	May 29	2634	720	23	2108
Violin chin-rest.....	G. T. Lawrence.....	275,672	Apr. 10	1052	286	23	1414
Violin. Piano.....	J. Parsons and J. W. Trinkle.....	272,314	Feb. 13	898	251	23	608
Vise.....	W. T. Anderson.....	287,993	Nov. 6	261	74	25	553
Vise.....	J. O. Barrett.....	284,997	Sept. 18	1035	290	24	1096
Vise.....	J. O. Barrett.....	286,990	Oct. 23	1532	422	25	295
Vise.....	C. M. Boyce.....	286,995	Oct. 23	1537	423	25	296
Vise.....	J. C. Coram.....	281,463	July 17	1407	366	24	260
Vise.....	D. Davis.....	271,316	Jan. 30	1840	534	23	372
Vise.....	C. Fisher.....	282,975	Aug. 14	590	166	24	612
Vise.....	P. A. Gladwin.....	287,271	Oct. 23	1887	516	25	361
Vise.....	J. W. Hudson.....	288,438	Nov. 13	823	223	25	650
Vise.....	W. Johnson.....	277,570	May 15	1308	351	23	1862
Vise.....	N. M. McLeod.....	277,592	May 15	1332	357	23	1866
Vise.....	E. L. Morris.....	288,722	Nov. 20	1185	323	25	727
Vise.....	J. A. Painter.....	276,622	May 1	95	26	23	1644
Vise.....	G. Thorp.....	286,345	Oct. 9	719	192	25	140
Vise. Bench.....	W. H. Cloud.....	288,549	Nov. 13	956	263	25	682
Vise. Bench.....	M. G. Lewis.....	279,260	June 12	803	223	23	2271
Vise. Bench.....	G. W. Pittman.....	277,158	May 8	821	216	23	1773
Vise. Bench.....	G. H. Wood.....	274,242	Mar. 20	1286	354	23	1071
Vise. Hand.....	G. Amborn, Jr., and E. D. Chaplin.....	282,033	July 31	2133	586	24	395
Vise. Hand or wire.....	S. B. Whitehead.....	269,903	Jan. 2	95	28	23	80
Vise. Pipe.....	A. Beard.....	272,193	Feb. 13	753	208	23	552
Vise. Pivoted-jaw.....	A. J. Odum.....	280,226	June 26	1978	556	23	2485



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Visual indicator. Electrical.....	J. U. Mackenzie.....	273,563	Mar. 6	419	{ 112 113 }	23	906
Volatile or inflammable fluids and oils. Treating.....	S. M. Eiseman.....	282,970	Aug. 14	585		24	611
Voltaic-arc light.....	W. Baxter, Jr.....	288,157	Nov. 6	445	125	25	585
Voltaic-arc light.....	O. A. Moses.....	276,702	May 1	212	55	23	1660
Voltaic battery.....	J. M. Stebbins.....	272,493	Feb. 20	1148	322	23	655
Voltaic battery. Portable.....	J. Mackenzie.....	270,551	Jan. 9	891	258	23	184
Votes. Apparatus for registering.....	H. Zimmer.....	272,011	Feb. 6	521	140	23	530
Voting-machine for legislative bodies. Electric.....	J. A. Enos.....	287,649	Oct. 30	2380	642	25	402
Vulcanizer safety-guard and governor.....	W. S. Blair.....	286,766	Oct. 16	1242	336	25	240
Vulcanizing and celluloid apparatus.....	G. P. Rishel.....	287,723	Oct. 30	2478	668	25	481
Waffle-iron.....	M. Griswold and S. Selden.....	270,659	Jan. 16	1031	296	23	217
Waffle-iron.....	J. B. Harker and C. L. Wilkins.....	277,422	May 8	1122	301	23	1825
Waffle-iron.....	C. H. Newman.....	270,973	Jan. 23	1425	411	23	294
Waffle-iron.....	A. G. Patton.....	287,713	Oct. 30	2468	665	25	479
Wagon.....	R. Dalton.....	278,408	May 29	2359	645	23	2060
Wagon.....	J. Moses.....	281,913	July 24	1990	545	24	365
Wagon-bodies. Device for lifting.....	J. B. Brickhouse.....	287,502	Oct. 30	2178	591	25	423
Wagon-body.....	C. Comstock. (Reissue).....	10,308	Apr. 10	1211	332	23	1441
Wagon-body.....	C. M. Coutant and R. Benson.....	273,967	Mar. 13	932	255	23	1001
Wagon-body.....	G. M. Hall.....	276,821	May 1	371	99	23	1691
Wagon-body.....	J. Stevens.....	275,868	Apr. 17	1311	{ 361 362 }	23	1466
Wagon-body facing-iron.....	J. Jensen.....	280,182	June 26	1919	539	23	2474
Wagon-bolster.....	A. O. Wilbur.....	278,645	May 22	2650	725	23	2111
Wagon-bolster spring.....	W. Cole.....	290,860	Dec. 25	1893	532	25	1242
Wagon-bolster wear-plate.....	T. Van Aernam.....	270,918	Jan. 23	1350	389	23	283
Wagon-box.....	P. Samcs.....	278,365	May 29	2310	632	23	2052
Wagon-box and hay-rack. Combined.....	J. G. Leslie and W. A. Hall.....	277,751	May 15	1517	411	23	1899
Wagon-box corner-plate.....	H. Bienhoff.....	281,435	July 17	1366	377	24	253
Wagon-box fastener.....	P. Stafford.....	277,801	May 15	1575	430	23	1910
Wagon-box fastener. Top.....	J. M. Piper.....	290,705	Dec. 25	1694	466	25	1206
Wagon-box straps. Mechanism for making.....	T. J. Bray.....	270,176	Jan. 2	409	119	23	83
Wagon-brake.....	E. B. Carson.....	288,546	Nov. 13	953	262	25	681
Wagon-brake.....	H. Felt.....	278,924	June 5	385	105	23	2189
Wagon-brake.....	F. S. Golden.....	270,946	Jan. 23	1386	400	23	288
Wagon-brake.....	J. L. Harrison.....	276,686	May 1	196	50	23	1657
Wagon-brake.....	F. Harter.....	278,948	June 5	411	112	23	2193
Wagon-brake.....	W. L. Hutson.....	285,624	Sept. 25	1789	508	24	1237
Wagon-brake.....	L. L. James.....	271,855	Feb. 6	328	90	23	498
Wagon-brake.....	D. S. Lane.....	288,456	Nov. 13	849	230	25	663
Wagon-brake.....	W. R. Long.....	287,037	Oct. 23	1593	438	25	307
Wagon-brake.....	J. F. Moore.....	274,017	Mar. 13	989	271	23	1011
Wagon-brake.....	A. Murray.....	279,974	June 26	1681	472	23	2431
Wagon-brake.....	C. Olmstead.....	278,589	May 29	2569	702	23	2098
Wagon-brake.....	J. C. Park.....	288,659	Nov. 20	1098	301	25	714
Wagon-brake.....	J. Ruka.....	285,077	Sept. 18	1135	317	24	1113
Wagon-brake.....	A. W. Shue.....	279,829	June 19	1498	419	23	2394
Wagon-brake. Automatic.....	J. D. Wyer.....	274,874	Mar. 27	2090	580	23	1217
Wagon-brake lever.....	J. F. Parker and C. D. Arnn.....	276,067	Apr. 17	1541	424	23	1506
Wagon-brake lever.....	J. G. Aram.....	282,432	July 31	2662	730	24	485
Wagon-brake. Machine.....	D. S. I. D. and W. D. Heebner.....	286,300	Oct. 9	661	176	25	130
Wagon. Buckboard.....	L. M. Fitch.....	270,879	Jan. 16	1294	373	23	267
Wagon. Buckboard.....	J. Jackson.....	284,019	Aug. 28	1900	532	24	867
Wagon. Buckboard.....	J. M. Mayer.....	290,445	Dec. 18	1349	373	25	1139
Wagon. Buckboard.....	J. H. Sinclair.....	277,359	May 8	1053	{ 282 283 }	23	1814
Wagon. Buckboard.....	O. Vanorman.....	279,894	June 19	1576	441	23	2408
Wagon. Caterer's.....	E. M. Perhás and F. Neumüller.....	275,516	Apr. 10	853	231	23	1380
Wagon-clip.....	J. G. Lepscum.....	284,029	Aug. 28	1910	535	24	869
Wagon. Cotton-picker's.....	C. P. Collins.....	276,778	May 1	325	84	23	1682
Wagon coupling-gear.....	A. T. Barr.....	284,593	Sept. 11	531	151	24	1000
Wagon. Covered.....	C. Tucker.....	279,047	June 5	534	145	23	2214
Wagon-dump.....	A. K. Ersland.....	280,592	July 3	307	85	24	55
Wagon. Dump.....	G. M. Wallace.....	283,937	Aug. 28	1777	502	24	846
Wagon. Dumping.....	H. S. Bernhart and I. R. Ritter.....	284,368	Sept. 4	254	70	24	947
Wagon. Dumping.....	J. G. Coburn.....	270,391	Jan. 9	683	203	23	143
Wagon. Dumping.....	I. B. Hammond.....	277,483	May 15	1201	{ 322 323 }	23	1845
Wagon. Dumping.....	R. Hudson.....	288,813	Nov. 20	1288	353	25	746
Wagon. Dumping.....	W. Hull.....	290,686	Dec. 25	1670	460	25	1201
Wagon. Dumping.....	C. Kaoppel.....	272,555	Feb. 20	1220	341	23	668
Wagon. Dumping.....	C. Kaoppel.....	287,547	Oct. 30	2235	607	25	435
Wagon. Dumping.....	K. Kennedy.....	289,660	Dec. 4	358	101	25	950
Wagon. Dumping.....	W. and J. H. Leonhardt.....	283,262	Aug. 14	950	265	24	676
Wagon. Dumping.....	H. S. Loomis.....	288,823	Nov. 20	1301	356	25	749
Wagon. Dumping.....	C. Miller.....	278,253	May 23	2131	587	23	2013
Wagon. Dumping.....	C. Miller.....	286,052	Oct. 2	334	92, 93	25	62
Wagon. Dumping.....	D. J. Russell.....	276,475	Apr. 24	2060	572	23	1603
Wagon. Dumping.....	J. P. Savage.....	281,141	July 10	991	277	24	181
Wagon. Dumping.....	G. W. Sisson.....	279,020	June 5	511	139	23	2210
Wagon. Dumping.....	M. Van Auker.....	276,098	Apr. 17	1580	436	23	1513
Wagon. Dumping.....	W. Wallace.....	273,202	Feb. 27	2044	575	23	820
Wagon-gear.....	W. R. Boling.....	287,797	Nov. 6	11	3	25	509
Wagon-gear.....	W. P. Brown.....	284,809	Sept. 11	804	224	24	1046
Wagon gear. Platform.....	M. Halfpenny.....	282,455	July 31	2690	{ 738 739 }	24	489
Wagon-gearing.....	T. Seaman.....	272,908	Feb. 27	1693	474	23	758
Wagon-gearing. Plow attachment for.....	W. H. Kremser.....	276,975	May 1	575	151	23	1724
Wagon-hound.....	A. J. Harper.....	271,631	Feb. 6	61	17	23	450
Wagon-hound.....	A. J. Harper.....	275,907	Apr. 17	1353	372	23	1474
Wagon-iron.....	J. H. Chamberlin.....	282,496	Aug. 7	20	5	24	504
Wagon-jack.....	J. R. Angel.....	279,903	June 26	1594	447	23	2417
Wagon-jack.....	T. T. and E. Barber.....	270,924	Jan. 23	1357	391	23	284

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Wagon-jack	A. J. Burke	288,772	Nov. 20	1240	340	25	738
Wagon-jack	W. C. Campbell	276,771	May 1	314	82	23	1680
Wagon-jack	A. B. Furman	274,584	Mar. 27	1747	485	23	1157
Wagon-jack	W. G. Garth	276,236	Apr. 24	1756	488	23	1551
Wagon-jack	J. T. Gilbert	286,291	Oct. 9	653	173	25	128
Wagon-jack	I. M. Johnson	276,594	May 1	66	18	23	1639
Wagon-jack	F. Kellogg	274,498	Mar. 27	1638	455	23	1138
Wagon-jack	T. Miller, Jr.	275,931	Apr. 17	1380	380	23	1478
Wagon-jack	A. E. Petticrew	278,594	May 29	2579	704	23	2099
Wagon-jack	C. H. Swink	287,191	Oct. 23	1786	490	25	344
Wagon-jack	A. H. Taft	288,275	Nov. 13	606	166	25	621
Wagon-lock	J. Wilson	282,826	Aug. 7	419	118	24	574
Wagon. Log	A. W. Cagle	275,016	Apr. 3	173	47	23	1255
Wagon. Milk	E. Borden	270,539	Jan. 9	875	254	23	181
Wagon. Platform	P. Huff	287,541	Oct. 30	2225	604 605	25	433
Wagon platform-gear	W. S. Appleget	277,186	May 8	853	226	23	1778
Wagon platform-gear	E. Clark	275,147	Apr. 3	350	96	23	1287
Wagon platform-gear	C. H. Pangborn	284,225	Sept. 4	89	24	24	919
Wagon platform-gearing	F. Selle	270,254	Jan. 9	507	149	23	109
Wagon-rack	C. Cotton	289,234	Nov. 27	1799	498	25	847
Wagon-reach	A. H. and R. H. Beach	281,335	July 17	1245	345	24	232
Wagon-reach	M. Deeg	275,331	Apr. 3	588	158	23	1326
Wagon-reach coupling	R. Jacks	288,707	Nov. 20	1158	318	25	723
Wagon rub-iron	P. Dickman	273,041	Feb. 27	1849	517	23	785
Wagon running-gear	A. H. and R. H. Beach	282,486	Aug. 7	8	3	24	502
Wagon running-gear	R. C. Blackwell	290,170	Dec. 11	979	276	25	1068
Wagon running-gear	R. C. Blackwell	290,171	Dec. 11	980	277	25	1068
Wagon running-gear	D. Bullock and J. Jackson	282,490	Aug. 7	12	3, 4	24	503
Wagon running-gear	N. L. Higgins	282,637	Aug. 7	197	57	24	534
Wagon running-gear	L. D. Hurd	283,712	Aug. 21	1498	422 423	24	785
Wagon running-gear	T. B. Mackey	271,487	Jan. 30	2071	597	23	414
Wagon running-gear	L. C. Mathison	283,628	Aug. 21	1392	389	24	764
Wagon running-gear	T. Poling	273,599	Mar. 6	463	125	23	913
Wagon-seat	D. Moehl, V. Pausch, and L. Moehl	283,803	Aug. 28	1616	455	24	817
Wagon-seat fastener	E. P. Sears	282,786	Aug. 7	373	105	24	565
Wagon-seat iron	L. N. Bewley and R. L. Mack	276,553	May 1	11	3	23	1628
Wagon-seat top	W. Hawkins	270,060	Jan. 2	275	80	23	56
Wagon-spring	P. J. Berdohl	286,377	Oct. 9	753	202	25	147
Wagon-spring	G. Dillig	272,219	Feb. 13	785	218	23	588
Wagon-spring	J. K. P. Pine	280,858	July 10	644	182	24	120
Wagon-stake	E. F. Chapman	280,132	June 26	1869	527	23	2466
Wagon-standard	P. Papineau	290,702	Dec. 25	1692	466	25	1205
Wagon-standard	O. Schimansky	286,335	Oct. 9	707	188	25	138
Wagons. Apparatus for loading and unloading	S. Van Patten	270,159	Jan. 2	391	113	23	79
Wagons. Detachable step for farm	J. Hallett	272,543	Feb. 20	1205	337	23	666
Wagons. Lock for top boxes of	T. Fleming	272,832	Feb. 20	1570	442	23	731
Wagons. Spring-motor for road	C. H. Jenne	287,939	Nov. 6	189	55, 56	25	540
Waist, drawers, and stocking supporter	M. Coddington	288,020	Nov. 6	295	83	25	557
Waiter or tray	G. D. Burton	285,386	Sept. 25	1506	423	24	1184
Wall-bracket	J. Nagele	290,789	Dec. 25	1802	498	25	1236
Wall-decoration	H. Fechteler	281,679	July 24	1683	458	24	311
Wall-paper	H. Lobdell	282,541	Aug. 7	78	.....	24	513
Wall-paper	H. Lobdell. (Reissue)	10,430	Dec. 25	2104	.....	25	1376
Wall-paper. Apparatus for drying	H. Hilbers	277,033	May 8	656	171	23	1744
Wall-paper hanger	B. G. Wright	286,669	Oct. 16	1120	302	25	219
Wall-paper-hanging machine	M. Heffernan	272,436	Feb. 20	1073	302	23	643
Wall-paper. Manufacture of	G. K. Birge	272,212	May 22	2081	573	23	2004
Wall-paper. Surfacing and ornamenting	T. Jefferson	273,364	Mar. 6	164	.....	23	862
Wall-papers. Sample-exhibitor for	J. E. Kidd	285,755	Sept. 25	1958	554	24	1265
Wall-pocket	G. W. Hessler	279,754	June 19	1410	394	23	2378
Walls and ceilings. Composition for the ornamentation of	M. Gibson	290,226	Dec. 18	1060	.....	25	1090
Walls and ceilings. Composition for the ornamentation of	M. Gibson	290,227	Dec. 18	1061	.....	25	1090
Walls and ceilings. Composition for the ornamentation of	M. Gibson	290,228	Dec. 18	1061	.....	25	1090
Walls. Composition for	J. R. Davis, C. M. Wyrick, and S. Parker	288,694	Nov. 20	1142	.....	25	721
Walls of buildings. Composition for waterproofing and preserving	T. Hunt	282,082	July 31	2199	.....	24	407
Walls. Projecting corner-piece for plastered	G. W. Da Cunha	290,750	Dec. 25	1764	487	25	1219
Walls, roofs, &c. Covering for	C. McCarthy and J. P. Cumming	274,354	Mar. 20	1428	391	23	1095
Wantage or village rod	J. David	280,586	July 3	302	84	24	54
Wardrobe	M. A. Winter	287,399	Oct. 23	2047	557	25	390
Warming and ventilating and apparatus therefor	T. Rowan	283,149	Aug. 14	803	224	24	649
Warp-linking machine	C. Denn	288,032	Nov. 6	306	87	25	560
Warp-threads. Machine for drawing in	L. P. Sherman	282,124	July 31	2270	622 623 624	24	417
Warping and beaming machine	S. S. Hall and J. Walmsley	284,416	Sept. 4	316	87, 88	24	956
Warping-machine	R. L. Carr	276,667	May 1	156	40	23	1653
Warping-machine	W. S. Walcott	287,201	Oct. 23	1801	494	25	346
Warping-machine drop-wire	G. S. Follansbee	278,327	May 29	2255	618	23	2042
Wash-board	E. Butzbach	277,109	May 8	757	199	23	1761
Wash-board	R. W. Harper	287,926	Nov. 6	171	49	25	537
Wash-board protector	J. M. Gorham	285,254	Sept. 18	1343	378	24	1150
Wash-boiler	D. Bunker	273,809	Mar. 13	736	200	23	969
Wash-boiler	D. McDonald	273,866	Mar. 13	814	220	23	981
Wash-boiler	W. A. Wright	274,076	Mar. 13	1063	293	23	1024
Wash-stand	W. Blackwood, Jr.	275,123	Apr. 3	321	89	23	1282
Wash-stand	N. O. Bond	285,001	Sept. 18	1044	292	24	1097
Wash-stand	E. F. Collins	273,710	Mar. 13	603	162	23	945



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Wash-stand.....	W. O. N. Scott.....	270,701	Jan. 16	1088	312	23	228
Wash-stand.....	G. E. Waring, Jr.....	277,963	May 22	1769	482	23	1949
Wash-stand. Stationary.....	P. Connolly.....	283,699	Aug. 21	1478	416	24	781
Wash-tub support.....	J. Reid.....	271,516	Jan. 30	2107	606	23	420
Washer:							
See Clothes-washer. Leather washer.							
Composite washer. Ore-washer.							
Dish-washer. Spring-washer.							
Glass-washer. Steam-washer.							
Glue-stock washer. Tumbler-washer.							
Gold-washer.							
Washer.....	J. Ringen.....	271,275	Jan. 30	1786	.....	23	362
Washer.....	S. H. Shively.....	271,373	Jan. 30	1921	555	23	386
Washers. Machine for making.....	H. M. Armstrong.....	284,707	Sept. 11	676	190	24	1024
Washers. Machine for making.....	J. P. Mason.....	276,848	May 1	402	106 107	23	1697
Washers. Mechanism for manufacturing.....	T. Gingras.....	270,301	Jan. 9	560	165	23	119
Washing compound.....	J. G., E. P., and D. W. Davis.....	278,409	May 29	2360	.....	23	2061
Washing. Hand-rubber for.....	I. T. Greene.....	285,256	Sept. 18	1345	379	24	1150
Washing-machine.....	J. F. Adams.....	270,357	Jan. 9	631	186	23	133
Washing-machine.....	W. W. Adams and D. R. Snelling.....	269,984	Jan. 2	189	55	23	39
Washing-machine.....	J. Bailly.....	276,329	Apr. 24	1885	523	23	1572
Washing-machine.....	J. Baker.....	286,109	Oct. 2	405	111	25	75
Washing-machine.....	R. G. Baldwin.....	285,550	Sept. 25	1697	479	24	1219
Washing-machine.....	J. F. Beam and S. Brillinger.....	279,522	June 19	1145	317	23	2332
Washing-machine.....	C. Beidler.....	279,691	June 19	1343	373	23	2366
Washing-machine.....	C. Blust.....	286,378	Oct. 9	753	203	25	147
Washing-machine.....	C. Bradford.....	277,670	May 15	1424	384	23	1882
Washing-machine.....	E. W. Bush.....	289,615	Dec. 4	301	84	25	941
Washing-machine.....	J. L. Bushong.....	288,543	Nov. 13	949	260	25	681
Washing-machine.....	J. S. Caldwell.....	282,955	Aug. 14	569	161	24	609
Washing-machine.....	H. Calkins.....	273,346	Mar. 6	140	39	23	857
Washing-machine.....	S. C. Danforth.....	288,552	Nov. 13	960	264	25	683
Washing-machine.....	A. K. De Good.....	271,317	Jan. 30	1841	535	23	372
Washing-machine.....	C. Dodson.....	277,243	May 8	914	245	23	1789
Washing-machine.....	W. M. Doty.....	282,615	Aug. 7	169	51	24	530
Washing-machine.....	L. K. Dutton.....	274,473	Mar. 27	1585	435	23	1131
Washing-machine.....	J. B. Fancetto.....	271,230	Jan. 30	1731	501	23	353
Washing-machine.....	G. D. Ferris.....	276,795	May 1	342	92	23	1686
Washing-machine.....	W. J. Forsyth.....	279,734	June 19	1390	388	23	2374
Washing-machine.....	G. P. Fuller.....	284,622	Sept. 11	566	160	24	1006
Washing-machine.....	L. S. Funk.....	283,094	Aug. 14	738	207	24	639
Washing-machine.....	W. C. Goode.....	282,514	Aug. 7	44	13	24	508
Washing-machine.....	J. O. Hardwick.....	274,190	Mar. 20	1212	334	23	1058
Washing-machine.....	R. S. Harrington.....	277,028	May 8	651	169	23	1743
Washing-machine.....	O. A. Harris.....	277,896	May 22	1692	461 462	23	1937
Washing-machine.....	D. S. Hart.....	290,047	Dec. 11	840	238	25	1041
Washing-machine.....	T. Hawksworth.....	272,250	Feb. 13	824	230	23	595
Washing-machine.....	W. A. Hedger.....	273,359	Mar. 6	157	44	23	861
Washing-machine.....	J. F. Hill.....	281,996	July 24	2084	572	24	382
Washing-machine.....	W. Holben.....	289,416	Dec. 4	52	15	25	896
Washing-machine.....	N. Holmes.....	285,411	Sept. 25	1535	433	24	1189
Washing-machine.....	A. L. Johnson.....	281,882	July 24	1950	533	24	359
Washing-machine.....	E. J. C. Kals.....	275,049	Apr. 3	218	59	23	1263
Washing-machine.....	E. L. Keys.....	274,946	Apr. 3	81	22	23	1239
Washing-machine.....	A. E. Kiel.....	290,064	Dec. 11	857	243	25	1044
Washing-machine.....	G. F. Knight.....	281,523	July 17	1481	406	24	273
Washing-machine.....	E. K. Lecone.....	289,775	Dec. 4	500	138	25	973
Washing-machine.....	H. Lighty.....	278,247	May 22	2124	585	23	2011
Washing-machine.....	J. R. Martindale.....	272,666	Feb. 20	1365	383	23	694
Washing-machine.....	W. H. McFarlen.....	272,292	Feb. 13	873	244	23	604
Washing-machine.....	J. E. Mitchell.....	281,111	July 10	948	265	24	175
Washing-machine.....	H. F. Moeller.....	273,584	Mar. 6	447	120	23	911
Washing-machine.....	A. G. Morlan and W. N. McKeen.....	279,877	June 19	1556	435	23	2404
Washing-machine.....	A. Mott.....	281,116	July 10	953	267	24	175
Washing-machine.....	L. N. Myers.....	281,119	July 10	957	267	24	176
Washing-machine.....	A. B. Paxton.....	270,976	Jan. 23	1429	412	23	294
Washing-machine.....	F. Pollmiller.....	274,140	Mar. 20	1151	317	23	1046
Washing-machine.....	J. W. Porter.....	276,072	Apr. 17	1545	425	23	1507
Washing-machine.....	A. Scharnweber.....	271,369	Jan. 30	1918	554 555	23	386
Washing-machine.....	A. Scheff.....	273,611	Mar. 6	477	128	23	916
Washing-machine.....	F. Schwarz.....	272,780	Feb. 20	1506	424	23	719
Washing-machine.....	P. B. Sheldon.....	274,396	Mar. 20	1482	407	23	1105
Washing-machine.....	H. E. Smith.....	275,724	Apr. 10	1115	305	23	1424
Washing-machine.....	S. Steelman.....	290,134	Dec. 11	940	266	25	1061
Washing-machine.....	P. W. Strader and F. A. Wittich.....	273,776	Mar. 13	702	189	23	962
Washing-machine.....	J. A. Vandervoort.....	280,973	July 10	788	218	24	145
Washing-machine.....	C. N. White.....	271,385	Jan. 30	1934	560	23	389
Washing-machine.....	M. White.....	286,245	Oct. 9	570	157	25	114
Washing-machine.....	J. Wilson.....	274,072	Mar. 13	1059	292	23	1023
Washing-machine.....	S. Wright.....	276,126	Apr. 17	1618	446	23	1519
Washing-machine. Cylinder.....	H. Losse.....	279,960	June 26	1666	468	23	2429
Washing-machine reversing mechanism.....	J. W. Fernald.....	283,586	Aug. 21	1349	377	24	756
Washing-machines, churns, &c. Gearing for operating.....	G. H. Connor.....	271,795	Feb. 6	234	71	23	485
Washing woven fabrics. Apparatus for.....	J. and P. Hawthorn and J. P. Liddell.....	274,766	Mar. 27	1957	544	23	1195
Wash-stand commode attachment.....	C. B. Basford.....	290,168	Dec. 11	977	276	25	1067
Waste-trap.....	S. E. Thomas.....	286,746	Oct. 16	1219	329	25	236
Watch.....	E. Kuhn.....	289,352	Nov. 27	1940	539	25	874
Watch.....	G. Thommen.....	289,728	Dec. 4	450	126	25	965
Watch.....	C. V. Weerd.....	271,965	Feb. 6	458	125	23	521

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Watch and time-piece movement. Full-plate.....	F. Fitt.....	281,758	July 24	1794	{ 489	24	331
Watch-balances. Machine for pointing, drilling, and tapping	C. V. Voerd.....	271,967	Feb. 6	461	490 126		521
Watch-balances. Mechanism for timing.....	E. J. Hall.....	283,233	Nov. 13	547	151	25	612
Watch-case.....	E. C. Fitch.....	277,865	May 15	1650	450	23	1923
Watch-case.....	E. C. Fitch.....	289,340	Nov. 27	1927	535	25	872
Watch-case.....	G. S. Ladd.....	278,151	May 22	2000	550	23	1930
Watch-case.....	T. Mueller.....	273,759	Mar. 13	672	180	23	957
Watch-case.....	T. Mueller.....	280,394	July 3	66	18	24	14
Watch-case.....	J. E. Searing.....	278,609	May 29	2597	709	23	2102
Watch-case.....	A. Von Loehr.....	283,170	Aug. 14	829	232	24	654
Watch-case.....	W. N. Weedon.....	284,926	Sept. 11	938	263	24	1071
Watch-case backs. Device for making.....	J. Lamont.....	284,440	Sept. 4	342	95	24	961
Watch-case center.....	J. C. Dueber.....	290,869	Dec. 25	1903	525	25	1243
Watch-case center.....	J. C. Dueber.....	290,870	Dec. 25	1904	525	25	1244
Watch-case columns. Making bases for rings of.....	S. Williams.....	284,526	Sept. 4	448	127	24	950
Watch-case. Dust-proof.....	W. H. Fitz Gerald and G. C. Smith	287,919	Nov. 6	163	47	25	536
Watch-case joint.....	R. J. Quigley.....	288,184	Nov. 6	482	134	25	591
Watch-case. Magic.....	E. A. Muckle.....	275,251	Apr. 3	467	{ 130	23	1306
Watch-case spring.....	N. J. Felix.....	290,761	Dec. 25	1774	490		1221
Watch-cases, &c. Ornamenting.....	T. Benfield.....	275,569	Apr. 10	918	243	23	1391
Watch-cases. Picture-holding cap for.....	H. Hirsh.....	276,403	Apr. 24	1373	546	23	1558
Watch-centers. Device for making and ornamenting.	F. Ecanbert.....	270,644	Jan. 16	1010	231	23	214
Watch-chain charm.....	J. R. Handy.....	286,608	Oct. 16	1041	281	25	205
Watch-dial.....	W. H. Newby.....	230,791	Dec. 25	1804	499	25	1226
Watch. Dust-proof.....	A. Bitner.....	273,938	Mar. 13	901	246	23	995
Watch-dust-ring.....	S. M. Morgan.....	287,152	Oct. 23	1734	475	25	335
Watch-escapement.....	G. F. Jacot.....	272,553	Feb. 20	1216	340	23	668
Watch-escapement. Detachable.....	F. Fitt.....	281,757	July 24	1792	489	24	331
Watch-fob.....	J. F. Harden.....	278,947	June 5	411	112	23	2193
Watch hair-spring protector.....	E. A. Curpen.....	273,034	Feb. 27	1842	515	23	784
Watch hair-spring stud.....	W. Oldroyd and G. H. Smith, Jr.	273,138	Feb. 27	1971	554	23	807
Watch-holder.....	W. W. Blow.....	283,855	Aug. 28	1675	472	24	827
Watch-key.....	J. S. Birch.....	282,606	Aug. 7	159	48	24	528
Watch-key and cross-bar for watch-chains. Combined	W. F. Brennan.....	274,903	Apr. 3	15	4	23	1229
Watch-key and holding-tool.....	J. S. Birch.....	282,605	Aug. 7	158	48	24	528
Watch-key or holding-tool.....	G. L. Holt.....	278,550	May 29	2532	691	23	2091
Watch-key. Self-adjusting.....	C. A. Smith.....	279,196	June 12	732	201	23	2258
Watch makers and repairers. Tool for.....	O. W. Smith.....	274,837	Mar. 27	2037	567	23	1209
Watch-maker's tool.....	A. W. Bnsh.....	281,967	July 24	2056	563	24	377
Watch-movement box.....	A. D. Bingham.....	280,121	June 26	1855	523	23	2463
Watch-pendant.....	C. K. Colby.....	287,001	Oct. 23	1544	425	25	2298
Watch pendant-ring.....	R. B. Richmond.....	289,141	Nov. 27	1688	469	25	826
Watch-pendants. Machine for making.....	C. Chabot.....	290,858	Dec. 25	1891	522	25	1241
Watch-plates. Fastening clicks to.....	T. Gill.....	275,762	Apr. 10	1172	321	23	1434
Watch-protector.....	W. A. Nichols.....	285,154	Sept. 18	1232	346	24	1129
Watch-regulator.....	C. R. Blake.....	285,959	Oct. 2	230	65	25	44
Watch-regulator.....	C. Ruttmann.....	289,359	Nov. 27	1948	541	25	875
Watch-regulator.....	D. Shive.....	284,079	Aug. 28	1970	549	24	879
Watch-regulator. Micrometer.....	C. E. Mason.....	288,086	Nov. 6	366	102	25	570
Watch. Self-winding.....	J. J. L. Brun.....	271,030	Jan. 23	1486	428	23	304
Watch show-rack.....	H. Schmidt.....	270,134	Jan. 2	360	105	23	73
Watch stem-setting attachment.....	F. Lenz.....	288,075	Nov. 6	353	98	25	568
Watch. Stem-winding.....	D. H. Church.....	280,719	July 3	455	130	24	81
Watch. Stem-winding.....	A. Savoye-Keller.....	274,613	Mar. 27	1782	495	23	1163
Watch. Stem-winding.....	J. Schaeppi.....	286,852	Oct. 16	1350	370	25	260
Watch. Stem-winding.....	N. R. Varney.....	269,974	Jan. 2	179	52	23	37
Watch stem winding and setting device.....	C. E. Mason.....	290,903	Dec. 25	1947	537	25	1251
Watch. Stop.....	A. Le Contre.....	284,444	Sept. 4	346	96	24	962
Watch. Stop.....	W. Goy.....	278,127	May 22	1972	541	23	1985
Watch. Stop.....	A. Henchoz, Arnold and F. Henchoz-Huguenin	272,545	Feb. 20	1207	337	23	666
Watch. Straight-line.....	R. L. Peabody.....	281,295	July 17	1101	329	24	924
Watch-wheels. Machine for cutting.....	F. E. Jeanjaquet.....	275,494	Apr. 10	826	224	23	1375
Watch-winding indicator.....	R. Heunsch.....	289,533	Dec. 4	200	56, 57	25	921
Watches. Anti-magnetic shield for.....	C. K. Giles.....	289,642	Dec. 4	335	94	25	946
Watches. Device for fitting hair-springs to.....	C. H. Lucas.....	278,347	May 29	2267	625	23	2048
Watches. Guard for the pendant-bows of.....	C. H. Shaw.....	278,282	May 22	2171	598	23	2019
Watches. Safety center-pinion for.....	J. Schaeppi.....	286,851	Oct. 16	1349	369	25	260
Watches. Stem-winding mechanism for.....	D. D. Palmer.....	272,310	Feb. 13	892	250	23	607
Watchman's register.....	C. E. Sanford.....	285,932	Oct. 2	198	56	25	38
Water, aging and purifying vinous and spirituous liquors, and purifying the unfermented juices of fruits. Purifying	D. McCurdy.....	285,825	Oct. 2	54	17	25	11
Water alarm and regulator. Automatic.....	N. C. Butler.....	278,872	June 5	272	78	23	2169
Water-closet.....	W. Bishop.....	289,210	Nov. 27	1773	492	25	842
Water-closet.....	W. P. Buchan.....	287,225	Oct. 23	1834	502	25	352
Water-closet.....	B. C. Cross.....	270,934	Jan. 23	1369	395	23	286
Water-closet.....	C. N. Dutton.....	280,017	June 26	1736	{ 486 487	23	2441
Water-closet.....	C. N. Dutton.....	280,018	June 26	1740	{ 488 489		2442
Water-closet.....	O. B. Evans.....	284,544	Sept. 4	466	132	24	983
Water-closet.....	J. Foley.....	272,539	Feb. 20	1202	335	23	665
Water-closet.....	J. L. and C. P. Howard.....	284,016	Aug. 28	1896	{ 531 532	24	866
Water-closet.....	E. S. Hutchinson.....	280,180	June 26	1916	539		2474
Water-closet.....	T. Hyde.....	279,566	June 19	1197	331	23	2341
Water-closet.....	J. Kelly.....	270,080	Jan. 2	293	87	23	60
Water-closet.....	S. G. McFarland.....	287,558	Oct. 30	2248	610	25	438
Water-closet.....	J. C. McLaughlin.....	275,838	Apr. 17	1272	350	23	1458



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Water-closet .....	F. J. Merz .....	285,829	Oct. 2	58	18	25	12
Water-closet .....	G. Milne and W. H. Gants. (Reis- snc.) .....	10,377	Aug. 28	2080	578	24	898
Water-closet .....	J. Muirhead .....	288,655	Nov. 20	1092	300	25	712
Water-closet .....	A. G. Myers .....	274,644	Mar. 27	1814	503	23	1170
Water-closet .....	C. F. Pike .....	270,113	Jan. 2	328	96, 97	23	66
Water-closet .....	C. F. Pike .....	270,335	Jan. 9	605	178	23	128
Water-closet .....	C. F. Pike .....	270,980	Jan. 23	1432	413	23	295
Water-closet .....	C. F. Pike .....	270,981	Jan. 23	1433	413	23	295
Water-closet .....	C. F. Pike .....	271,356	Jan. 30	1900	550	23	383
Water-closet .....	C. F. Pike .....	271,915	Feb. 6	403	109	23	511
Water-closet .....	C. F. Pike .....	271,916	Feb. 6	404	109	23	511
Water-closet .....	C. F. Pike .....	271,917	Feb. 6	405	110	23	512
Water-closet .....	J. P. Putnam .....	285,926	Oct. 2	191	54	25	37
Water-closet .....	J. P. Putnam .....	285,927	Oct. 2	192	54	25	37
Water-closet .....	J. P. Putnam .....	285,928	Oct. 2	193	55	25	37
Water-closet .....	W. Tweeddale .....	279,048	June 5	535	146	23	2214
Water-closet .....	W. H. Umpleby .....	280,417	July 3	95	25	24	19
Water-closet .....	L. Wacfelael .....	286,874	Oct. 16	1378	378	25	264
Water-closet .....	R. Walsh .....	283,172	Aug. 14	831	232	24	654
Water-closet .....	D. Wellington .....	271,752	Feb. 6	202	56	23	475
Water-closet .....	T. Wilson and C. N. Dutton .....	280,108	June 26	1844	520	23	2461
Water-closet and other traps. Cleansing	C. F. Pike .....	271,358	Jan. 30	1902	550	23	383
Water-closet and similar receptacles .....	J. P. Putnam .....	285,924	Oct. 2	186	54	25	36
Water-closet and similar receptacles .....	J. P. Putnam .....	285,925	Oct. 2	189	54	25	37
Water-closet and trap .....	J. Benner .....	289,495	Dec. 4	156	43	25	913
Water-closet apparatus .....	K. E. Kritch .....	277,293	May 8	976	262	23	1800
Water-closet bowl .....	J. Cropper .....	270,754	Jan. 16	1154	330	23	240
Water-closet bowl .....	J. J. B. Frey .....	275,900	Apr. 17	1346	{ 370 371 }	23	1473
Water-closet bowls and their traps. Cleansing and disinfecting .....	C. F. Pike .....	271,357	Jan. 30	1901	550	23	383
Water-closet casing .....	C. F. Pike .....	270,333	Jan. 9	603	178	23	127
Water-closet cistern .....	J. Demarest .....	269,921	Jan. 2	114	34	23	24
Water-closet cistern .....	C. H. Moore .....	274,214	Mar. 20	1250	344	23	1064
Water-closet cistern .....	J. Reid .....	280,243	June 26	2000	{ 562 563 }	23	2489
Water-closet cistern .....	W. Scott .....	275,716	Apr. 10	1103	302	23	1423
Water-closet cistern attachment .....	J. Foley .....	282,876	Aug. 7	482	135	24	585
Water-closet pan .....	P. Connolly .....	273,668	Mar. 6	548	146	23	927
Water-closet pull-cup .....	J. Demarest .....	274,182	Mar. 20	1204	331	23	1056
Water-closet seats. Device for covering .....	M. Bonnefond .....	279,218	June 12	752	{ 207 208 }	23	2262
Water-closet shut-off .....	J. Farthing .....	270,211	Jan. 9	459	133	23	101
Water-closet splash-board .....	W. Welch, J. Coughlin, and J. J. Mahoney .....	271,557	Jan. 30	2152	619	23	427
Water-closet stench-trap. Revolving .....	L. D. Craig .....	274,725	Mar. 27	1905	532	23	1186
Water-closet tank or cistern .....	H. and W. Sutcliffe .....	277,172	May 8	839	221	23	1775
Water-closet, urinal, and cesspool .....	J. B. Berlier .....	272,405	Feb. 20	1036	290	23	636
Water-closet valve .....	C. Birkery and H. S. Lord .....	272,196	Feb. 13	757	208	23	583
Water-closet valve .....	J. McGuire .....	274,628	Mar. 27	1795	499	23	1166
Water-closet valve .....	T. McHugh .....	280,648	July 3	372	104	24	66
Water-closet valve .....	P. White .....	285,191	Sept. 18	1275	358	24	1137
Water-closet valves. Float for .....	H. S. Lord and R. E. Day .....	276,436	Apr. 24	2011	537	23	1595
Water-closets. Automatic valve for .....	W. N. Decker .....	288,167	Nov. 6	459	129	25	588
Water-closets. Flushing .....	J. E. Boyle .....	285,875	Oct. 2	117	35	25	23
Water-closets. Sealing device for the operating mechanism of .....	C. F. Pike .....	270,112	Jan. 2	326	96	23	66
Water-closets, urinals, &c. Flushing-tank for .....	T. Henderson .....	283,105	Aug. 14	757	213	24	641
Water-closets. Water-waste preventive for flush- ing .....	C. Winn .....	280,275	June 26	2039	574	23	2495
Water-cooler .....	A. J. Schultze .....	274,663	Mar. 27	1838	511	23	1174
Water-cooler stand .....	R. B. Vardin and J. C. Moore .....	288,960	Nov. 20	1465	405	25	780
Water-crane .....	H. S. Cubberley and D. Mann .....	280,140	June 26	1879	529	23	2467
Water-elevator .....	A. J. English .....	288,783	Nov. 20	1249	343	25	740
Water-elevator .....	S. W. Hudson .....	278,796	June 5	162	47, 48	23	2150
Water-elevator .....	J. E. Morgan .....	278,582	May 29	2562	700	23	2097
Water-elevator .....	H. W. Norwood .....	272,463	Feb. 20	1104	312	23	648
Water-elevator .....	W. M. Scott .....	276,481	Apr. 24	2067	574	23	1604
Water for stock. Apparatus for supplying .....	A. G. Lyell .....	280,051	June 26	1781	499	23	2449
Water from wells. Wheel for drawing .....	W. A. Martin .....	274,011	Mar. 13	984	270	23	1010
Water-gage .....	W. A. Clark .....	278,223	May 22	2094	576	23	2006
Water-gage .....	T. Galvin .....	279,144	June 12	681	186	23	2249
Water-gage .....	G. P. Harmon .....	289,255	Nov. 27	1820	503	25	851
Water-gage .....	F. H. Lincoln .....	278,345	May 29	2285	625	23	2047
Water-gage reflector .....	G. C. Whitesides .....	270,530	Jan. 9	865	252	23	179
Water, gas, or drain pipe .....	J. P. Culver .....	271,687	Feb. 6	123	34	23	461
Water-heater .....	H. A. Gantert .....	278,123	May 22	1969	540	23	1984
Water-heater .....	J. B. Webster .....	289,194	Nov. 27	1753	487	25	837
Water-heater and circulator-boiler .....	T. G. Morse .....	279,583	June 19	1218	338	23	2345
Water heater and feeder .....	J. Park .....	289,930	Dec. 11	695	195	23	1015
Water in houses. Distribution of .....	A. Dumas .....	277,691	May 15	1447	390	23	1886
Water-meter .....	J. B. Erwin .....	286,285	Oct. 9	643	171	25	127
Water-meter .....	L. H. Nash .....	280,221	June 26	1970	554	23	2484
Water-meter .....	L. H. Nash .....	280,222	June 26	1972	{ 554 555 }	23	2484
Water-meter .....	L. H. Nash .....	281,390	July 17	1312	363	24	245
Water-meter .....	D. B. Spooner .....	287,588	Oct. 30	2301	{ 622 623 }	25	447
Water-meter .....	W. Wells .....	273,204	Feb. 27	2046	576	23	820
Water-meter. Diaphragm .....	C. W. Stickney .....	285,175	Sept. 18	1258	353	24	1134
Water-meter. Piston .....	F. Walker .....	272,607	Feb. 20	1291	{ 359 360 }	23	680
Water-meter. Rotary .....	L. H. Nash .....	280,220	June 26	1968	554	23	2483

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & Co.	Vol.	Page.
Water-mill.....	I. R. Kulp.....	275,922	Apr. 17	1371	377	23	1477
Water-mill.....	C. F. C. Steinhagen.....	284,084	Aug. 28	1976	550	24	880
Water-motor.....	S. S. Richardson.....	289,560	Dec. 4	236	67	25	928
Water-motor.....	A. A. Walker and T. J. Backus.....	272,105	Feb. 13	655	178	23	565
Water-pipes. Device for preventing hammer in.....	R. W. Miller.....	273,379	Mar. 6	186	50	23	866
Water-pipes from rust. Protecting iron.....	F. Eaton.....	289,900	Dec. 11	663	185	25	1009
Water-proof cloth.....	T. J. Mayall.....	286,039	Oct. 2	320	.....	25	59
Water-proof fabric for making gossamer clothing.....	F. F. Terramorse.....	284,514	Sept. 4	434	.....	24	978
Water. Purifying.....	G. Seiler.....	275,277	Apr. 3	503	.....	23	1312
Water. Purifying.....	G. S. Strong.....	273,777	Mar. 13	704	190	23	962
Water purifying and softening apparatus.....	F. Pichler and K. Sedlacek.....	278,178	May 22	2033	559	23	1995
Water-service plug.....	P. Keilt.....	289,642	Nov. 20	1073	295	25	709
Water sprinkler or pipe. Automatic.....	G. A. Smith.....	285,697	Sept. 25	1874	534	24	1252
Water-supply and windmill regulator. Combined.....	M. A. Sayles and T. J. Brook.....	271,133	Jan. 23	1610	463	23	324
Water-supply. Combined railway and cattle.....	C. P. Sykes.....	289,040	Nov. 27	1570	433	25	804
Water-tank. Elevated.....	N. T. Whiting.....	288,901	Nov. 20	1393	364	25	766
Water-tank feed-pipe.....	C. Frankenhild.....	280,809	July 10	589	165	24	111
Water-tight fabrics. Preparing.....	L. Heyer.....	288,635	Nov. 20	1066	.....	25	708
Water-tight joint for tiling, vault-covers, areas, &c.....	E. Bosworth.....	284,170	Sept. 4	14	.....	24	907
Water-waste preventer.....	W. Bartholomew.....	288,758	Nov. 20	1226	335	25	735
Water-wheel.....	G. W. Converse.....	281,459	July 17	1403	366	24	259
Water-wheel.....	A. Figge.....	271,524	Feb. 6	289	79	23	492
Water-wheel.....	M. I. Martin.....	276,442	Apr. 24	2019	560	23	1596
Water-wheel.....	J. M. Nilson.....	289,021	Nov. 27	1544	426	25	800
Water-wheel.....	J. M. Powell.....	276,538	Apr. 24	2140	595	23	1617
Water-wheel.....	L. C. Ryan.....	287,330	Oct. 23	1962	536	25	375
Water-wheel.....	H. B. Stevens.....	286,500	Oct. 9	897	242	25	173
Water-wheel.....	L. B. Swartwout.....	289,169	Nov. 27	1718	479	25	831
Water-wheel bucket.....	C. D. Smith.....	272,592	Feb. 20	1273	355	23	677
Water-wheel. Turbine.....	H. R. Austin.....	287,403	Oct. 30	2059	559	25	399
Water-wheel. Turbine.....	C. M. Baker.....	277,535	May 15	1265	339	23	1856
Water-wheel. Turbine.....	C. Barnhart.....	279,519	June 19	1142	316	23	2331
Water-wheel. Turbine.....	M. D. Grow.....	272,428	Feb. 20	1065	300	23	641
Water-wheel. Turbine.....	B. Keiser.....	272,705	Feb. 20	1413	396	23	702
Water-wheel. Turbine.....	J. Raab.....	279,981	June 26	1688	474	23	2433
Water-proof compound of mangrove rosin, or cativo, and caoutchouc.....	C. C. Parsons.....	278,591	May 29	2571	.....	23	2098
Water-proof fabrics. Manufacture of oiled.....	N. S. York and A. W. Lane.....	270,717	Jan. 16	1106	316	23	231
Waterproofed building material. Treating.....	R. M. Caffall.....	275,327	Apr. 3	567	.....	23	1322
Waterproofing compound.....	C. L. and J. Weimann.....	275,738	Apr. 10	1130	.....	23	1497
Waterproofing fabrics.....	W. H. Horner and F. Hyde.....	273,233	Feb. 27	2089	.....	23	827
Waterproofing fabrics.....	W. McNeil.....	272,569	Feb. 20	1250	.....	23	673
Waterproofing leather, &c. Process of and composition for.....	H. Trenk.....	274,059	Mar. 13	1040	.....	23	1020
Water-works. Storage-basin for.....	H. W. Wilson.....	289,877	Dec. 11	633	176	25	1004
Watering device. Stock.....	W. E. Young.....	282,146	July 31	2296	630	24	421
Watering stock. Tank for.....	F. Funk.....	290,675	Dec. 25	1653	456	25	1198
Wave-power.....	W. E. Jory.....	281,370	July 17	1289	357	24	240
Wave-power apparatus.....	T. Mayes.....	273,117	Feb. 27	1942	545	23	801
Wax compound.....	P. C. Ghaler.....	274,484	Mar. 27	1623	.....	23	1135
Weaner. Calf.....	W. F. Geissler.....	278,532	May 29	2512	685	23	2088
Weaner. Calf.....	G. A. Marvin.....	280,642	July 3	367	102	24	65
Weather-board gage.....	J. M. Keith and S. R. Bolton.....	283,404	Aug. 21	1132	390	24	717
Weather-board gage.....	J. C. McEwen.....	280,494	July 3	198	52	24	36
Weather-boarding gage.....	J. Miller.....	290,457	Dec. 18	1366	377	25	1142
Weather-boarding gage and clamp.....	S. A. Kennedy.....	285,137	Sept. 18	1213	341	24	1125
Weather-boarding gage, clamp, and saw-guide.....	T. M. Dedman.....	277,890	May 22	1686	460	23	1935
Weather-strip.....	M. L. Bramhall.....	284,602	Sept. 11	542	153	24	1002
Weather-strip.....	D. L. Cady.....	282,160	July 31	2311	634	24	424
Weather-strip.....	H. Carter.....	284,539	Sept. 4	462	131	24	983
Weather-strip.....	P. Cool.....	287,245	Oct. 23	1860	509	25	356
Weather-strip.....	I. Coppock.....	272,213	Feb. 13	777	215	23	586
Weather-strip.....	J. C. Fiester.....	285,024	Sept. 18	1074	300	24	1102
Weather-strip.....	T. B. McCurdy.....	282,208	July 31	2377	654	24	434
Weather-strip.....	C. M. Packer.....	282,216	July 31	2384	657	24	436
Weather-strip.....	L. Parmele.....	279,425	June 12	1023	284	23	2305
Weather-strip.....	T. H. Pruner.....	279,501	June 12	1114	307	23	2319
Weather-strip.....	J. Shoemaker.....	281,802	July 24	1854	506	24	341
Weather-strip.....	T. Urie.....	277,858	May 15	1640	447	23	1922
Weather-strip.....	J. Walker.....	274,536	Mar. 27	1689	469	23	1147
Weather-strip.....	C. F. Whipple.....	274,158	Mar. 20	1175	324	23	1051
Weather-strip. Double-acting outward-pulling.....	E. Conklin.....	277,887	May 22	1681	458	23	1934
Weather-strip for door-sills.....	J. G. O'Kelly.....	282,109	July 31	2237	616	24	413
Weaving cane. Crossing-needle for.....	C. Vieman.....	272,993	Feb. 27	1786	500	23	774
Weaving double-pile fabrics and loom for weaving the same.....	S. C. Lister and J. Reixach.....	270,321	Jan. 9	587	172	23	124
Weaving imitation seersucker fabric.....	J. C. Potts.....	284,145	Aug. 28	2059	571	24	893
Webermeter.....	T. A. Edison.....	281,352	July 17	1269	352	24	237
Weed-cutter.....	W. F. and H. C. Reeves.....	287,163	Oct. 23	1748	479	25	337
Weed-puller.....	J. D. Higginbotham and G. F. Ball.....	287,677	Oct. 30	2415	651	25	469
Weigh-box.....	H. Langhlin and E. Baumgardner.....	284,864	Sept. 11	866	243	24	1058
Weigher and measure. Grain.....	J. E. Kimble.....	290,066	Dec. 11	859	244	25	1045
Weigher and register. Automatic grain.....	W. B. Patterson.....	285,921	Oct. 2	182	52, 53	25	35
Weigher and tally. Grain.....	G. Keith, Jr.....	271,079	Jan. 23	1552	447	23	315
Weighing and bagging machine. Grain.....	J. B. Pelton.....	283,018	Aug. 14	653	184	24	623
Weighing and dumping machine.....	J. Morrow.....	283,641	Aug. 21	1405	393	24	767
Weighing apparatus.....	G. D. Hibbs.....	273,528	Mar. 6	367	98	23	897
Weighing apparatus. Automatic grain.....	D. D. Kuhlman.....	286,934	Oct. 16	1451	398	25	276
Weighing apparatus. Automatic grain.....	D. D. Kuhlman.....	288,820	Nov. 20	1296	355	25	748
Weighing apparatus. Grain.....	W. H. Ernst.....	278,114	May 22	1949	534	23	1921
Weighing-machine and dynamometer.....	A. H. Emery.....	278,913	June 5	345	95	23	2182



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Weighing-machine. Automatic .....	C. Reuther .....	282,226	July 31	2396	{ 659 660 563	} 24	438
Weighing machine. Automatic grain.....	J. Stevens .....	278,193	May 22	2050	{ 564 565 565		
Weighing machine. Automatic grain.....	J. Stevens .....	278,194	May 22	2055	{ 566 567 91	} 23	1999
Weighing machinery .....	A. H. Emery .....	278,006	June 5	323	{ 92 93		
Weight. Machinery or apparatus for ascertaining } and indicating .....	T. H. Ward .....	270,864	Jan. 16	1274	{ 368 369	} 23	264
Weight-motor .....	D. H. Brenner .....	277,875	May 22	1669	455		23 1933
Weight-power .....	S. Raymond .....	286,962	Oct. 16	1489	409	25	283
Weirs and sluice-gates. Construction of river and other .....	F. Wiswall and W. H. Collier .....	281,599	July 17	1574	430	24	287
Welding apparatus .....	A. Grieses .....	285,124	Sept. 18	1193	334	24	1122
Well .....	B. F. Stephens .....	272,596	Feb. 20	1276	356	23	678
Well-boring machine .....	W. J. Sherman .....	277,794	May 15	1565	{ 426 427	} 23	1909
Well-digging apparatus .....	B. F. Stephens .....	274,988	Apr. 3	132	37		23 1248
Well-digging machine .....	J. C. and S. Chambers .....	271,600	Feb. 6	22	5	23	444
Well-drilling apparatus .....	E. Cain .....	255,010	Sept. 18	1054	295	24	1099
Well-drilling apparatus .....	E. Catlin .....	288,975	Nov. 27	1488	412	25	791
Well-drilling machine .....	L. A. Hardison .....	274,120	Mar. 20	1130	311	23	1043
Well-drilling machine .....	T. J. Hathaway .....	289,257	Nov. 27	1822	{ 503 504	} 25	851
Well-drilling machine .....	H. and J. Kelly .....	285,274	Sept. 18	1366	385		24 1155
Well. Drive .....	C. W. Schreiber .....	273,166	Feb. 27	2003	563	23	812
Well. Driven .....	J. Shaw .....	278,751	June 5	95	27	23	2140
Well point. Drive .....	O. B. Olmsted .....	287,708	Oct. 30	2459	662	25	477
Well point. Drive .....	R. A. Ryrie .....	279,600	June 19	1235	342	23	2348
Well-tubing clamp. Oil .....	D. L. Lewis .....	277,142	May 8	802	211	23	1770
Wells and apparatus therefor. Formation of deep .....	J. B. Edson .....	288,557	Nov. 13	967	266	25	684
Wells. Apparatus for cleaning oil .....	W. E. Karns .....	282,531	Aug. 7	68	20	24	512
Wells having water-bearing strata of different hy- drostatic levels. Apparatus for raising water from wells in quicksand, &c. Formation of deep .....	J. B. Yeagley .....	285,774	Sept. 25	1986	562	24	1269
Wells or cisterns. Device for closing bricks in the walls of .....	J. B. Edson .....	277,695	May 15	1451	391	23	1887
Wells. Process of and apparatus for the formation of deep .....	W. H. Small .....	290,277	Dec. 18	1123	316	25	1100
Wells. Side-leak or sand-wall washer for oil .....	S. W. Douglass .....	290,546	Dec. 18	1486	411	25	1163
Wells. Tube-clamp for oil .....	J. M. Reardon .....	277,607	May 15	1351	364	23	1869
Wells. Tubing, packing, and operating oil .....	C. C. Utter .....	273,195	Feb. 27	2034	572	23	818
Well-cutter .....	L. L. Crowley .....	280,139	June 26	1875	528	23	2467
Wetted or hemmed goods of knit fabrics. Manufac- ture of .....	A. Hinchcliffe .....	281,365	July 17	1283	356	24	239
Wetting grommed papers. Device for .....	S. Borton .....	271,190	Jan. 23	1636	487	23	336
Wheat-cleaner .....	J. B. Sword .....	272,350	Feb. 13	943	262	23	615
Wheat-drill .....	D. P. Motley .....	281,115	July 10	952	266	24	175
Wheat-grader and cockle-separator .....	A. L. Reese .....	274,380	Mar. 20	1458	400	23	1101
Wheat-huller .....	J. N. Merchant .....	269,872	Jan. 2	58	18	23	14
Wheat hulling and cleaning machine .....	T. T. Kneeland .....	277,906	May 22	1702	465	23	1939
Wheat-scouring apparatus .....	S. K. Todd .....	276,200	Apr. 24	1709	{ 472 473	} 23	1543
Wheel .....	F. X. Stiefenhofer .....	270,145	Jan. 2	374	109		23 76
See Abrasive wheel. Leather-creasing wheel.							
Advertising-wheel. Logging-wheel.							
Balance-wheel. Paddle-wheel.							
Buffing-wheel. Paper wheel.							
Car-wheel. Plow-wheel.							
Cart-wheel. Plow guide-wheel.							
Caster-wheel. Polishing-wheel.							
Creasing-wheel. Polishing or buffing wheel.							
Drive-wheel. Propelling-wheel.							
Emery-wheel. Pulley-wheel.							
Expansible wheel. Scouring, scratching, and buffing wheel.							
Fan-wheel. Sheave-wheel.							
Fifth-wheel. Traction-wheel.							
Fly-wheel. Turbine wheel.							
Gear-wheel. Vehicle-wheel.							
Grinding and polish- ing wheel. Velocipede-wheel.							
Harvester-wheel. Water-wheel.							
Harvester traction- wheel. Wheelbarrow-wheel.							
Iron wheel. Wind-wheel.							
Wheel .....	A. M. Allen .....	278,071	May 22	1894	519	23	1972
Wheel .....	R. Brown .....	287,801	Nov. 6	15	4	25	509
Wheel .....	F. W. Randall .....	290,224	Dec. 18	1058	297	25	1090
Wheel .....	E. E. Josef .....	277,904	May 22	1700	464	23	1938
Wheel .....	J. R. Little .....	273,746	Mar. 13	652	{ 173 174	} 23	954
Wheel .....					{ 502 503		
Wheel .....	A. E. Miltimore and A. J. Wolff....	280,063	June 26	1792	{ 504	} 23	2451
Wheel .....							
Wheel .....	F. X. Myer, Jr. ....	270,461	Jan. 9	771	226	23	160
Wheel .....	F. W. Randall .....	270,481	Jan. 9	792	231	23	164
Wheel and pulley .....	W. J. Innis .....	283,397	Aug. 21	1124	318	24	715
Wheel motor. Helical flanged .....	L. Patterson .....	289,931	Dec. 11	696	195	25	1015
Wheel or pulley .....	A. R. Byrket .....	289,335	Nov. 27	1923	534	25	871
Wheel-runner .....	H. Holland .....	272,601	Feb. 20	1395	391	23	699

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volum.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Wheels for vehicles, &c. Making	W. Newlin and S. Whitehall	279,584	June 19	1218	338	23	2345
Wheels. Making metallic	C. O. Wilder	286,754	Oct. 16	1226	331	25	237
Wheels. Making steel	H. Oweley	285,763	Sept. 25	1964	556	24	1266
Wheels on their shafts. Mounting	H. C. Hopkins	282,322	July 31	2520	691	24	459
Wheels to axles. Device for attaching	A. B. Carter	285,341	Sept. 18	1439	407	24	1167
Wheelbarrow	W. Clark	273,225	Feb. 27	2077	583	23	825
Wheelbarrow	D. B. S. Cockburn	288,019	Nov. 6	294	83	25	557
Wheelbarrow	W. Seabrook	279,604	June 19	1239	343	23	2348
Wheelbarrow	A. J. Upham	285,323	Sept. 18	1421	401	24	1164
Wheelbarrow	W. A. Whitney	290,156	Dec. 11	964	272	25	1065
Wheelbarrow-wheel	L. H. Goodwin	281,865	July 24	1929	527	24	355
Wheelbarrows for transportation. Packing	F. A. Jacobs	274,781	Mar. 27	1976	550	23	1198
Wheelwright's tool	A. Wright	275,742	Apr. 10	1133	310	23	1428
Whiffletree	S. R. Ames	283,454	Aug. 21	1194	335	24	728
Whiffletree	G. H. Gaston and C. H. Grant	285,121	Sept. 18	1188	333	24	1122
Whiffletree	J. Grems	287,376	Oct. 23	2018	549	25	365
Whiffletree	M. D. L. and J. M. Hartley	285,032	Sept. 18	1087	303	24	1104
Whiffletree	C. W. Hersey	281,065	July 10	895	249	24	165
Whiffletree	F. Littlefield	273,372	Mar. 6	177	48	23	864
Whiffletree	E. Palmer	283,274	Aug. 14	964	268	24	679
Whiffletree	E. H. Wade	283,541	Aug. 21	1291	361	24	745
Whiffletree and holdback attachment	G. Hubert	282,325	July 31	2523	692	24	460
Whiffletree attachment	J. Kurtz	290,890	Dec. 25	1931	533	25	1248
Whiffletree attachment	L. Stevenson and W. B. Jacobs	278,288	May 22	2182	600	23	2021
Whiffletree-clip	R. S. Clark	288,922	Nov. 20	1417	390	25	771
Whiffletree-clip	R. E. Harper	288,796	Nov. 20	1270	348	25	743
Whiffletree-hook	D. S. Blue	271,777	Feb. 6	232	65	23	481
Whiffletree-hook	J. J. Green	275,196	Apr. 3	404	111	23	1296
Whiffletree-hook	H. and A. T. Hatch	271,632	Feb. 6	62	17	23	451
Whiffletree-hook	J. C. Horner	272,255	Feb. 13	829	232	23	597
Whiffletree-iron	E. W. McLendon	271,093	Jan. 23	1567	451	23	317
Whiffletree-iron	J. W. Trease	288,681	Nov. 20	1127	310	25	718
Whiffletree-plate	W. M. Dawson and R. A. Simpson	281,032	July 10	857	238	24	159
Whiffletree-plate	C. H. Kerns	283,615	Aug. 21	1378	385	24	762
Whip	J. P. Arnold	284,351	Sept. 4	234	66	24	944
Whip	H. J. Bush	288,305	Nov. 13	638	175	25	627
Whip	T. M. Griswold	273,678	Mar. 6	565	150	23	930
Whip	E. K. Warren	286,748	Oct. 16	1220	329	25	236
Whip and rein holder. Combined	F. C. Ayer	287,493	Oct. 30	2170	589	25	421
Whip and rein holder. Combined	N. Robertson and H. C. Doll	285,161	Sept. 18	1230	340	24	1130
Whip-connection	W. J. Morand	271,504	Jan. 30	2092	602	23	417
Whip-coupling	E. Phelps	277,778	May 15	1549	421	23	1905
Whip-holder	S. Baker	234,995	Sept. 18	1033	289	24	1095
Whip-holder	J. J. Rose	289,310	Nov. 27	1866	525	25	864
Whip-lash	W. C. Schriek	273,319	Mar. 6	99	29	23	851
Whip-loop fastening	H. Mullen and J. Noble, Jr.	274,641	Mar. 27	1811	503	23	1169
Whip-rack	J. J. Read	290,268	Dec. 18	1113	313	25	1099
Whip-snaps. Machine for twisting	C. E. Williams	277,967	May 22	1773	483 484	23	1950
Whip-socket	F. Baumgartner	277,197	May 8	864	230	23	1780
Whip-socket	C. S. Bugbee	290,207	Dec. 18	1032	290	25	1085
Whip-socket	S. J. Clark	279,708	June 19	1361	379	23	2369
Whip-socket	P. Jasnowski	274,199	Mar. 20	1222	336	23	1060
Whip-socket	B. W. Morris and W. H. Rodgers	288,721	Nov. 20	1184	323	25	727
Whip-socket	E. W. Scott	272,907	Feb. 27	1692	474	23	758
Whip-socket	E. W. Scott	287,872	Nov. 6	102	30	25	525
Whip-socket	A. Searls	279,252	June 12	827	229	23	2275
Whip-socket	A. Searls	288,671	Nov. 20	1112	305	25	716
Whip-socket	J. Thornton	274,850	Mar. 27	2051	572	23	1211
Whip-socket	J. Thornton	285,707	Sept. 25	1884	537	24	1254
Whip-socket and rein-holder. Combined	J. L. Thomson	274,675	Mar. 27	1852	516	23	1176
Whip-socket fastener	A. Searls	283,520	Aug. 21	1270	356	24	741
Whip-socket fastener	A. Searls	287,874	Nov. 6	103	31	25	525
Whip-socket locking device	A. H. Lau	290,073	Dec. 11	868	247	25	1047
Whips. Machine for making	D. Doty	270,029	Jan. 2	238	69	23	49
Whips. Machine for rolling buttons on	W. J. Morand	271,503	Jan. 30	2091	601	23	417
Whips. Manufacture of	J. C. Schmidt	281,305	July 17	1206	333	24	227
Whisk-broom holder	C. E. Kidder	272,446	Feb. 20	1082	305	23	644
Whisk-broom holder	R. Skeog	270,137	Jan. 2	366	106	23	75
Whisk-brooms. Wall-case for supporting	H. Pattberg	281,393	July 17	1316	364	24	245
Whisky. Making	M. J. Allen and W. E. Bradley	287,213	Oct. 23	1818	498	25	349
Whistle. Steam	J. E. Gause	286,420	Oct. 9	806	218	25	156
Whistle. Steam	F. McCabe	285,639	Sept. 25	1807	514	24	1240
Whistles automatically. Device for blowing locomotive	E. A. Leland	278,440	May 29	2401	654	23	2068
Wick adjuster and trimmer for lamps	J. B. Deeds	283,217	Aug. 14	889	248	24	666
Wick cleaner. Lamp	C. E. Baldwin	278,075	May 22	1899	520	23	1972
Wick. Lamp	L. E. Clow	285,971	Oct. 2	241	68	25	46
Wick. Lamp	I. Lynd	270,447	Jan. 9	754	221	23	156
Wick-raiser	J. B. Deeds and W. Mack	276,525	Apr. 24	2124	591	23	1614
Wick-trimmer	A. J. Phipps	280,510	July 3	214	56	24	38
Wick-trimmer	W. C. Seaton	272,338	Feb. 13	931	259	23	613
Wick-trimmer	W. C. Seaton	283,521	Aug. 21	1271	356	24	741
Wick-trimmer. Lamp	P. G. Beckley	271,022	Jan. 23	1480	426	23	303
Wick-trimmer. Lamp	J. Holmes	278,965	June 5	431	118	23	2197
Wick-trimming shears	R. F. Hendley	271,982	Feb. 6	449	132	23	525
Wick-tube for oil-burners	F. H. Kelland and F. W. Ladd	283,255	Aug. 14	942	263	24	675
Wicket	M. L. Harrison and F. Underhill	270,309	Jan. 9	570	167 168	23	121
Wig-block holder	H. P. Leonard	282,537	Aug. 7	75	22	24	513
Wind-engine	P. T. Coffield	273,226	Feb. 27	2077	584	23	825
Wind-engine	G. E. Fletcher	275,032	Apr. 3	202	54	23	1260
Wind-engine	J. L. Walker	273,920	Mar. 13	877	238	23	992
Wind-engine	E. W. Wildey and W. L. Simons	272,370	Feb. 13	970	271	23	620



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Wind-locomotive.....	O. W. Burnell .....	271,784	Feb. 6	242	68	23	423
Wind-motor .....	C. M. Conradson .....	283,079	Aug. 14	721	202	24	635
Wind-motor .....	A. Dnmont .....	274,229	Mar. 20	1244	369	23	1080
Wind-wheel .....	J. M. Boyd .....	285,960	Oct. 2	230	65		
Wind-wheel .....	J. C. Butler .....	272,525	Feb. 20	1184	331	23	662
Wind-wheel .....	A., A. J., and C. Inglis .....	270,591	Jan. 16	945	273	23	202
Wind-wheel .....	R. G. Kirkwood .....	275,561	May 29	2542	693	23	2093
Wind-wheel .....	A. Sherwood .....	272,489	Feb. 20	1143	321	23	655
Winding cops, quills, bobbins, &c. Machine for .....	E. Barton .....	272,623	Feb. 20	1312	366	23	685
Winding-on mechanism for spinning-mules .....	W. McConnell .....	286,460	Oct. 9	849	230	25	165
Winding silk, thread, &c. Machine for .....	T. Wrigley .....	286,363	Oct. 9	739	198		
Winding thread upon spools. Machine for .....	C. F. Bosworth .....	270,376	Jan. 9	600	194	23	138
Winding yarn or thread. Machine for .....	J. and T. A. Boyd .....	276,758	May 1	300	76		
Winding yarn, thread, &c. Machine for .....	E. Ashworth .....	285,203	Sept. 18	1285	361	24	1139
Windlass .....	C. A. Bucklin and J. D. Knewlton .....	276,956	May 1	555	362		
Windlass .....	C. J. Hall .....	282,075	July 31	2191	144	23	1721
Windlass .....	F. A. Moore and A. J. Heaberlin .....	281,910	July 24	1967	145		
Windlass .....	F. A. Moore and A. J. Heaberlin .....	286,547	Oct. 9	956	602	24	406
Windlass. Marine steam- .....	J. F. Pankhurst .....	287,050	Oct. 23	1608	544	24	365
Windlass. Power- .....	H. Winter and F. S. Mantou .....	276,968	May 1	589	257	25	184
Windmill .....	W. P. Badger .....	285,948	Oct. 2	218	443	25	310
Windmill .....	W. Barnes .....	275,457	Apr. 10	778	155	23	1727
Windmill .....	C. D. Bowlus .....	274,261	Mar. 20	1308	61	25	42
Windmill .....	M. A. Button .....	275,137	Apr. 3	339	208	23	1367
Windmill .....	B. Chamberlain .....	284,945	Sept. 11	962	360	23	1075
Windmill .....	C. M. Ford .....	272,226	Feb. 13	797	93	23	1284
Windmill .....	S. Haney .....	270,059	Jan. 2	274	270	24	1075
Windmill .....	W. H. and C. A. Holcombe .....	271,635	Feb. 6	64	222	23	590
Windmill .....	L. M. Hoskins .....	274,329	Mar. 20	1398	80	23	56
Windmill .....	A. O. Koontz .....	272,064	Feb. 13	599	18	23	451
Windmill .....	S. E. Limpus .....	271,643	Feb. 6	71	383	23	1090
Windmill .....	J. M. Mack .....	272,566	Feb. 20	1246	162	23	556
Windmill .....	J. M. Murphy .....	279,178	June 12	714	20	23	453
Windmill .....	I. W. Russell .....	270,487	Jan. 9	798	347		
Windmill .....	C. F. W. Schramm .....	262,122	July 31	2266	348	23	673
Windmill .....	W. C. Sickles .....	279,194	June 12	731	195		
Windmill .....	H. B. Sprague .....	273,182	Feb. 27	2020	233	23	2255
Windmill .....	G. L. Stearns .....	273,183	Feb. 27	2021	621	24	416
Windmill .....	J. E. Toombs .....	273,642	Mar. 6	513	200	23	2258
Windmill .....	W. N. Trumble .....	276,939	May 1	532	568	23	816
Windmill .....	W. J. Vaughn .....	278,756	June 5	100	28	23	922
Windmill .....	L. Wilcox .....	278,842	June 5	231	138	23	1717
Windmill .....	W. E. Williams .....	272,821	Feb. 20	1558	100	23	2140
Windmill .....	F. Witherspoon .....	279,066	June 5	537	68	23	2162
Windmill and derrick .....	I. W. Lamb .....	276,831	May 1	385	438	23	729
Windmill attachment .....	A. G. Carman .....	275,140	Apr. 3	342	153	23	1694
Windmill for boats .....	P. J. Munson and G. H. Strand .....	279,973	June 26	1680	94		
Windmill. Geared .....	W. H. and C. A. Holcombe .....	283,109	Aug. 14	760	471	23	1285
Windmill. Horizontal .....	A. Zwiebel .....	274,541	Mar. 27	1693	214	24	642
Windmill-motor .....	H. S. Wilson .....	273,212	Feb. 27	2063	471	23	1147
Windmill power-transmitter .....	W. H. Aldrich and H. M. Laurie .....	272,014	Feb. 13	537	580	23	823
Windmill rotary .....	W. H. Ryther .....	278,748	June 5	89	245	23	545
Windmill. Self-regulating .....	G. K. Glenn .....	275,036	Apr. 3	205	23	2139	
Windmill-tower .....	J. S. Adams. (Reissue) .....	10,292	Mar. 6	587	156	23	935
Windmills, &c. Attachment to .....	D. Austin .....	272,618	Feb. 20	1307	364	23	683
Windmills. Mechanical power for .....	D. Austin .....	273,796	Mar. 13	722	196	23	966
Window .....	M. L. Edmunds .....	279,364	June 12	951	264	23	2293
Window and door screen .....	A. L. Benedict .....	290,312	Dec. 18	1169	327	25	1108
Window-cleaner .....	M. Hurley .....	274,334	Mar. 20	1404	385	23	1091
Window-cleaner .....	J. Kirkham .....	275,921	Apr. 17	1370	377	23	1476
Window-cleaning guard .....	M. R. Jaboeuf .....	290,431	Dec. 18	1333	369	25	1137
Window-head fastener .....	C. H. Myers .....	280,756	July 3	514	145	24	91
Window drip-pan .....	W. S. Taylor .....	289,174	Nov. 27	1723	480	25	832
Window-frame .....	W. Beisen .....	276,219	Apr. 24	1731	479	23	1547
Window-frame .....	W. W. Beyington .....	286,584	Oct. 16	1009	272	25	200
Window-guard .....	B. Schmitt .....	276,082	Apr. 17	1558	273		
Window. Incidence .....	F. Bredehorst .....	276,761	May 1	304	78	23	1509
Window-jack .....	G. W. Dearborn .....	280,603	July 10	584	420	23	1678
Window-platform and fire-escape. Combined .....	T. Jarvis .....	279,167	June 12	703	191	24	110
Window. Removable bay- .....	C. A. Nordyke .....	280,946	July 10	758	213	23	9253
Window-sash ventilator .....	E. W. Chadwick .....	289,387	Dec. 4	18	6	25	890
Window-screen .....	W. G. Anderson .....	284,588	Sept. 11	526	149	24	999
Window-screen .....	W. E. Brock .....	290,173	Dec. 11	982	277	25	1068
Window-screen .....	J. W. Carman .....	277,111	May 8	759	200	23	1762
Window-screen .....	V. R. Chamberlin .....	288,160	Nov. 6	451	126	25	586
Window-screen .....	P. W. Fry .....	288,921	Nov. 20	1416	390	25	771
Window-screen .....	H. F. Geist .....	278,006	May 22	1826	498	23	1939
Window-screen .....	J. N. Gibney .....	290,568	Dec. 18	1520	418	25	1169
Window-screen .....	S. Glass and G. H. Noble .....	289,526	Dec. 4	193	54	25	920
Window-screen .....	E. Hunter .....	284,410	Sept. 4	308	86	24	955
Window-screen .....	F. Isard and W. S. Leiter .....	288,943	Nov. 20	1445	398	25	776
Window-screen .....	A. W. Lovejoy .....	272,824	Feb. 27	1668	466	23	754
Window-screen .....	J. H. McVay .....	272,068	Feb. 13	602	163	23	556
Window-screen .....	J. M. Montgomery, Jr. .....	272,145	Feb. 13	699	191	23	573
Window-screen .....	J. D. Palmer .....	272,302	Feb. 13	883	247	23	606
Window-screen .....	J. D. Palmer .....	279,882	June 19	1561	437	23	2405

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'ts	Vol.	Page.
Window-screen .....	R. J. Parrett.....	270,469	Jan. 9	781	228	23	162
Window-screen .....	J. W. Thompson.....	290,496	Dec. 18	1418	392	25	1152
Window-screen .....	J. Watson.....	288,262	Nov. 13	611	168	25	622
Window-screen. Adjustable .....	G. W. and W. H. Gordon.....	282,716	Aug. 7	301	85	24	552
Window-screen frame .....	E. J. Brent.....	281,964	July 24	2053	{ 562 563 }	24	376
Window-screen. Rolling .....	A. Brown.....	285,006	Sept. 18	1048	294	24	1098
Window-screens. Making .....	W. G. Anderson.....	279,851	June 19	1524	426	23	2398
Window-shade .....	A. Barricklo.....	276,152	Apr. 24	1653	456	23	1534
Window-shade .....	W. J. Cox.....	282,277	July 31	2455	676	24	449
Window-shade .....	W. T. Estberg.....	288,043	Nov. 6	320	90	25	562
Window-shade .....	P. Michel.....	290,698	Dec. 25	1686	464	25	1204
Window-shade .....	W. H. Paulding.....	281,128	July 10	975	272	24	179
Window shade and screen .....	E. Green.....	289,408	Dec. 4	42	12	25	894
Window-shade pull .....	C. W. Clark.....	273,028	Feb. 27	1834	513	23	782
Window-shade roller .....	W. F. Edwards.....	271,438	Jan. 30	2002	578	23	402
Window-shade roller .....	B. F. Fox.....	280,808	July 10	588	164	24	110
Window-shade weight and pull. Combined .....	J. H. Russ.....	280,768	July 3	533	149	24	94
Window-shades. Frame for stretching and drying .....	P. Richter.....	278,184	May 22	2042	561	23	1997
Window-shades, &c. Manufacture of .....	J. Hartnagel.....	274,594	Mar. 27	1758	23	23	1159
Window-shades to rods which are used with their free ends. Attachment of .....	C. Flos.....	286,191	Oct. 9	506	139	25	104
Window-slat adjuster .....	G. Hayes.....	279,155	June 12	693	190	23	2252
Window-slat adjuster .....	G. Hayes.....	279,156	June 12	694	190	23	2252
Window-ventilator .....	J. Badger.....	287,791	Nov. 6	4	2	25	507
Window-ventilator .....	J. G. Bronson.....	270,733	Jan. 16	1125	332	23	235
Window-ventilator .....	C. F. Müller.....	287,848	Nov. 6	69	21	25	510
Window-ventilator .....	J. G. Reinl.....	287,055	Oct. 23	1616	445	25	312
Window-washing seat .....	C. L. Watt.....	290,506	Dec. 18	1436	397	25	1155
Windows. Manufacture of colored-glass .....	J. La Farge.....	274,948	Apr. 3	83	23	23	1239
Wine and cider press .....	J. Treher.....	271,161	Jan. 23	1646	473	23	331
Wine and cider press .....	H. Tyack.....	290,653	Dec. 18	1620	{ 445 446 }	25	1186
Wine and other liquids. Apparatus for treating .....	C. G. Frash.....	285,607	Sept. 25	1769	501	24	1233
Wine. Apparatus for maturing sherry .....	M. T. De Abreu.....	277,554	May 15	1291	{ 347 348 }	23	1859
Winker-straps. Connecting device for .....	H. Latshaw.....	270,958	Jan. 23	1407	405	23	291
Wipe-joint. Imitation .....	N. Spofford.....	284,917	Sept. 11	929	261	24	1069
Wire and cord stretcher .....	J. Sedgwick.....	277,068	May 8	707	184	23	1753
Wire-annealing pot .....	H. Roberts.....	275,522	Apr. 10	864	233	23	1382
Wire. Apparatus for assorting straight and crooked .....	J. A. Morton.....	290,700	Dec. 25	1689	465	25	1205
Wire. Apparatus for elevating and holding spools of .....	L. Williams and E. M. Bates.....	290,300	Dec. 18	1149	322	25	1104
Wire. Barbed .....	C. S. Locke.....	277,423	May 8	1123	302	23	1825
Wire. Barbed .....	W. A. Root.....	281,300	July 17	1200	332	24	226
Wire. Barbed .....	A. J. Upham.....	286,507	Oct. 9	906	245	25	175
Wire-barbing machine .....	F. W. Brainerd.....	277,451	May 15	1164	312	23	1839
Wire-barbing machine .....	O. P. Briggs.....	281,444	July 17	1384	{ 380 381 }	24	256
Wire-barbing machine .....	J. H. Coon.....	285,016	Sept. 18	1062	{ 297 298 }	24	1100
Wire-barbing machine .....	H. B. Hedge and T. A. Noble.....	273,838	Mar. 13	774	210	23	975
Wire-barbing machine .....	A. Johnston.....	273,286	Mar. 6	48	15	23	843
Wire-barbing machine .....	E. P. Peacock.....	287,714	Oct. 30	2469	{ 665 666 }	25	479
Wire-barbing machine .....	H. B. Scott.....	280,676	July 3	405	113	24	72
Wire-barbing machine .....	D. C. Stover.....	285,855	Oct. 2	91	27	25	18
Wire-barbing machine .....	D. C. Stover.....	287,783	Oct. 30	2563	689	25	496
Wire-barbing machines. Center for .....	W. T. Burrows.....	289,750	Dec. 4	476	134	25	970
Wire bending and forming machine .....	W. B. Curtiss.....	283,327	Aug. 14	1025	{ 287 288 289 }	24	691
Wire clamp. Ground .....	H. W. Pope.....	283,276	Aug. 14	965	269	24	679
Wire-cloth for the manufacture of paper, &c. ....	G. R. Caldwell.....	284,273	Sept. 4	143	40	24	928
Wire-cloth-sample card .....	H. H. Waters.....	272,005	Feb. 6	516	138	23	529
Wire-coating apparatus .....	L. L. Smith.....	276,914	May 1	485	128	23	1711
Wire-coating for drawing .....	A. B. Clemence.....	282,055	July 31	2165	.....	24	401
Wire-coiling machine .....	E. W. Durkee.....	273,483	Mar. 6	312	85	23	887
Wire continuously. Process of and apparatus for annealing, cleaning, and galvanizing or plaiting .....	C. S. Hall, C. M. Whitcomb, and W. J. D'Ewart.....	286,538	Oct. 9	944	254	25	182
Wire-coupling .....	C. Collins.....	278,097	May 22	1929	529	23	1977
Wire-covering machine .....	W. Halkyard.....	281,186	July 10	1048	290	24	192
Wire. Device for handling spooled barbed .....	W. T. Burrows.....	290,969	Dec. 25	2044	562	25	1266
Wire. Die for indenting .....	M. Wieser.....	271,178	Jan. 23	1671	481	23	334
Wire-drawing machine .....	W. T. Brennan.....	289,805	Dec. 11	539	150	25	987
Wire fabric and making the same .....	J. Simonson.....	281,804	July 24	1855	507	24	342
Wire fabrics. Machine for making .....	W. J. Davisson.....	289,507	Dec. 4	170	{ 46 47 48 }	25	916
Wire. Forming metal .....	G. Gray.....	276,391	Apr. 24	1961	543	23	1585
Wire from sheet metal. Machine for forming .....	J. M. Estabrook.....	280,023	June 26	1747	{ 490 491 }	23	2443
Wire. Implement for handling coils of .....	A. McGuiggan.....	288,467	Nov. 13	862	233	25	665
Wire. Let-off mechanism for looms for weaving .....	C. Smith.....	277,623	May 15	1372	369	23	1873
Wire. Loom for weaving .....	J. McMurray.....	288,468	Nov. 13	863	{ 233 234 }	25	665
Wire. Loom for weaving .....	C. F. Wickwire.....	282,430	July 31	2658	729	24	484
Wire looping and cutting apparatus .....	W. Wilson, Jr.....	290,955	Dec. 25	2015	556	25	1262
Wire machine. Barb- .....	W. Edenborn and G. Griésche.....	270,645	Jan. 16	1012	{ 291 292 293 }	23	214
Wire machine. Barb- .....	W. Edenborn and G. Griésche.....	270,646	Jan. 16	1015	{ 292 293 294 }	23	214
Wire machine. Barb- .....	H. Fuchs.....	278,930	June 5	390	107	23	2190
Wire machine. Barbed .....	O. O. Kittleson.....	280,189	June 26	1925	{ 541 542 }	23	2476



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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Wire. Machine for engraving	J. A. Charnley	290,318	Dec. 18	1176	329	25	1110
Wire. Machine for making barbed	O. P. Briggs	281,443	July 17	1375	379 380	24	255
Wire. Machine for making barbed	J. W. Nadelhoffer	281,120	July 10	958	268 269	24	176
Wire. Machine for making barbed	N. G. Ross	273,705	Mar. 13	687	184 185	23	959
Wire. Machine for stringing barbs on	O. P. Briggs	282,698	Aug. 7	268	77, 78	24	546
Wire. Manufacture of covered or insulated	J. D. Thomas	271,750	Feb. 6	197	55, 56	23	474
Wire. Manufacturing	E. J. Watson and C. S. Hall	279,295	June 12	843		23	2277
Wire nail	W. D. Sloan	276,541	Apr. 24	2143	596	23	1617
Wire-netting	W. H. Johnson	278,147	May 22	1996	549	23	1989
Wire or metal cleaning bath	B. F. Aiken, Jr.	288,150	Nov. 6	439		25	584
Wire-pointing machine	C. B. Brainard	279,124	June 12	654	179	23	2245
Wire preparatory to drawing. Coating for	E. J. Watson, C. S. Hall, and P. Bauer.	284,345	Sept. 4	227		24	943
Wire. Process-of and apparatus for manufacturing continuous lengths of coiled	F. P. Barney	283,557	Aug. 21	1312	367	24	749
Wire-puller	J. Keene	288,241	Nov. 13	561	156	25	614
Wire-reel	L. P. Johnson	280,628	July 3	348	96	24	61
Wire-reel	H. Roberts	266,639	Oct. 16	1081	291	25	212
Wire-reeling machine	J. Lynam	274,953	Apr. 3	89	24	23	1240
Wire rods. Apparatus for reeling	F. H. Daniels	290,216	Dec. 18	1046	294	25	1088
Wire rods. Making	F. H. Daniels	283,469	Aug. 21	1211	340	24	731
Wire rope and cables. Manufacturing	F. A. Wiswell	276,315	Apr. 24	1850	515 516 517	23	1567
Wire-rope grip	A. H. Mathesius	287,451	Oct. 30	2113	574	25	410
Wire-rope machine	T. S. Stevenson	288,677	Nov. 20	1122	308	25	717
Wire rope. Machine for making	F. A. Wiswell	276,318	Apr. 24	1870	519 520	23	1569
Wire rope. Machine for the manufacture of	F. A. Wiswell	276,317	Apr. 24	1861	518 519 517	23	1568
Wire rope. Manufacturing	F. A. Wiswell	276,316	Apr. 24	1857	518	23	1567
Wire seat. Woven	H. Roberts	276,881	May 1	447	120	23	1705
Wire seat. Woven	H. Roberts	279,598	June 19	1233	341 342	24	2347
Wire springs. Machine for forming	R. S. Baldwin	273,933	Mar. 13	894	244	23	995
Wire-straightener. Rotary	S. W. Goodyear and M. A. Morris	277,267	May 8	940	252	23	1794
Wire-stretcher	J. J. Cook	287,244	Oct. 23	1860	509	25	356
Wire-stretcher	G. S. Dean	281,673	July 24	1677	457	24	310
Wire-stretcher	A. C. Decker	288,166	Nov. 6	458	122	25	587
Wire-stretcher	W. C. Henshaw	279,948	June 26	1632	463	23	2428
Wire-stretcher	A. Hill	286,302	Oct. 9	663	177	25	130
Wire-stretcher	H. H. Hutchins	274,198	Mar. 20	1221	336	23	1060
Wire-stretcher	H. McIntosh	284,969	Sept. 11	990	279	24	1081
Wire-stretching machine	D. W. Norris and W. Young	288,359	Nov. 13	715	196	25	640
Wire-tightener	A. A. Atwood	290,384	Dec. 18	1258	353	25	1124
Wire to metal-coating baths. Apparatus for feeding	H. Roberts	275,521	Apr. 10	862	233	23	1381
Wire tubes. Machine for making	H. O. Lothrop	290,694	Dec. 25	1679	462	25	1203
Wire-twister	A. L. Sjölander and E. Larson	270,494	Jan. 9	807	235	23	167
Wire-tyer	B. F. Bell	279,525	June 19	1153	319	23	2333
Wire-wiper	H. Crich	274,727	Mar. 27	1907	532	23	1186
Wire-wiping apparatus	F. Crich	275,364	Apr. 10	652	174	23	1346
Wire-wiping compound	H. Roberts and F. Crich	275,415	Apr. 10	723		23	1359
Wire. Wiping metal-coated	H. Roberts	275,520	Apr. 10	860	232 233	23	1381
Wire, wire rods, &c. Apparatus for annealing, cleaning, and galvanizing or plating	T. Midgley	279,580	June 19	1213	336 337	23	2344
Wire-work. Machine for forming	F. J. Brand	274,557	Mar. 27	1711	475	23	1150
Wire wrapping or covering machine	C. Conner	278,099	May 22	1931	530	23	1978
Wires. Composition for coating and insulating underground	H. R. Brissett and J. Howe	283,200	Aug. 14	870		24	662
Wires. Machine for stringing barbs upon	S. Turner and G. B. Durkee	281,653	July 17	1641	448 449	24	299
Wires. Roll for flattening the ends of terminal	A. Swan	276,982	May 1	583	153	23	1726
Wires through tubes. Apparatus for threading	H. B. Lytle	273,295	Mar. 6	66	19	23	845
Wires through tubes. Motor for drawing	W. J. Philips and G. L. Kitson	274,818	Mar. 27	2019	562	23	1206
Wonder-camera	E. B. Foote, Jr.	273,500	Mar. 6	328	89	23	890
Wood and metal. Compound for preserving	L. D. Mott, Jr.	284,653	Sept. 11	603		24	1012
Wood-bending form	B. M. Myers and W. H. H. Williams	283,412	Aug. 21	1139	322	24	718
Wood-bending machine	G. Meyer	281,104	July 10	936	262	24	173
Wood by impregnation to given heights. Preserving	G. S. Valentine	285,087	Sept. 18	1148	321	24	1114
Wood-cutter	J. Burge	284,944	Sept. 11	961	270	24	1075
Wood. Cutting articles from	S. H. Smith	278,828	June 5	207	61	23	2158
Wood-cutting machine	J. L. Gage	272,038	Feb. 13	564	152 153	23	550
Wood-dressing machine	S. R. Bailey	277,827	May 15	1601	438	23	1915
Wood-filler	R. Parke	281,721	July 24	1746		24	322
Wood-fluting machine	E. I. Engelmann	283,874	Aug. 28	1698	478	24	831
Wood. Machine for bundling kindling	M. J. Shaw	282,381	July 31	2591	712	24	472
Wood. Machine for ornamenting	W. J. Robinson	283,664	Aug. 21	1431	401	24	772
Wood. Manufacture of articles of	S. C. Bigford	285,455	Sept. 25	1589	446	24	1198
Wood-oiling apparatus	F. Herboth	287,025	Oct. 23	1578	435	25	305
Wood-oiling machine	J. L. Mathews	288,465	Nov. 13	859	232 233	25	665
Wood. Ornamenting	J. P. Jamison	271,469	Jan. 30	2049	590	23	409
Wood-polishing machine	A. Bridgman and J. Challoner	285,728	Sept. 25	1919	544 545	24	1259
Wood-polishing machine	J. L. Perry	273,303	Mar. 6	76	22, 23	23	847
Wood-polishing machine	J. Willis	278,647	May 29	2651	725	23	2111
Wood-preserving composition	L. N. Teachman	277,810	May 15	1583		23	1911
Wood. Solution for seasoning and preserving	J. Loomis	273,661	Mar. 13	810	219	23	961

*Alphabetical list of inventions—Continued.*

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Wood-splitting machine.....	A. B. Holcombe.....	269,856	Jan. 2	44	14	23	11
Wood-splitting machine.....	W. H. Mors and J. C. Cross.....	280,657	July 3	381	107	24	67
Wood-staining compound.....	A. W. O'Blennus.....	270,833	Jan. 16	1244	.....	23	258
Wood-turning machine.....	J. D. Craig.....	280,453	July 3	143	39	24	27
Wood-turning machine.....	F. Hanson.....	272,242	Feb. 13	816	227	23	593
Wood-working machine.....	J. G. Anstin.....	270,014	Jan. 23	1472	{ 423 424 }	23	302
Wood-working machine.....	W. E. Varney and W. J. Hull.....	279,051	June 5	538	{ 147 148 }	23	2215
Wood-working machine.....	W. E. Varney and W. J. Hull.....	279,052	June 5	541	148	23	2215
Wood-working machine cutter.....	A. I. Sanborn.....	282,671	Aug. 7	235	68	24	540
Wood-working machines. Balancing knives for.....	H. A. Crossley.....	285,236	Sept. 18	1326	374	24	1146
Wood-working machines. Endless-chain bed for.....	L. P. Hoyt.....	275,213	Apr. 3	427	117	23	1299
Wood-working machines. Registering attachment for.....	A. E. Palmer.....	273,383	Mar. 6	190	51	23	866
Wooden bows. Cooling-rack for bent.....	W. Aldrich.....	271,584	Feb. 6	1	1	23	441
Wooden plate.....	S. H. Smith.....	273,773	Mar. 13	697	187	23	951
Wooden plate.....	E. C. Westervelt.....	284,347	Sept. 4	230	65	24	943
Wooden plates. Machine for cutting.....	S. H. Smith.....	276,198	Apr. 24	1706	{ 471 472 }	23	1543
Wooden rings. Machine for making.....	R. V. Boice.....	273,806	Mar. 13	733	199	23	968
Wooden rings. Polishing.....	T. J. Sammons.....	280,520	July 3	224	59	24	40
Wooden shovel.....	F. A. Stegner.....	281,158	July 10	1007	282	24	185
Wool. Apparatus for extracting grease from.....	A. H. Butel.....	276,349	Apr. 24	1906	529	23	1576
Wool-combing machine.....	W. Wardman.....	276,313	Apr. 24	1849	515	23	1567
Wool. Method of and apparatus for removing vegetable matter from.....	A. Snoeck.....	270,992	Jan. 23	1446	417	23	293
Wool, &c. Process of and apparatus for extracting oil, fat, and oily and fatty matters from.....	T. J. Mullings.....	287,786	Oct. 30	2567	690	25	497
Wool-washing machine.....	T. J. Mullings.....	285,831	Oct. 2	60	18	25	13
Woolen fabrics from short-staple fiber. Manufacturing.....	L. Chaux.....	288,015	Nov. 6	291	.....	25	557
Work-bench.....	C. A. Williams.....	289,947	Dec. 11	712	201	25	1013
Work-benches. Device for fastening saw-clamps, &c., to.....	A. B. Coburn.....	289,227	Nov. 27	1791	496	25	845
Work-holding device.....	H. A. Davis.....	281,244	July 17	1133	312	24	214
Work-table. Lady's.....	B. G. Borgesen.....	272,201	Feb. 13	764	211	23	584
Woven fabric and loom for weaving the same.....	A. Urbahn.....	289,731	Dec. 4	452	{ 126 127 }	25	965
Wrench:							
See Carriage-wrench. Ratchet-wrench.							
Jaw-wrench. Revolving wrench.							
Machine-wrench. Socket-wrench.							
Monkey-wrench. Stud-wrench.							
Pipe-wrench. Suspension-wrench.							
Pipe or nut wrench. Tap-wrench.							
Wrench.....	F. Armstrong.....	274,544	Mar. 27	1697	471	23	1148
Wrench.....	F. Armstrong and J. H. Hine.....	274,545	Mar. 27	1698	471	23	1148
Wrench.....	H. W. Atwater.....	284,162	Sept. 4	2	1	24	905
Wrench.....	W. Baxter.....	281,431	July 17	1362	376	24	252
Wrench.....	W. Baxter.....	281,432	July 17	1363	376	24	252
Wrench.....	C. A. Blomquist and T. Buskirk.....	284,598	Sept. 11	537	152	25	1001
Wrench.....	J. H. Bowen.....	273,017	Feb. 27	1819	510	23	780
Wrench.....	J. J. Brandt.....	283,696	Aug. 21	1476	416	24	781
Wrench.....	J. W. Calef.....	273,461	Mar. 6	285	77	23	882
Wrench.....	J. H. Cole.....	289,069	Nov. 27	1605	445	25	811
Wrench.....	H. Crowther.....	288,927	Nov. 20	1422	392	25	772
Wrench.....	G. W. Davenport.....	279,722	June 19	1377	384	23	2372
Wrench.....	J. Davidson.....	289,506	Dec. 4	169	46	25	916
Wrench.....	R. W. Davis.....	286,913	Oct. 16	1429	393	25	272
Wrench.....	J. A. Dodge.....	274,113	Mar. 20	1122	309	23	1041
Wrench.....	I. W. and T. F. Giles.....	277,265	May 8	938	252	23	1794
Wrench.....	J. M. Hamrick.....	278,135	May 22	1984	545	23	1987
Wrench.....	J. M. Harland.....	288,432	Nov. 13	815	221	25	658
Wrench.....	I. Q. Holmes.....	284,015	Aug. 28	1895	531	24	866
Wrench.....	J. Houlehan.....	278,553	May 29	2535	691	23	2092
Wrench.....	J. Houlehan.....	289,347	Nov. 27	1936	537	25	873
Wrench.....	A. Hyde.....	286,543	Oct. 9	953	256	25	183
Wrench.....	W. E. Lawrence.....	285,415	Sept. 25	1540	434	24	1190
Wrench.....	J. Lee.....	288,713	Nov. 20	1164	319	25	724
Wrench.....	J. McAlpin.....	277,590	May 15	1330	357	23	1865
Wrench.....	D. V. Miller.....	283,801	Aug. 28	1614	454	24	817
Wrench.....	C. H. Myers.....	288,098	Nov. 6	384	108	25	574
Wrench.....	G. F. Newell.....	279,661	June 19	1307	363	23	2360
Wrench.....	F. E. Okie and J. F. Simpson.....	279,271	June 12	819	226	23	2273
Wrench.....	G. W. Pittman.....	286,842	Oct. 16	1339	366	25	258
Wrench.....	D. R. Porter.....	278,265	May 22	2153	591	23	2016
Wrench.....	O. E. H. N. Reichling.....	275,079	Apr. 3	265	73	23	1271
Wrench.....	C. Schinke.....	280,673	July 3	403	112	24	71
Wrench.....	W. J. Sherman.....	283,675	Aug. 21	1450	407	24	776
Wrench.....	W. N. Smith and H. M. Vincent.....	286,561	Oct. 9	976	262	25	187
Wrench.....	B. F. Stockford.....	281,318	July 17	1226	339	24	229
Wrench.....	H. A. Thompson.....	286,653	Oct. 16	1097	296	25	215
Wrench.....	C. D. Wells and C. A. Newlin.....	285,449	Sept. 25	1580	444	24	1197
Wrench.....	H. Wheeler.....	279,896	June 19	1577	442	23	2408
Wrench and pinchers. Combined.....	S. L. Willmer.....	270,356	Jan. 9	630	186	23	133
Wrench and stretcher. Combined.....	W. A. Irwin.....	285,902	Oct. 2	159	44	25	31
Wrench. Automatic self-setting.....	B. F. Bonnett.....	287,998	Nov. 6	268	76	25	554
Wrench for wagon-axle nuts.....	T. L. Whitacre.....	284,521	Sept. 4	444	126	24	980
Wringer:							
See Clothes-wringer. Mop-wringer.							
Wringing-machines. Anti-friction bearing for.....	J. Jonson.....	286,618	Oct. 16	1057	284	25	208
Wrist-pin lubricator.....	H. H. Kimball and C. E. Perry.....	273,256	Mar. 13	804	217	23	980
Wrist-pin lubricator.....	C. E. Perry and H. H. Kimball.....	278,817	June 5	187	54	23	2154



## Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & Co.	Vol.	Page.
Writing-case. Manifold .....	F. D. Scott and O. L. Gordon .....	281,403	July 17	1329	368	24	247
Writing. Device for holding and guiding the fingers in .....	I. Bergman .....	282,948	Aug. 14	564	160	24	608
Wrought and sheet iron vessel .....	J. Chaumont .....	287,624	Oct. 30	2353	635	25	456
Yarn-banking machine .....	J. F. McAfee .....	271,889	Feb. 6	365	101	23	505
Yarns or threads. Apparatus for manufacturing napped or filled .....	J. T. Waring .....	279,997	June 26	1707	479	23	2436
Yeast. Device for cutting .....	L. Kasehagen and H. Wietheger .....	282,088	July 31	2309	607	24	408
Yeast from juices of grains, &c. Production and collection of fertile .....	G. Clandon and C. Vigreux .....	279,337	June 12	907	.....	23	2287
Yeast. Preparing .....	T. J. Delany and W. W. Jameson .....	287,367	Oct. 23	2008	.....	25	383
Yeast. Preparation of .....	S. Levy. (Reissue) .....	10,341	June 12	1135	.....	23	2324
Yoke attachment. Neck .....	F. Svoboda .....	282,471	July 31	2707	744	24	492
Yoke center. Neck .....	J. L. Ryno .....	291,005	Dec. 25	2092	576	25	1273
Yoke coupling. Neck .....	J. McKibbin .....	290,257	Dec. 18	1092	304	25	1096
Yoke for draft-animals .....	E. L. Johnson .....	287,682	Oct. 30	2420	653	25	471
Yoke holder. Neck .....	S. Colahan .....	288,024	Nov. 6	298	84	25	588
Yoke. Neck .....	C. H. Bambach .....	274,696	Mar. 27	1877	523	23	1181
Yoke. Neck .....	E. B. Childs .....	278,400	May 29	2348	642	23	2058
Yoke. Neck .....	J. B. Dobyne and R. S. Fleming .....	281,250	July 17	1145	315	24	215
Yoke. Neck .....	G. A. Gregerson .....	274,759	Mar. 27	1948	542	23	1194
Yoke. Neck .....	E. H. Haight .....	278,703	June 5	37	11	23	2131
Yoke. Neck .....	J. W. Harris .....	289,256	Nov. 27	1821	503	25	851
Yoke. Neck .....	E. B. Hartwell .....	278,952	June 5	415	113	23	2194
Yoke. Neck .....	J. Hollister .....	269,858	Jan. 2	46	14	23	12
Yoke. Neck .....	L. D. Hornbeck .....	270,802	Jan. 16	1207	348	23	251
Yoke. Neck .....	G. W. Hurd .....	287,834	Nov. 6	54	16	25	517
Yoke. Neck .....	J. Jensen .....	280,183	June 26	1820	540	23	2474
Yoke. Neck .....	F. C. Johnson .....	282,529	Aug. 7	66	20	24	512
Yoke. Neck .....	Z. Norton .....	277,503	May 15	1224	329	23	1849
Yoke. Neck .....	J. H. Osborne .....	282,918	Aug. 7	524	147	24	593
Yoke. Neck .....	J. T. Ramsey .....	288,364	Nov. 13	730	198	25	642
Yoke. Neck .....	H. A. Schermerhorn .....	275,714	Apr. 10	1100	300	23	1422
Yoke. Neck .....	H. R. Wallace .....	279,847	June 19	1520	425	23	2397
Zinc. Apparatus for the manufacture of oxide of .....	M. Lambert .....	283,901	Aug. 28	1728	488	24	836
Zinc. Manufacture of anhydrous sulphide of .....	T. Mactarlane .....	271,090	Jan. 23	1562	.....	23	317
Zinc ores. Process of and apparatus for reducing .....	L. Létrange .....	286,208	Oct. 9	523	144	25	407
Zithern .....	G. Bender .....	286,524	Oct. 9	928	250	25	179
Zylonite, &c. Apparatus for polishing sheets of .....	J. B. Edson .....	289,239	Nov. 27	1803	499	25	847
Zylonite, &c., for collars, cuffs, &c. Forming and finishing fabrics coated with .....	J. B. Edson .....	289,242	Nov. 27	1805	.....	25	848
Zylonite. Forming and finishing surfaces coated with .....	J. B. Edson .....	289,240	Nov. 27	1804	.....	25	848
Zylonite to resemble pebble-goat, French calf, and alligator leather. Treating material with .....	J. B. Edson .....	289,338	Nov. 27	1926	.....	25	871
Zylonite with other sheeted substances. Combining sheets of .....	J. B. Edson .....	290,553	Dec. 18	1498	413	25	1165





# ALPHABETICAL LIST OF DESIGNS.

Design.	Name.	No.	Date.	Official Gazette.	
				Volume.	Page.
Advertising-blank.....	C. K. Mills.....	13,520	Jan. 9	23	95
Advertising-clock.....	W. Bellman.....	14,090	July 17	24	207
Advertising-column.....	R. D. Bradley.....	14,137	July 31	24	393
Advertising device.....	H. P. Childs.....	13,693	Mar. 6	23	834
Advertising-post.....	G. Enchs.....	14,140	July 31	24	393
Alphabet.....	S. H. Holland.....	14,143	July 31	24	393
Alto-relievo.....	W. Schumacher.....	14,041	July 3	24	2
Apron. Baby's creeping.....	M. Turner.....	14,456	Nov. 27	25	790
Arm-chair.....	N. Wheeler.....	13,713	Mar. 6	23	834
Atomizer.....	J. G. Justin.....	13,975	June 12	23	2342
Autograph-sheet.....	D. Gerson.....	13,696	Mar. 6	23	834
Axle-nut.....	D. Wentworth.....	14,089	July 10	24	104
Badge or emblem.....	P. H. Riru.....	13,992	June 19	23	2329
Bag or satchel. Hand.....	A. L. Silberman.....	14,464	Dec. 4	25	885
Banner.....	S. W. Johnson.....	14,256	Sept. 4	24	903
Bas-relief.....	E. Meyer.....	13,924	May 22	23	1930
Basin. Lavatory.....	T. Haynes.....	14,023	July 3	24	1
Basque. Lady's.....	C. O'Hara.....	14,432	Nov. 20	25	702
Basque. Lady's.....	J. Q. Reed.....	14,511	Dec. 25	25	1193
Basque. Lady's.....	L. Tully.....	14,460	Nov. 27	25	790
Basque. Lady's dress.....	J. Q. Reed.....	14,371	Oct. 23	25	293
Bed-spring.....	B. T. Millikin.....	14,242	Aug. 28	24	802
Bed-spring.....	S. H. Turner.....	13,820	Mar. 27	23	1126
Bell.....	W. E. Barton.....	14,263	Sept. 11	24	997
Bell. Sleigh.....	W. E. Barton.....	14,236	Aug. 28	24	801
Blouse. Boy's.....	J. Q. Reed.....	14,453	Nov. 27	25	790
Boot-strap.....	H. C. Noble.....	13,985	June 19	23	2329
Bottle.....	T. Davis.....	13,736	Mar. 20	23	1035
Bottle.....	C. Gulden.....	13,868	Apr. 24	23	1532
Bottle.....	M. G. Landsberg.....	13,699	Mar. 6	23	834
Bottle.....	H. H. Warner.....	14,435	Nov. 20	25	702
Bottle-coaster.....	F. B. Wilson.....	14,437	Nov. 20	25	702
Bottle. Pickle.....	H. J. Heinz.....	14,254	Sept. 4	24	903
Bottle show-box.....	R. H. Brown.....	{ 14,252 14,253 }	Sept. 4	24	903
Bottle-stopper.....	J. S. Stites.....	14,330	Sept. 25	24	1180
Bottles. Ornamenting.....	S. J. Cox.....	14,154	Aug. 7	24	499
Box.....	T. Candy.....	13,692	Mar. 6	23	834
Bracelet.....	R. H. Ahn.....	14,438	Nov. 27	25	789
Bracelet.....	H. E. Chadwick and H. P. Lester.....	14,391	Nov. 6	25	506
Bracelet-chain.....	B. S. Freeman.....	14,093	July 17	24	207
Breastpin.....	C. A. Fowler.....	14,502	Dec. 25	25	1193
Breastpin.....	J. T. Quayle.....	14,480	Dec. 11	25	984
Bridle-bit.....	H. E. Fowler.....	13,867	Apr. 24	23	1531
Brush-handle.....	J. B. Edson.....	14,331	Oct. 2	25	1
Buckle.....	C. V. Goddard.....	13,898	May 8	23	1736
Buckle.....	R. G. Hanford, Jr.....	13,832	Apr. 3	23	1125
Bureau.....	J. F. Reitz.....	14,317	Sept. 18	24	1094
Burial-casket.....	W. J. Noble.....	13,703	Mar. 6	23	834
Burial-casket.....	T. M. Taylor.....	13,970	June 5	23	2123
Burial-caskets. Ornamentation of.....	S. Reynolds.....	14,496	Dec. 18	25	1081
Burial-caskets. Ornamentation of.....	S. Reynolds.....	14,527	Dec. 25	25	1194
Butter-print.....	G. M. Oyster.....	14,102	July 17	24	207
Button back. Sleeve.....	T. A. Searle.....	14,106	July 17	24	207
Button. Lady's collar.....	G. H. Cragg.....	13,610	Feb. 13	23	543
Button. Sleeve.....	F. I. Marcy.....	14,241	Aug. 23	24	802
Button. Sleeve.....	A. P. Phillips.....	14,260	Sept. 4	24	903
Calendar.....	J. H. Littell.....	14,159	Aug. 7	24	499
Calendar.....	C. S. Nathan.....	{ 14,026 to 14,028 }	July 3	24	1
Calendar-card.....	H. Toasperm, Jr.....	14,465	Dec. 4	25	885
Car. Railway.....	N. Wheeler.....	13,712	Mar. 6	23	834
Card.....	G. M. Hayes.....	13,697	Mar. 6	23	834
Card.....	G. M. Hayes.....	13,860	Apr. 24	23	1532
Card.....	C. A. Wright.....	13,567	Jan. 30	23	347
Card. Cigarette show.....	J. Huppman.....	14,322	Sept. 25	24	1180
Card-grinding machine.....	B. S. Roy.....	13,888	May 1	23	1626
Carpet.....	F. Allen.....	{ 13,733 to 13,735 }	Mar. 20	23	1035
Carpet.....	F. Allen.....	{ 14,110 to 14,114 }	July 24	24	305
Carpet.....	A. Beaumont.....	{ 14,249 to 14,251 }	Sept. 4	24	903
Carpet.....	F. Bend.....	{ 14,134 14,135 }	July 31	24	393
Carpet.....	E. H. Bennett.....	14,288	Sept. 18	24	1093

*Alphabetical list of designs—Continued.*

Design.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Carpet .....	P. C. Chambellan .....	14,017	July 3	24	1
Carpet .....	F. W. B. Christie .....	14,047	July 10	24	103
Carpet .....	F. W. B. Christie .....	14,180	Aug. 21	24	707
Carpet .....	A. Cochran .....	{ 13,653 to 13,660 }	Feb. 27	23	743
Carpet .....	A. Cochran .....	14,424	Nov. 20	25	702
Carpet .....	E. A. Costain .....	14,467	Dec. 11	25	983
Carpet .....	E. A. Crowe .....	{ 13,569 to 13,572 }	Feb. 6	23	439
Carpet .....	E. A. Crowe .....	{ 13,822 13,823 }	Mar. 27	23	1126
Carpet .....	E. A. Crowe .....	{ 13,929 to 13,939 }	May 29	23	2036
Carpet .....	E. A. Crowe .....	{ 14,048 to 14,058 }	July 10	24	103
Carpet .....	E. A. Crowe .....	{ 14,172 to 14,179 }	Aug. 21	24	707
Carpet .....	E. A. Crowe .....	{ 14,289 14,290 }	Sept. 18	24	1093
Carpet .....	A. Danby .....	{ 13,573 to 13,575 }	Feb. 6	23	439
Carpet .....	A. Danby .....	13,611	Feb. 13	23	543
Carpet .....	A. Danby .....	14,354	Oct. 23	25	293
Carpet .....	H. Davis .....	14,059	July 10	24	103
Carpet .....	E. Fajon .....	13,623	Feb. 20	23	633
Carpet .....	E. Fajon .....	13,856	Apr. 17	23	1449
Carpet .....	E. Fajon .....	13,903	May 15	23	1836
Carpet .....	A. Fisher .....	14,440	Nov. 27	25	789
Carpet .....	E. Fisher .....	{ 13,576 to 13,578 }	Feb. 6	23	439
Carpet .....	E. Fisher .....	13,624	Feb. 20	23	633
Carpet .....	E. Fisher .....	{ 13,808 13,809 }	Mar. 27	23	1125
Carpet .....	E. Fisher .....	{ 13,941 to 13,947 }	May 29	23	2036
Carpet .....	E. Fisher .....	13,965	May 29	23	2036
Carpet .....	E. Fisher .....	{ 14,060 to 14,065 }	July 10	24	103
Carpet .....	E. Fisher .....	14,182	Aug. 21	24	707
Carpet .....	J. L. Folsom .....	{ 13,737 to 13,792 }	Mar. 20	23	{ 1035 1036 }
Carpet .....	J. L. Folsom .....	{ 14,183 to 14,212 }	Aug. 21	24	707
Carpet .....	J. L. Folsom .....	14,266	Sept. 11	24	997
Carpet .....	J. L. Folsom .....	14,343	Oct. 9	25	97
Carpet .....	W. J. Gadsby .....	13,579	Feb. 6	23	439
Carpet .....	W. J. Gadsby .....	13,793	Mar. 20	23	1036
Carpet .....	W. J. Gadsby .....	14,066	July 10	24	103
Carpet .....	W. J. Gadsby .....	14,291	Sept. 18	24	1093
Carpet .....	A. L. Halliday .....	13,997	June 19	23	2329
Carpet .....	A. L. Halliday .....	{ 14,019 to 14,022 }	July 3	24	1
Carpet .....	A. L. Halliday .....	14,116	July 24	24	306
Carpet .....	A. L. Halliday .....	14,141	July-31	24	393
Carpet .....	A. L. Halliday .....	{ 14,292 to 14,294 }	Sept. 18	24	1093
Carpet .....	A. L. Halliday .....	{ 14,332 14,333 }	Oct. 2	25	1
Carpet .....	A. Heald .....	{ 13,581 to 13,585 }	Feb. 6	23	439
Carpet .....	O. Heinigke .....	13,663	Feb. 27	23	743
Carpet .....	O. Heinigke .....	13,811	Mar. 27	23	1126
Carpet .....	O. Heinigke .....	{ 14,214 14,215 }	Aug. 21	24	707
Carpet .....	O. Heinigke .....	14,344	Oct. 9	25	97
Carpet .....	O. Heinigke .....	{ 14,347 14,348 }	Oct. 16	25	195
Carpet .....	O. Heinigke .....	14,469	Dec. 11	25	983
Carpet .....	R. P. Hemming .....	14,068	July 10	24	103
Carpet .....	R. P. Hemming .....	{ 14,357 to 13,625 }	Oct. 23	25	293
Carpet .....	H. Horan .....	{ 13,627 to 13,825 }	Feb. 20	23	633
Carpet .....	H. Horan .....	13,880	Mar. 27	23	1126
Carpet .....	H. Horan .....	{ 13,880 to 13,883 }	May 1	23	1626
Carpet .....	H. Horan .....	{ 14,217 14,218 }	Aug. 21	24	707



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Design.	Name.	No.	Date.	Official Gazette.	
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Carpet .....	H. Horan .....	{ 14,295 to 14,302 }	Sept. 18	24	1093
Carpet .....	H. Hunt .....	{ 13,664 13,665 }	Feb. 27	23	743
Carpet .....	H. Hunt .....	13,796	Mar. 20	23	1036
Carpet .....	H. Hunt .....	13,812	Mar. 27	23	1126
Carpet .....	H. Hunt .....	13,853	Apr. 10	23	1339
Carpet .....	H. Hunt .....	{ 14,360 13,667 }	Oct. 23	25	293
Carpet .....	W. L. Jacobs .....	{ 13,672 to 13,798 }	Feb. 27	23	743
Carpet .....	W. L. Jacobs .....	{ 13,801 to 13,813 }	Mar. 20	23	1036
Carpet .....	W. L. Jacobs .....	{ 14,219 to 14,224 }	Mar. 27	23	1126
Carpet .....	W. L. Jacobs .....	{ 14,224 to 14,345 }	Aug. 21	24	707
Carpet .....	W. L. Jacobs .....	{ 14,345 to 14,470 }	Oct. 9	25	97
Carpet .....	W. L. Jacobs .....	{ 14,473 to 14,504 }	Dec. 11	25	983
Carpet .....	W. L. Jacobs .....	{ 14,505 to 13,802 }	Dec. 25	25	1193
Carpet .....	W. Kerr .....	{ 13,804 to 13,702 }	Mar. 20	23	1036
Carpet .....	C. Magee .....	13,629	Mar. 6	23	834
Carpet .....	W. McCallum .....	14,267	Feb. 20	23	633
Carpet .....	W. McCallum .....	14,305	Sept. 11	24	997
Carpet .....	W. McCallum .....	14,363	Sept. 18	24	1093
Carpet .....	W. McCallum .....	{ 14,394 to 14,395 }	Oct. 23	25	293
Carpet .....	W. McCallum .....	13,591	Nov. 6	25	506
Carpet .....	D. McNair .....	13,630	Feb. 6	23	439
Carpet .....	D. McNair .....	{ 14,268 to 14,270 }	Feb. 20	23	633
Carpet .....	D. McNair .....	13,628	Sept. 11	24	997
Carpet .....	T. E. Meagher .....	13,631	Feb. 20	23	633
Carpet .....	T. E. Meagher .....	14,119	Feb. 20	23	633
Carpet .....	T. E. Meagher .....	{ 13,862 to 13,863 }	July 24	24	305
Carpet .....	D. G. Melville .....	14,071	Apr. 17	23	1450
Carpet .....	D. G. Melville .....	14,306	July 10	24	103
Carpet .....	D. G. Melville .....	{ 14,361 to 14,362 }	Sept. 18	24	1093
Carpet .....	D. G. Melville .....	{ 13,674 to 13,676 }	Oct. 23	25	293
Carpet .....	J. S. Meyer .....	14,474	Feb. 27	23	743
Carpet .....	J. S. Meyer .....	{ 14,506 to 14,507 }	Dec. 11	25	983
Carpet .....	J. S. Meyer .....	14,307	Dec. 25	25	1193
Carpet .....	H. Mitchell .....	13,565	Sept. 18	24	1093
Carpet .....	J. Neil .....	13,998	Jan. 30	23	347
Carpet .....	J. Neil .....	14,229	June 19	23	2329
Carpet .....	J. B. Neil .....	14,308	Aug. 21	24	708
Carpet .....	J. B. Neil .....	14,309	Sept. 18	24	1093
Carpet .....	H. North .....	{ 13,633 to 13,634 }	Sept. 18	24	1094
Carpet .....	T. Onslow .....	14,124	Feb. 20	23	633
Carpet .....	T. Onslow .....	14,479	July 24	24	305
Carpet .....	H. A. Parker .....	14,243	Dec. 11	25	984
Carpet .....	H. W. Parton .....	14,311	Aug. 28	24	802
Carpet .....	H. W. Parton .....	{ 13,678 to 13,679 }	Sept. 18	24	1094
Carpet .....	J. Pegel .....	14,273	Feb. 27	23	743
Carpet .....	J. Pegel .....	{ 13,704 to 13,709 }	Sept. 11	24	997
Carpet .....	E. Petit .....	14,073	Mar. 6	23	834
Carpet .....	E. Petit .....	{ 14,074 to 14,103 }	July 10	24	103
Carpet .....	E. Petit .....	14,075	July 17	24	207
Carpet .....	A. Petzold .....	14,088	July 10	24	103
Carpet .....	A. Petzold .....	14,360	July 10	24	104
Carpet .....	A. Petzold .....	{ 14,274 to 14,275 }	Oct. 23	25	293
Carpet .....	G. W. Piggott .....	14,342	Sept. 11	24	997
Carpet .....	G. W. Piggott .....	13,563	Oct. 2	25	2
Carpet .....	P. Pignot .....	{ 13,592 to 13,595 }	Jan. 30	23	347
Carpet .....	P. Pignot .....	13,680	Feb. 6	23	440
Carpet .....	P. Pignot .....	{ 13,986 to 13,991 }	Feb. 27	23	743
Carpet .....	P. Pignot .....	14,029	June 19	23	2329
Carpet .....	P. Pignot .....	{ 14,037 to 14,044 }	July 3	24	1, 2
Carpet .....	P. Pignot .....	14,044	July 3	24	2

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Carpet .....	P. Pignot .....	14,105	July 17	24	207
Carpet .....	E. Poole .....	{ 13,636 13,637 }	Feb. 20	23	633
Carpet .....	E. Poole .....	13,826	Mar. 27	23	1126
Carpet .....	E. Poole .....	13,887	May 1	23	1626
Carpet .....	E. Poole .....	{ 13,952 13,953 }	May 29	23	2036
Carpet .....	E. Poole .....	{ 14,312 to 14,316 }	Sept. 18	24	1094
Carpet .....	G. W. Pugh .....	14,128	July 24	24	305
Carpet .....	G. Rapp .....	14,509	Dec. 25	25	1193
Carpet .....	C. A. Righter .....	{ 13,682 13,688 }	Feb. 27	23	744
Carpet .....	C. A. Righter .....	{ 14,277 to 14,282 }	Sept. 11	24	998
Carpet .....	O. Righter .....	{ 13,640 to 13,644 }	Feb. 20	23	634
Carpet .....	O. Righter .....	{ 14,283 to 14,286 }	Sept. 11	24	998
Carpet .....	E. G. Saner .....	13,646	Feb. 20	23	634
Carpet .....	E. G. Saner .....	{ 14,318 14,319 }	Sept. 18	24	1094
Carpet .....	S. Smith .....	{ 14,130 14,131 }	July 24	24	306
Carpet .....	J. Spring .....	14,042	July 3	24	2
Carpet .....	T. J. Stearns .....	13,566	Jan. 30	23	347
Carpet .....	T. J. Stearns .....	{ 13,647 13,648 }	Feb. 20	23	634
Carpet .....	T. J. Stearns .....	13,827	Mar. 27	23	1126
Carpet .....	T. J. Stearns .....	14,077	July 10	24	103
Carpet .....	T. J. Stearns .....	{ 14,287 13,596 }	Sept. 11	24	998
Carpet .....	C. W. Swapp .....	{ 13,602 13,649 }	Feb. 6	23	440
Carpet .....	C. W. Swapp .....	{ 13,650 13,828 }	Feb. 20	23	634
Carpet .....	C. W. Swapp .....	{ 13,829 13,955 }	Mar. 27	23	1126
Carpet .....	C. W. Swapp .....	{ 13,964 to 14,078 }	May 29	23	2036
Carpet .....	C. W. Swapp .....	{ 14,087 to 14,231 }	July 10	24	104
Carpet .....	C. W. Swapp .....	{ 14,233 to 14,321 }	Aug. 21	24	708
Carpet .....	L. W. Valentine .....	14,321	Sept. 18	24	1094
Carpet-sweeper case .....	W. S. Carter .....	14,493	Dec. 18	25	1081
Case for thermometers, &c .....	M. Dittenhoefer .....	{ 13,694 13,695 }	Mar. 6	23	834
Caster .....	H. Berry and K. A. Hathaway .....	14,523	Dec. 25	25	1194
Caster-cruet .....	H. Berry .....	13,691	Mar. 6	23	834
Casting bridle-bits. Pattern for .....	A. Buermann .....	13,652	Feb. 27	23	743
Center-piece. Plaster .....	W. F. Kellett .....	{ 14,257 to 14,259 }	Sept. 4	24	903
Center-piece. Plaster .....	W. F. Kellett .....	{ 14,324 14,325 }	Sept. 25	24	1180
Chain .....	C. Förster .....	13,857	Apr. 17	23	1449
Chain .....	H. Untermeyer .....	13,558	Jan. 30	23	347
Chain-link. Ornamental .....	J. Bushee .....	14,045	July 10	24	103
Chain-link. Ornamental .....	S. L. Lederer .....	13,718	Mar. 13	23	942
Chain. Ornamental .....	W. Ballou .....	13,714	Mar. 13	23	941
Chain. Ornamental .....	W. V. Briggs .....	13,715	Mar. 13	23	941
Chain. Ornamental .....	H. G. Smith .....	14,107	July 17	24	208
Chain-swivel .....	M. B. Mackreth .....	14,393	Nov. 6	25	506
Chain. Watch .....	W. C. Edge .....	13,661	Feb. 27	23	743
Chain. Watch .....	W. C. Edge .....	13,875	May 1	23	1626
Chenille pendant .....	B. Dreyfus .....	14,265	Sept. 11	24	997
Cigar-lighter .....	G. Fuchs .....	13,810	Mar. 27	23	1126
Cloak. Child's .....	C. O'Hara .....	14,364	Oct. 23	25	293
Cloak. Girl's .....	C. O'Hara .....	14,367	Oct. 23	25	293
Clock-case .....	W. D. Davies .....	14,392	Nov. 6	25	506
Clock dial and hands .....	S. Diolot .....	14,162	Aug. 14	24	605
Clock-front .....	H. J. Davies .....	14,501	Dec. 25	25	1193
Clocks. Moon-dial for .....	H. Rost .....	14,421	Nov. 13	25	604
Coat. Child's .....	M. Turner .....	14,455	Nov. 27	25	790
Coat. Lady's .....	C. O'Hara .....	14,430	Nov. 20	25	702
Coat. Lady's long .....	C. O'Hara .....	14,477	Dec. 11	25	984
Cockeye. Clip .....	G. F. Eberhard .....	14,374	Oct. 30	25	398
Coffin .....	W. J. Noble .....	14,475	Dec. 11	25	983
Coffin-handle socket .....	W. M. Smith .....	14,422	Nov. 13	25	604
Coffin-plate .....	E. H. and J. H. Eldridge .....	13,967	June 5	23	2123
Coffin-plate .....	C. L. Wright .....	14,013	June 26	23	2415
Comb and brush box .....	H. O. Berg .....	14,000	June 26	23	2415
Confection .....	W. H. Stinard .....	14,010	June 26	23	2415
Corset .....	J. Bowers .....	14,466	Dec. 11	25	983
Corset .....	F. Welton .....	13,620	Feb. 13	23	544
Costume. Child's .....	C. O'Hara .....	14,366	Oct. 23	25	293



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Design.	Name.	No.	Date.	Official Gazette.	
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Costume. Child's.....	C. O'Hara.....	14,448	Nov. 27	25	789
Costume. Child's.....	C. O'Hara.....	{ 14,498 } { 14,499 }	Dec. 18	25	1082
Costume. Girl's.....	C. O'Hara.....	14,365	Oct. 23	25	293
Costume. Girl's.....	C. O'Hara.....	14,368	Oct. 23	25	293
Costume. Girl's.....	C. O'Hara.....	14,478	Dec. 11	25	924
Costume. Girl's.....	L. Tully.....	14,457	Nov. 27	25	790
Costume. Girl's.....	M. Turner.....	14,458	Nov. 27	25	790
Costume. Girl's.....	M. Turner.....	14,513	Dec. 25	25	1194
Costume. Lady's.....	C. O'Hara.....	14,413	Nov. 13	25	604
Costume. Lady's.....	C. O'Hara.....	14,447	Nov. 27	25	789
Costume. Lady's.....	C. O'Hara.....	14,508	Dec. 25	25	1193
Costume. Lady's.....	J. Q. Reed.....	14,420	Nov. 13	25	604
Costume. Lady's.....	J. Q. Reed.....	14,452	Nov. 27	25	790
Costume. Lady's.....	S. J. Shields.....	14,512	Dec. 25	25	1193
Costume. Miss's.....	J. Q. Reed.....	14,481	Dec. 11	25	984
Costume. Miss's princess.....	L. Tully.....	14,515	Dec. 25	25	1194
Cracker. Biscuit.....	J. Hartman.....	13,522	Jan. 16	23	195
Cracker or biscuit.....	A. J. Medlar.....	13,909	May 15	23	1836
Cretonne.....	G. W. Fries.....	13,732	Mar. 13	23	942
Crockery. Article of.....	F. A. Benedikt.....	14,136	July 31	24	393
Cup and saucer.....	T. R. Davis.....	13,807	Mar. 27	23	1125
Cup and saucer.....	T. R. Davis.....	13,845	Apr. 10	23	1359
Curb. Well.....	M. R. Daykin.....	13,966	June 5	23	2123
Curry-comb back-handle.....	M. Sweet.....	14,108	July 17	24	208
Curtain and upholstery fabric.....	H. Langer.....	{ 13,884 } { 13,885 }	May 1	23	1626
Curtain-band.....	B. Dreyfus.....	13,902	May 15	23	1836
Curtain-band.....	I. Dreyfus.....	13,622	Feb. 20	23	633
Curtain-band.....	C. Otto.....	14,101	July 17	24	207
Curtain-band.....	J. O. Remington.....	13,904	May 15	23	1836
Curtain-band.....	S. Steinecke.....	13,711	Mar. 6	23	834
Curtain-loop.....	W. R. Bassett.....	14,015	July 3	24	1
Curtain-poles, &c. Tubing for.....	R. S. Gould.....	13,580	Feb. 6	23	439
Cuspidor.....	O. Gutherz.....	13,515	Jan. 9	23	95
Cuspidor.....	G. Vogt.....	14,483	Dec. 11	25	984
Cuspidor-top.....	O. Gutherz.....	13,516	Jan. 9	23	95
Dish.....	J. Moses.....	14,328	Sept. 25	24	1120
Dish. Butter.....	H. Berry and K. A. Hathaway.....	14,521	Dec. 25	25	1194
Dish. Cake or fruit.....	H. Berry and K. A. Hathaway.....	14,525	Dec. 25	25	1194
Dish. China or earthenware.....	J. Chetwynd.....	13,716	Mar. 13	23	741
Dish. Covered.....	T. Maddock.....	13,977	June 12	23	2242
Dish. Soap.....	J. F. Lockwood.....	14,495	Dec. 18	25	1081
Dish. Vegetable.....	D. Willets.....	13,995	June 19	23	2329
Drilling-machine frame.....	S. W. Putnam.....	14,276	Sept. 11	24	997
Ear-ring and pendant.....	J. B. Van Houten.....	{ 14,516 } to { 14,520 }	Dec. 25	25	1194
Earthenware vessel.....	J. Barlow and S. M. Alpaugh.....	14,388	Nov. 6	25	506
Electrical conductor.....	C. H. Pond.....	14,451	Nov. 27	25	790
Embroidery.....	H. Bosshardt.....	13,538	Jan. 23	23	274
Engine-frame.....	C. R. Arnold.....	14,404	Nov. 13	25	604
Engine-frame.....	G. M. Hopkins.....	14,024	July 3	24	1
Engine-frame.....	D. Whitlock.....	13,971	June 5	23	2123
Envelope.....	G. Sieckenberger.....	13,818	Mar. 27	23	1126
Fabric.....	C. R. Hieronymus.....	{ 13,517 } { 13,518 }	Jan. 9	23	95
Fabric.....	C. R. Hieronymus.....	13,542	Jan. 23	23	274
Fabric.....	C. R. Hieronymus.....	13,949	May 29	23	2036
Fan or screen. Feather.....	F. A. Rausom.....	14,261	Sept. 4	24	903
Fence-picket.....	W. Thomas.....	13,926	May 22	23	1930
Fence. Wire.....	G. Hunziker.....	14,442	Nov. 27	25	789
Fender.....	J. H. White.....	13,907	May 15	23	1836
Fender.....	J. H. White.....	14,170	Aug. 14	24	605
Fender. Fire-place.....	J. A. Read.....	14,350	Oct. 16	25	196
Finger-ring.....	H. C. Haskell.....	14,142	July 31	24	393
Finger-ring.....	L. J. Heintz.....	14,406	Nov. 13	25	604
Finger-ring.....	H. D. Sherrill.....	13,840	Apr. 3	23	1226
Finger-ring.....	C. J. Thenerner.....	14,351	Oct. 16	25	196
Finger-ring.....	B. D. Traitel.....	13,852	Apr. 10	23	1340
Finger-ring.....	B. D. Traitel.....	14,247	Aug. 28	24	802
Finger-ring setting.....	D. Goldsmith.....	14,468	Dec. 11	25	983
Fire-place back.....	W. H. Jackson and J. H. Hankinson.....	14,378	Oct. 30	25	398
Fire-place back.....	W. H. Jackson and J. H. Hankinson.....	14,462	Dec. 4	25	885
Fire-place casing.....	A. Osborne.....	14,385	Oct. 30	25	398
Fire-place casings. Facing for.....	A. Osborne.....	14,383	Oct. 30	25	398
Fire-place facing.....	A. Osborne.....	14,382	Oct. 30	25	398
Fire-place facing.....	A. Osborne.....	14,384	Oct. 30	25	398
Fire-place facing.....	A. Osborne.....	14,402	Nov. 6	25	506
Fire-place frame.....	J. A. Read.....	14,169	Aug. 14	24	605
Fire-place front.....	J. A. Read.....	14,076	July 10	24	103
Fire-place heater.....	H. C. Bascom and T. S. Heister.....	13,608	Feb. 13	23	543
Fire-place lining.....	J. A. Read.....	14,039	July 3	24	2
Fire-place or grate.....	W. H. Jackson and J. H. Hankinson.....	14,379	Oct. 30	25	398
Fire-screen.....	W. H. Hoyt.....	14,338	Oct. 2	25	1
Fire-screen.....	J. H. White.....	14,171	Aug. 14	24	605
Fishing-reel.....	T. H. Chubb.....	13,921	May 22	23	1930
Flask and bottle.....	D. R. Bradley.....	14,423	Nov. 20	25	702
Flower-pot.....	C. S. Reed.....	13,896	May 8	23	1736
Flower-pot bracket.....	H. R. Van Eps.....	13,905	May 15	23	1836
Flower-stand.....	H. R. Van Eps.....	13,906	May 15	23	1836
Fork.....	H. C. Hart.....	14,441	Nov. 27	25	789
Fringe.....	T. Abbott.....	{ 13,889 } { 13,890 }	May 8	23	1736

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Fringe.....	W. R. Bassett.....	14,014	July 3	24	1
Fringe.....	C. Cresson.....	13,891	May 8	23	1736
Fringe.....	C. Cresson.....	14,353	Oct. 23	25	293
Fringe.....	H. Goldthorp.....	{ 13,509	Jan. 2	23	1
Fringe.....	J. Goodman.....	13,510			
		13,717	Mar. 13	23	942
Fringe.....	G. E. Goucher.....	{ 13,892			
		to	May 8	23	1736
		13,895			
Fringe.....	J. Leonard.....	14,494	Dec. 18	25	1081
Fringe.....	B. Lipper.....	13,976	June 12	23	2242
		13,587			
Fringe.....	J. Loeb.....	{ 13,587	Feb. 6	23	439
		to			
		13,590			
Fringe.....	J. Loeb.....	13,701	Mar. 6	23	834
Fringe.....	L. J. McDonald.....	13,615	Feb. 13	23	543
Fringe.....	J. L. O'Brien.....	13,632	Feb. 20	23	633
Fringe.....	F. L. Prindle.....	13,805	Mar. 20	23	1036
Fringe.....	C. A. Schmidt.....	13,710	Mar. 6	23	834
Fringe.....	C. A. Schmidt.....	13,817	Mar. 27	23	1126
Fringe.....	C. A. Schmidt.....	13,854	Apr. 10	23	1340
Fringe.....	S. Steinecke.....	13,841	Apr. 3	23	1226
Garment.....	A. Simon.....	13,925	May 22	23	1930
Gate.....	H. Faller.....	14,156	Aug. 7	24	499
Gate.....	J. Pirkl.....	13,635	Feb. 20	23	633
Gem-setting.....	H. G. Mackinney.....	14,225	Aug. 21	24	707
Gimp.....	H. Davenport.....	13,901	May 15	23	1836
Glass articles. Cnt.....	G. E. Hatch.....	14,117	July 24	24	305
Glass flask.....	C. H. Warner, Jr.....	13,526	Jan. 16	23	195
Glassware.....	A. H. Heisey.....	13,833	Apr. 3	23	1225
Glassware.....	W. Leighton.....	14,443	Nov. 27	25	789
Glassware.....	W. F. Russell.....	13,645	Feb. 20	23	634
Glove.....	R. Bartel.....	14,352	Oct. 23	25	293
Glove-buttoner.....	C. T. Jones.....	14,158	Aug. 7	24	499
Grate-bracket.....	W. J. Irwin.....	13,666	Feb. 27	23	743
Hand-wheel.....	L. Bailey.....	13,621	Feb. 20	23	633
Hand-wheel.....	A. Y. McDonald.....	13,673	Feb. 27	23	743
Handkerchief.....	H. Doherty and J. Wadsworth.....	13,922	May 22	23	1930
Handkerchief and scarf.....	E. Jansen.....	14,339	Oct. 2	25	1
Handle for table-ware.....	W. B. Durgin.....	13,983	June 19	23	2329
Hanger.....	F. Brown.....	14,139	July 31	24	393
Hardware. Ornamental panels on articles of builders'.....	G. S. Barkentin.....	13,568	Feb. 6	23	439
Hardware. Ornamentation of builder's.....	J. Lochner.....	13,511	Jan. 2	23	2
Harness-bit.....	G. F. Eberhard.....	{ 13,547	Jan. 30	23	347
		13,548			
Harness-bit.....	A. A. Pope.....	13,549	Jan. 30	23	347
		13,550			
Harness-bit.....	J. L. Pope.....	{ 13,550	Jan. 30	23	347
		to			
		13,553			
Harness-trimming.....	E. N. Crane.....	13,562	Jan. 30	23	347
Harness-trimming.....	F. Crane.....	13,561	Jan. 30	23	347
Harness-trimming.....	A. Dalton.....	14,155	Aug. 7	24	499
Harness-trimming.....	C. F. Waldron.....	13,559	Jan. 30	23	347
Hat and coat rack.....	J. R. Palmenberg.....	14,310	Sept. 18	24	1094
Hat. Lady's.....	W. R. Warren.....	13,821	Mar. 27	23	1126
Hinges. Ornamentation of.....	J. B. Sargent.....	13,546	Jan. 23	23	274
Hoe.....	J. Crosley.....	14,092	July 17	24	207
Hollow, flat, and covered ware.....	O. Gutherz.....	14,213	Aug. 21	24	707
Ice-cream mold.....	L. F. Mazzetti.....	14,327	Sept. 25	24	1180
Inkstand.....	A. Cooke, C. W. Schrieber, and J. S. Morgan.....	14,425	Nov. 20	25	702
Inkstand.....	J. Gibbins.....	13,948	May 29	23	2036
Inkstand.....	L. B. Gray.....	13,996	June 19	23	2329
Inkstand.....	J. Murray.....	13,851	Apr. 10	23	1340
Jacket. Lady's double-breasted.....	M. Turner.....	14,459	Nov. 27	25	790
Jewel or emblem. Masonic.....	D. W. Laird.....	14,025	July 3	24	1
Jewelry.....	E. W. Tuttle.....	14,012	June 26	23	2415
Jewelry.....	H. Untermeyer.....	{ 13,730	Mar. 13	23	942
		13,731			
Jewelry.....	H. Untermeyer.....	13,874	Apr. 24	23	1532
Jewelry. Letter for.....	C. F. Wood.....	14,248	Aug. 28	24	802
Jewelry. Letter in.....	C. F. Wood.....	14,485	Dec. 11	25	964
Jewelry-setting.....	H. Huestis.....	14,157	Aug. 7	24	499
Jewelry. Trimming for articles of.....	H. G. Mackinney.....	13,836	Apr. 3	23	1225
Jewelry. Trimming for articles of.....	H. G. Mackinney.....	13,861	Apr. 17	23	1450
Knife-sharpener.....	A. C. Kasson.....	14,303	Sept. 18	24	1093
		14,001			
Knit fabric.....	S. Condé.....	{ 14,001	June 26	23	2415
		to			
		14,004			
Knit fabric.....	S. Condé.....	14,046	July 10	24	103
Knitted overshirt.....	S. Condé.....	14,239	Aug. 28	24	801
Lacing-book.....	W. F. Foster.....	13,847	Apr. 10	23	1339
Lacing-hook for gloves.....	W. F. Foster.....	13,846	Apr. 10	23	1339
Lamp.....	H. Berry and K. A. Hatbaway.....	14,524	Dec. 25	25	1194
Lamp and chandelier body.....	J. and J. A. Kasschau.....	14,463	Dec. 4	25	885
Lamp-chimney.....	H. Dietrich.....	14,373	Oct. 30	25	398
Lamp-chimney.....	G. Kline.....	14,167	Aug. 14	24	605
Lamp-chimney.....	G. A. Macbeth.....	{ 14,445	Nov. 27	25	789
		14,446			
Lamp, gas, and electric-light globe or shade.....	W. R. Bates.....	14,264	Sept. 11	24	997
Lamp. Hanging.....	W. A. Hull.....	{ 14,407	Nov. 13	25	604
		14,408			
Lamp. Incandescing electric.....	T. A. Edison.....	13,940	May 29	23	2036
Lamp-shade stand. Banner.....	D. W. Wilkins.....	14,152	July 31	24	394



## Alphabetical list of designs—Continued.

Design.	Name.	No.	Date.	Official Gazette.	
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Lamps. Weight for extension.....	L. F. Griswold.....	13,968	June 5	23	2123
Letters. Capital.....	W. S. Dolbey.....	14,181	Aug. 21	24	707
Letters or alphabet.....	W. C. Peet.....	13,677	Feb. 27	23	743
Letters or alphabet.....	H. L. Reid.....	13,681	Feb. 27	23	744
Lining. Quilted.....	A. Beck.....	14,237	Aug. 28	24	801
Lock case. Hasp.....	P. O. Snyder.....	14,434	Nov. 20	25	702
Mallet. Irregular.....	T. W. Whitacre.....	14,246	Aug. 28	24	802
Mantel-facing.....	R. Rossman.....	13,839	Apr. 3	23	1225
Mat.....	E. E. and O. H. Widdifield.....	14,133	July 24	24	306
Match-case.....	M. Ebreneich.....	14,153	July 31	24	394
Mirror-frame.....	G. L. Garrigues.....	13,564	Jan. 30	23	347
Mirror or picture frame.....	F. G. Newell.....	14,126	July 24	24	305
Monument.....	J. and J. Pool.....	13,543	Jan. 23	23	274
Mug. Beer.....	O. Osthoff.....	14,271	Sept. 11	24	997
Musical-instrument case.....	G. W. Turner.....	13,603	Feb. 6	23	440
Necktie-fastener.....	P. M. Melick.....	13,886	May 1	23	1626
Oil-cans. Casing for glass.....	F. C. and E. B. Ball.....	13,806	Mar. 27	23	1125
Oil-cloth.....	C. T. and V. E. Meyer.....	{ 13,527 to 13,537 }	Jan. 16	23	195
Oil-cloth.....	C. T. and V. E. Meyer.....	{ 13,720 to 13,726 }	Mar. 13	23	942
Oil-cloth.....	C. T. and V. E. Meyer.....	{ 13,910 to 13,916 }	May 15	23	1836
Oil-cloth.....	C. T. and V. E. Meyer.....	{ 14,396 to 14,401 }	Nov. 6	25	506
Oil-cloth. Floor.....	C. T. and V. E. Meyer.....	{ 14,096 to 14,099 }	July 17	24	207
Oil-cloth. Floor.....	C. T. and V. E. Meyer.....	{ 14,120 to 14,123 }	July 24	24	305
Oil-cloth. Floor.....	C. T. and V. E. Meyer.....	{ 14,227 to 14,484 }	Aug. 21	24	708
Organ-case.....	A. Wagner.....	14,484	Dec. 11	25	924
Organ case. Cabinet.....	R. F. Meissner.....	{ 14,069 to 14,070 }	July 10	24	103
Ornament for cloaks and other garments.....	W. Engel.....	14,005	June 26	23	2415
Overshoe.....	G. A. Lewis.....	14,341	Oct. 2	25	2
Overshoes. Ornamentation of.....	G. Watkinson.....	14,372	Oct. 23	25	294
Overskirt. Lady's.....	J. Q. Reed.....	14,510	Dec. 25	25	1193
Panel.....	L. De Planque.....	14,417	Nov. 13	25	604
Paper and cards. Writing.....	B. A. Hard.....	14,067	July 10	24	103
Paper-weight.....	J. A. Prindle.....	14,146	July 31	24	394
Paper. Writing.....	G. Sieckenberger.....	13,819	Mar. 27	23	1126
Parlor ornament.....	W. H. Hoyt.....	14,337	Oct. 2	25	1
Pen or pencil holder.....	P. Schrag.....	13,618	Feb. 13	23	543
Pen. Writing.....	G. F. King.....	14,144	July 31	24	393
Pendant.....	B. Dreyfus.....	14,356	Oct. 23	25	293
Pencil.....	J. Reshower and A. Heck.....	13,814	Mar. 27	23	1126
Pencil-case.....	C. W. Livermore.....	13,519	Jan. 9	23	95
Piano case. Square.....	A. Kaucher.....	14,118	July 24	24	305
Picture-frame and easel.....	W. H. Brownell.....	14,115	July 24	24	305
Picture-frame molding.....	E. Fillmann.....	{ 14,375 to 14,376 }	Oct. 30	25	398
Pillow-block.....	F. Brown.....	14,138	July 31	24	393
Pitcher.....	H. Berry and K. A. Hathaway.....	14,526	Dec. 25	25	1194
Pitcher or other similar vessel.....	K. L. French.....	14,235	Aug. 21	24	708
Plaque.....	W. H. Brownell.....	13,973	June 12	23	2242
Plaster center-piece.....	W. F. Kellett.....	{ 14,006 to 14,007 }	June 26	23	2415
Plow point or share.....	J. W. Lawson.....	14,095	July 17	24	207
Polonaise. Lady's.....	C. O'Hara.....	{ 14,415 to 14,416 }	Nov. 13	25	604
Polonaise. Lady's.....	J. Q. Reed.....	14,433	Nov. 20	25	702
Pompon.....	F. Landenberger.....	14,326	Sept. 25	24	1180
Post-office lock-box door.....	W. H. Camp.....	13,982	June 19	23	2329
Printed matter. Background for.....	A. E. Carpenter.....	13,609	Feb. 13	23	543
Puff-box.....	W. H. Brownell.....	14,016	July 3	24	1
Quilting.....	L. Shultz.....	14,147	July 31	24	394
Range. Cooking.....	H. C. Bascom and T. S. Heister.....	13,972	June 12	23	2242
Revolver charge-cylinder.....	F. W. Hood.....	13,524	Mar. 27	23	1126
Rocking-chair.....	G. J. Shultz.....	14,230	Aug. 21	24	708
Ruffling or collarette.....	H. Rosenthal.....	13,617	Feb. 13	23	543
Ruffling or collarette.....	H. Rosenthal.....	14,040	July 3	24	2
Ruffling or collarette.....	H. Rosenthal.....	14,129	July 24	24	306
Rug.....	R. P. Hemming.....	14,377	Oct. 30	25	398
Rug.....	A. Petzold.....	{ 14,386 to 14,387 }	Oct. 30	25	398
Rng. Chenille.....	J. Ferguson.....	{ 14,164 to 14,166 }	Aug. 14	24	605
Rule. Desk.....	D. H. Stephens.....	14,043	July 3	24	2
Satchel.....	P. W. Lambert.....	14,168	Aug. 14	24	605
Satchel.....	I. Wallach.....	13,994	June 19	23	2329
Sconce-frame.....	A. Patitz.....	14,244	Aug. 28	24	802
Sconce-frame.....	A. Patitz.....	14,272	Sept. 11	24	997
Screw or clamp. Hand.....	A. J. Benjamin.....	13,690	Mar. 6	23	834
Seal-press.....	R. H. Smith.....	13,897	May 8	23	1736
Seat-riser.....	J. L. Pope.....	14,329	Sept. 25	24	1180
Sewing-machine fly-wheel.....	J. H. Whitney.....	14,436	Nov. 20	25	702
Sewing-machines. Ornamentation of.....	W. Haehnel.....	13,662	Feb. 27	23	743

*Alphabetical list of designs—Continued.*

Design.	Name.	No.	Date.	Official Gazette.	
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Sewing-machines. Ornamentation of .....	W. Haehnel .....	{ 13,876 } to 13,879 14,334 14,335	May 1	23	1626
Sewing-machines. Ornamentation of .....	W. Haehnel .....	14,216	Oct. 2	25	1
Sewing-machine side drawer case and drawer .....	G. B. Hooper .....	14,160	Aug. 21	24	707
Sewing-machine table .....	J. H. Osborn .....	13,855	Aug. 7	24	499
Sewing-machine table .....	J. H. Whitney .....	13,864	Apr. 10	23	1340
Shawl .....	J. G. Savage .....	14,234	Apr. 17	23	1450
Shawl. Woven .....	F. A. Woodhead .....	13,521	Aug. 21	24	708
Show-case .....	H. R. Brown .....	13,856	Jan. 16	23	195
Show-stand .....	G. E. Cumming .....	14,431	Apr. 17	23	1449
Skirt. Lady's .....	C. O'Hara .....	14,476	Nov. 20	25	702
Skirt. Lady's .....	C. O'Hara .....	14,381	Dec. 11	25	983
Skirt. Lady's walking .....	C. O'Hara .....	14,428	Oct. 30	25	398
Skirt. Lady's walking .....	C. O'Hara .....	14,449	Nov. 20	25	702
Skirt. Lady's walking .....	C. O'Hara .....	14,514	Nov. 27	25	789
Skirt. Miss's walking .....	L. Tully .....	13,865	Dec. 18	25	1082
Skirt or other garment .....	L. Tully .....	14,412	Dec. 25	25	1194
Skirt. Walking .....	A. Beck .....	14,370	Apr. 24	23	1531
Skirt with sash drapery. Miss's kilt-plaited .....	C. O'Hara .....	14,145	Nov. 13	25	604
Sleigh .....	J. Q. Reed .....	14,109	Oct. 23	25	293
Sleigh .....	W. C. Leach .....	14,163	July 31	24	394
Sleigh knee. Bob .....	G. E. Watson .....	13,541	July 17	24	208
Sleigh. Landau .....	J. Drohan .....	13,999	Aug. 14	24	605
Smoking-pipe .....	J. C. Gould .....	13,999	Jan. 23	23	274
Soap-cake .....	H. Tibbe .....	14,240	June 19	23	2329
Soap. Cake or bar .....	B. A. Daland .....	14,444	Aug. 28	24	802
Sponge-basket .....	A. Lucy .....	13,508	Nov. 27	25	789
Spoon and fork handle .....	D. Gabay .....	14,323	Jan. 2	23	1
Spoon and fork handle .....	A. F. Jackson .....	14,245	Sept. 25	24	1180
Spoon and fork handle .....	W. Rogers .....	14,262	Aug. 28	24	802
Spoon-handle .....	T. Trichel .....	13,613	Sept. 4	24	903
Spoon-handle .....	C. Egge .....	13,860	Feb. 13	23	543
Spoons, &c. Handle for .....	A. F. Jackson .....	14,349	Apr. 17	23	1450
Spoon or fork handle .....	G. I. Mix .....	14,072	Oct. 16	25	195
Spoon or fork handle .....	T. J. Fairpoint .....	13,835	July 10	24	103
Spoon or fork handle .....	M. H. Kinsley .....	14,127	Apr. 3	23	1225
Spoon or fork handle .....	T. J. Fairpoint .....	13,838	July 24	24	305
Spoon or fork handle .....	W. Rogers .....	14,320	Apr. 3	23	1225
Spoon or fork handle .....	A. A. Sperry .....	13,927	Sept. 18	24	1094
Spoon or fork handle .....	F. A. Wallace .....	13,981	May 22	23	1930
Spoon or fork handle .....	F. Waterhouse .....	13,797	June 12	23	2242
Stair and room corner-guard .....	D. C. Hyde .....	13,727	Mar. 20	23	1036
Statuary. Monumental .....	M. Muldoon .....	13,616	Mar. 13	23	942
Steam-engine .....	A. Rosenkranz .....	14,111	Feb. 13	23	543
Steam-engine frame .....	N. Melvin .....	13,842	Nov. 13	25	604
Steam-engine. Upright .....	J. E. Sweet and M. C. Bullock .....	13,638 } 13,639 }	Apr. 3	23	1226
Step-pad .....	J. L. Pope .....	14,018	Feb. 20	23	633
Stocking .....	J. Furi and J. Rubly .....	13,514	July 3	24	1
Stove .....	H. C. Bascom, C. A. Hodges, and T. S. Heister .....	13,513	Jan. 9	23	95
Stove .....	H. C. Bascom and F. Ritchie .....	13,605	Feb. 13	23	543
Stove .....	G. O. Bergstrom .....	13,540	May 15	23	1835
Stove .....	C. H. Buck, Jr. ....	13,612	Jan. 23	23	274
Stove .....	J. Dwyer .....	13,719	Feb. 13	23	543
Stove .....	W. L. McDowell .....	13,604	Mar. 13	23	942
Stove .....	W. P. Warren .....	14,161	Feb. 6	23	440
Stove .....	H. A. Wood .....	13,917	Aug. 7	24	499
Stove. Coal .....	H. C. Bascom, C. A. Hodges, and T. S. Heister .....	14,488	May 22	23	1929
Stove. Cooking .....	H. C. Bascom .....	13,607	Dec. 18	25	1081
Stove. Cooking .....	H. C. Bascom and C. A. Hodges .....	{ 14,490 } 14,491 }	Feb. 13	23	543
Stove. Cooking .....	H. C. Bascom and C. A. Hodges .....	13,928	Dec. 18	25	1081
Stove. Cooking .....	G. E. Wilburt .....	14,492	May 22	23	1930
Stove. Globe .....	H. C. Bascom and C. A. Hodges .....	{ 14,486 } 14,487 }	Dec. 18	25	1081
Stove. Heating .....	H. C. Bascom .....	13,918	Dec. 18	25	1081
Stove. Heating .....	H. C. Bascom and T. S. Heister .....	13,606	May 22	23	1929
Stove. Heating .....	H. C. Bascom and F. Ritchie .....	13,919	Feb. 13	23	543
Stove. Heating .....	H. C. Bascom, F. Ritchie, and C. A. Hodges .....	13,539	May 22	23	1930
Stove. Heating .....	N. Brayer .....	13,728	Jan. 23	23	274
Stove. Laundry .....	J. Ringen .....	14,100	Mar. 13	23	942
Stove. Oil .....	R. S. Oliver .....	13,920	July 17	24	207
Stove. Parlor .....	H. C. Bascom and F. Ritchie .....	14,489	May 22	23	1930
Stove. Parlor .....	H. C. Bascom and C. A. Hodges .....	14,008	Dec. 18	25	1081
Stove. Parlor .....	F. Kernan, Jr. ....	13,980	June 26	23	2415
Support for vases or other articles .....	F. Ratcliff .....	14,009	June 12	23	2242
Tapestry or damask .....	E. G. Nuffer .....	14,355	June 26	23	2415
Target .....	J. A. H. Dressel .....	13,866	Oct. 23	25	293
Tassel for trimming .....	C. F. Buschner .....	14,522	Apr. 24	23	1531
Tea-pot .....	H. Berry and K. A. Hathaway .....	14,091	Dec. 25	35	1194
Thermometer-holder .....	C. L. Crear .....	14,426	July 17	24	207
Toilet-stand .....	A. Cooke, C. W. Schrieber, and J. S. Morgan .....	13,689	Nov. 20	25	702
Toilet-vessel .....	G. D. Winchell .....	14,439	Feb. 27	23	744
Toilet ware or vessel .....	J. P. Enstis .....	13,837	Nov. 27	25	789
Toy fulminate-exploder .....	E. L. Morris .....	13,969	Apr. 3	23	1225
Toy money-box .....	W. S. Reed .....	13,974	June 5	23	2123
Toy pistol .....	G. S. Crosby .....		June 12	23	2242



*Alphabetical list of designs—Continued.*

Design.	Name.	No.	Date.	Official Gazette.	
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Toy pistol .....	C. F. Ritchel .....	{ 13,815 } 13,816	Mar. 27	23	1126
Toy savings-bank .....	J. H. Bowen .....	14,238	Aug. 28	24	801
Trimming .....	C. M. Gilbert .....	13,614	Feb. 13	23	543
Trimming .....	J. H. Horwitz and A. Hepner .....	14,359	Oct. 23	25	293
Trimming .....	J. O. Remington .....	{ 13,544 } 13,545	Jan. 23	23	274
Type .....	C. J. Cary .....	14,390	Nov. 6	25	506
Type .....	J. A. St. John .....	{ 13,556 } 13,557	Jan. 30	23	347
Type .....	J. A. St. John .....	13,729	Mar. 13	23	942
Type .....	T. W. Winchester .....	14,403	Nov. 6	25	506
Type. Border for printing .....	C. Müller .....	13,850	Apr. 10	23	1340
Type. Font of .....	W. W. Jackson .....	13,834	Apr. 3	23	1225
Type. Font of printing .....	J. M. Conner .....	13,830	Apr. 3	23	1225
Type. Font of printing .....	J. M. Conner .....	13,844	Apr. 10	23	1339
Type. Font of printing .....	J. M. Conner .....	14,389	Nov. 6	25	506
Type. Font of printing .....	J. M. Conner .....	14,405	Nov. 13	25	604
Type. Font of printing .....	G. F. Giesecke .....	{ 13,794 } 13,795	Mar. 20	23	1036
Type. Font of printing .....	J. Herriot .....	13,870	Apr. 24	23	1532
Type. Font of printing .....	C. E. Heyer .....	13,560	Jan. 30	23	347
Type. Font of printing .....	C. E. Heyer .....	14,503	Dec. 25	25	1193
Type. Font of printing .....	H. Ihlenburg .....	13,848	Apr. 10	23	1339
Type. Font of printing .....	H. Ihlenburg .....	13,859	Apr. 17	23	1450
Type. Font of printing .....	H. Ihlenburg .....	{ 13,871 } to 13,873	Apr. 24	23	1532
Type. Font of printing .....	H. Ihlenburg .....	13,923	May 22	23	1930
Type. Font of printing .....	H. Ihlenburg .....	{ 13,950 } 13,951	May 29	23	2036
Type. Font of printing .....	W. W. Jackson .....	{ 13,523 } 13,524	Jan. 16	23	195
Type. Font of printing .....	W. W. Jackson .....	13,586	Feb. 6	23	439
Type. Font of printing .....	W. W. Jackson .....	13,849	Apr. 10	23	1339
Type. Font of printing .....	W. W. Jackson .....	14,255	Sept. 4	24	903
Type. Font of printing .....	W. W. Jackson .....	{ 14,409 } 14,410	Nov. 13	25	604
Type. Font of printing .....	A. Little .....	13,700	Mar. 6	23	834
Type. Font of printing .....	C. Müller .....	14,346	Oct. 9	25	98
Type. Font of script printing .....	W. W. Jackson .....	14,340	Oct. 2	25	1
Type. Movable .....	J. A. St. John .....	14,011	June 26	23	2415
Type ornaments. Printing .....	H. H. Thorp .....	13,993	June 19	23	2329
Type ornaments. Font of .....	C. E. Heyer .....	14,336	Oct. 2	25	1
Type ornaments. Font of .....	H. Ihlenburg .....	13,951	May 29	23	2036
Type. Printing .....	G. Giesecke .....	13,831	Apr. 3	23	1225
Type. Printing .....	H. H. Thorp .....	13,651	Feb. 20	23	634
Type. Printing .....	H. H. Thorp .....	{ 14,148 } to 14,151	July 31	24	394
Upholstery fabric .....	D. B. Kerr .....	13,908	May 15	23	1836
Upholstery fabric .....	A. Moniot .....	14,228	Aug. 21	24	708
Upholstery or damask .....	D. B. Kerr .....	14,304	Sept. 18	24	1093
Upholstery-trimming .....	J. C. Copper .....	13,843	Apr. 3	23	1226
Upholstery-trimming .....	G. H. Prindle .....	13,954	May 29	23	2036
Upholstery. Two-ply .....	D. B. Kerr .....	13,978	June 12	23	2242
Upholstery. Two-ply .....	J. E. Kerr .....	13,979	June 12	23	2242
Upholstery. Two-ply .....	A. Moniot .....	14,125	July 24	24	305
Vase .....	C. Nardini .....	14,226	Aug. 21	24	708
Vase .....	W. J. Patterson .....	13,525	Jan. 16	23	195
Vase .....	W. Tweeddale .....	13,619	Feb. 13	23	543
Ventilator or air-grate .....	W. W. Drummond .....	14,132	July 24	24	306
Violin-box .....	W. W. Randall .....	14,419	Nov. 13	25	604
Wall-book .....	E. F. Hotchkiss .....	13,698	Mar. 6	23	834
Wall-pocket .....	H. T. Johnson .....	14,094	July 17	24	207
Watch-cases. Ornamentation of .....	V. Nivois .....	13,984	June 19	23	2329
Watch top plate .....	C. E. Mason .....	14,427	Nov. 20	25	702
Whiffletree-plate .....	J. L. Pope .....	13,512	Jan. 2	23	2
Window-shade pull .....	C. W. Clark .....	13,900	May 15	23	1835
Wire handle .....	W. C. Perkins .....	14,038	July 3	24	2
Wrap. Lady's .....	C. O'Hara .....	14,360	Oct. 30	25	398
Wrap. Lady's .....	C. O'Hara .....	14,414	Nov. 13	25	604
Wrap. Lady's .....	C. O'Hara .....	14,429	Nov. 20	25	702
Wrap. Lady's .....	C. O'Hara .....	14,497	Dec. 18	25	1081
Wrap. Lady's .....	J. Q. Reed .....	14,454	Nov. 27	25	790
Wrap. Lady's .....	M. Turner .....	14,461	Nov. 27	25	790
Wrapper. Lady's watteau .....	M. Turner .....	14,482	Dec. 11	25	984





# ALPHABETICAL LIST OF TRADE-MARKS.

Title.	Name.	No.	Date.	Official Gazette.	
				Volume.	Page.
Accordions	F. O. Weidlich	10,234	May 1	23	1626
Agricultural machinery	Russell and Company	10,579	Sept. 11	24	998
Alcohol. Refined wood	Buffalo Alcholene Company	10,130	Mar. 20	23	1036
Alcohol. Wood	American Chemical Company	10,117	Mar. 13	23	942
Ale. Ginger	Bewley & Draper	10,304	May 29	23	2036
Ale. Ginger	Bewley & Draper	10,305	May 29	23	2036
Ale. Ginger	Bewley & Draper	10,306	May 29	23	2036
Ale. Ginger	Sachs, Pruden & Co	10,092	Mar. 6	23	834
Ale. Ginger	Sachs, Pruden & Co	10,093	Mar. 6	23	834
Ale. Ginger	Sachs, Pruden & Co	10,190	Apr. 17	23	1450
Ale, porter, and lager-beer	Beadleston & Woerz	9,928	Jan. 2	23	2
Ales, stouts, and cider	M. B. Foster & Sons	10,164	Apr. 10	23	1340
Alloy of metal	G. A. Dick	10,602	Sept. 25	24	1180
Alloys of copper in the form of sheets, tubing, hollow ware, and cartridge-shells	Brown & Brothers	10,264	May 15	23	1836
Alum. Concentrated	Harrison Brothers & Co	10,466	July 24	24	306
Articles and preparations for treating and improving the finger-nails, feet, and complexion. Certain	M. E. Pray	10,326	June 5	23	2124
Articles for nursery use. Certain	H. S. Evans	10,393	July 3	24	2
Asphalt pavements	A. L. Barber	10,545	Aug. 28	24	802
Awnings. Blind	F. O. North & Co	10,183	Apr. 10	23	1340
Axes	Johnson Bros. & Leeper	10,131	Mar. 20	23	1036
Axes	H. D. Loveland	10,358	June 19	23	2330
Baking-powder	S. E. Egerton & Co	10,505	Aug. 14	24	606
Baking-powder	B. S. Gilbert & Co	10,224	May 1	23	1626
Baking-powder	Goodall, Backhouse & Co	10,173	Apr. 10	23	1340
Baking-powder	Jaques, Atwood & Co	10,615	Oct. 2	25	2
Baking-powder	Ridenour, Baker & Co	10,197	Apr. 17	23	1450
Baking-powder	Rumford Chemical Works	10,535	Aug. 21	24	708
Baking-powder	Smith, Hanway & Co	10,572	Sept. 4	24	904
Baking-powder and yeast	A. S. Bush	10,383	July 3	24	2
Balm-drops	G. C. Keep	10,229	May 1	23	1626
Base-balls	A. J. Reach & Co	10,662	Oct. 23	25	294
Bats. Base-ball	A. J. Reach & Co	10,663	Oct. 23	25	294
Beer	J. C. Jacobsen	10,347	June 12	23	2242
Beer, ale, porter, and all carbonated beverages	Lighte & Co	10,703	Nov. 6	25	506
Beer, ale, porter, and all carbonated drinks. Bottled	Consolidated Bottling Company	10,265	May 15	23	1836
Beer, ale, stout, and porter	H. Clausen & Son Brewing Company	10,576	Sept. 11	24	998
Beer. Bottled	P. Best Brewing Company	10,258	May 8	23	1736
Beer. Lager	F. Hollender	10,176	Apr. 10	23	1340
Beer. Lager	F. Hollender	10,177	Apr. 10	23	1340
Beer. Lager	F. Hollender	10,178	Apr. 10	23	1340
Beer. Lager	National Lager Beer Bottling Company	10,531	Aug. 21	24	708
Beer. Lager	J. Ruppert	10,004	Jan. 30	23	348
Beer. Lager	Williamsburgh Brewing Company	10,012	Jan. 30	23	348
Belting. Cotton	M. Gandy	10,303	May 22	23	1930
Belts or bands. Non-elastic	M. Gandy	10,481	Aug. 7	24	500
Beverage. Gentle sparkling liquid used as a	J. A. Lomax	10,311	May 29	23	2036
Beverage containing acid phosphates	W. C. Milburn	10,458	July 24	24	306
Beverages. Sparkling	H. Downes	10,280	May 22	23	1930
Bird-food. Certain mixture for	L. Rosenstein & Co	10,439	July 17	24	208
Biscuit-crackers	J. Hartman	10,623	Oct. 9	25	98
Biscuits	W. G. Wilson	10,027	Feb. 6	23	440
Biscuits	W. G. Wilson	10,152	Mar. 27	23	1126
Biscuits	W. G. Wilson	10,153	Mar. 27	23	1126
Biscuits	W. G. Wilson	10,671	Oct. 23	25	294
Biscuits, crackers, jumbles, snaps, cakes, wafers, and kindred articles.	Hetfield & Ducker	9,986	Jan. 30	23	348
Bitters	T. S. Foote	10,452	July 24	24	396
Bitters	H. Meinhard	10,684	Oct. 30	25	398
Bitters	H. H. Warner	10,687	Oct. 30	25	398
Bitters. Tonic	J. Boyd	10,450	July 24	24	306
Bitters. Tonic	H. H. Warner	10,688	Oct. 30	25	398
Bitters. Tonic	H. H. Warner	10,689	Oct. 30	25	398
Blacking	T. Y. Kelley	10,076	Feb. 27	23	744
Blacking. Boot and shoe	Rothschild Brothers & Co	10,574	Sept. 4	24	904
Blacking. Shoe	A. Fortenbaugh	10,085	Mar. 6	23	834
Blacking. Water-proof polish	A. B. Cumberlege	10,583	Sept. 18	24	1094
Blacking. Water-proof preservative	J. A. & L. N. Van Kenren	10,074	Feb. 27	23	744
Bleaching and dyeing compounds	Wilson Chemical Company	10,363	June 19	23	2330
Blue. Laundry	Fickett & Beal	10,002	Jan. 30	23	348
Blue. Laundry	L. S. Root	9,961	Jan. 16	23	196
Boiler-cleaning compound	T. Baker & Co	9,984	Jan. 30	23	348
Books, letter-headings, envelopes, paper-wrappers, advertising-circulars, pamphlets, &c.	F. A. Davis	9,998	Jan. 30	23	348
Books, pamphlets, catalogues, and miscellaneous publications	J. R. Jones	10,021	Feb. 6	23	440
Boot or shooshanks and sole-edges. Burnishing ink or blacking for	W. R. Albertson	10,335	June 5	23	2124
Boots. Leather	Levy, Diamant, Oppenheimer & Co	10,120	Mar. 20	23	1036
Boots. Long-legged and ankle	G. L. Kensley	10,728	Nov. 20	25	702

*Alphabetical list of trade-marks—Continued.*

Title.	Name.	No.	Date.	Official Gazette.	
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Boots or shoes. Burnishing ink or blacking for.....	W. R. Albertson.....	10,332	June 5	23	2124
Boots or shoes. Burnishing ink or blacking for.....	W. R. Albertson.....	10,333	June 5	23	2124
Boots or shoes. Burnishing ink or blacking for.....	W. R. Albertson.....	10,334	June 5	23	2124
Boots, shoes, and slippers. Women's and children's.....	Pingree & Smith.....	10,773	Dec. 11	25	984
Boots, shoes, and slippers. Women's and children's.....	Pingree & Smith.....	10,818	Dec. 25	25	1194
Boots, shoes, slippers, and gaiters. Felted-wool.....	Merino Shoe Company.....	10,618	Oct. 2	25	2
Boxed cans for oils, varnishes, spirits of turpentine, and other liquids.	C. Burnham & Co.....	10,745	Nov. 27	25	790
Braids and silk thread. Silk and mohair.....	W. Skinner & Son.....	10,405	July 10	24	104
Brandy.....	J. Hennessy & Co.....	10,038	Feb. 13	23	544
Brandy.....	Rouyer, Guillet & Co.....	10,555	Aug. 28	24	802
Brandy. Kelley's Island grape.....	Weideman, Holmes & Co.....	10,052	Feb. 13	23	544
Bread preparation. Self-raising.....	Rumford Chemical Works.....	10,536	Aug. 21	24	708
Bricks.....	I. M. Hedges and G. H. Smith.....	10,769	Dec. 4	25	886
Burning-fluids.....	J. G. Gorrell.....	10,680	Oct. 30	25	398
Butter.....	Société Générale de Produits Alimentaires.....	10,812	Dec. 25	25	1194
Butter.....	Société Générale de Produits Alimentaires.....	10,813	Dec. 25	25	1194
Butter.....	Wardell, Gunster & Baker.....	10,132	Mar. 20	23	1036
Butter. Manufactured or artificial.....	C. A. Watson.....	10,757	Dec. 4	25	886
Buttons.....	A. P. Parent.....	10,213	Apr. 24	23	1532
Buttons.....	A. P. Parent.....	10,214	Apr. 24	23	1532
Buttons.....	A. P. Parent.....	10,300	May 22	23	1930
Buttons and studs. Sleeve and collar.....	Cooke & Eddy.....	10,418	July 10	24	104
Buttons. Sleeve.....	F. I. Marcy.....	10,121	Mar. 20	23	1036
Cabs.....	D. P. Nichols & Co.....	10,459	July 24	24	306
Calcimine.....	W. B. Price.....	10,686	Oct. 30	25	398
Calf-skins, calf-kids, and goat-kid skins.....	Bittel, Tepel & Rilers.....	10,263	May 15	23	1836
Candies and sugar toys.....	C. Grimm & Co.....	10,270	May 15	23	1836
Canned and pickled meats.....	H. Verhage.....	10,129	Mar. 20	23	1036
Canned fruits and vegetables.....	Reid, Murdoch & Fischer.....	10,359	June 19	23	2330
Canned fruits and vegetables.....	Reid, Murdoch & Fischer.....	10,465	July 24	24	306
Canned fruits, vegetables, and other articles of food.....	Franco-Californian Packing Company.....	10,658	Oct. 23	25	294
Canned goods.....	G. W. Baker.....	10,752	Dec. 4	25	885
Canned meat. Packages of.....	G. E. Greene.....	10,087	Mar. 6	23	834
Canned or preserved oysters and fish.....	Tillmann & Bendel.....	10,391	July 3	24	2
Canned oysters.....	L. W. Counselman & Co.....	10,723	Nov. 20	25	702
Canned oysters, fruits, and vegetables.....	J. S. Gibbs.....	10,446	July 17	24	208
Canned oysters, fruits, and vegetables.....	Hall Brothers.....	9,936	Jan. 9	23	96
Canned provisions.....	J. O. Schiramel & Co.....	10,151	Mar. 27	23	1126
Cap for exploding dynamite. Blasting.....	J. H. Lau.....	10,628	Oct. 16	25	196
Caps and cartridges, primers, shells, and wads. Pistol or gun.....	Union Metallic Cartridge Company.....	10,717	Nov. 13	25	604
Caps and cartridges, primers, shells, and wads. Pistol and gun.....	Union Metallic Cartridge Company.....	10,733	Nov. 20	25	702
Caps, cartridges, primers, shells, and wads. Pistol and gun.....	Union Metallic Cartridge Company.....	10,748	Nov. 27	25	790
Car-spring. Spiral.....	French Spiral Spring Company, (limited.).....	10,585	Sept. 18	24	1094
Cards for carding cotton.....	L. S. Watson & Co.....	9,925	Jan. 2	23	2
Cards. Playing.....	M. F. Milward.....	10,712	Nov. 13	25	604
Cards. Playing.....	New York Consolidated Card Company.....	10,501	Aug. 14	24	605
Cards. Playing.....	New York Consolidated Card Company.....	10,502	Aug. 14	24	606
Carpets and rugs. Body-brussels and Wilton.....	Schofield, Mason & Co.....	10,400	July 3	24	2
Carpets. Ingrain.....	R. Carlson.....	10,192	Apr. 17	23	1450
Carpets. Ingrain.....	R. Huston.....	10,586	Sept. 18	24	1094
Cement for mending broken articles.....	Kay Brothers.....	10,211	Apr. 24	23	1532
Cement. Hydraulic.....	New York and Rosendale Cement Company.....	10,578	Sept. 11	24	998
Cement, plaster, lime, coloring for mortars, and kaolin.....	W. J. Prentice and G. W. Hackett.....	10,274	May 15	23	1836
Chains. Ornamental.....	Davidson Bros.....	10,384	July 3	24	2
Cheroots, cigars, cigarettes, smoking and chewing tobacco.....	Goodwin & Co.....	10,622	Oct. 9	25	98
Cheroots, cigars, cigarettes, and smoking and chewing tobacco.	Goodwin & Co.....	10,635	Oct. 16	25	196
Cherry-juice.....	Mayer Brothers & Co.....	10,077	Feb. 27	23	744
China. Stone.....	Mellor, Taylor & Co.....	10,573	Sept. 4	24	904
Chocolate.....	Menier.....	10,340	June 5	23	2124
Chocolate.....	Menier.....	10,785	Dec. 18	25	1082
Chocolate and cocoa.....	Runkel Brothers.....	10,285	May 22	23	1930
Chocolate, broma, and cocoa.....	H. L. Pierce.....	10,639	Oct. 16	25	196
Cigarettes.....	J. Huppmann.....	10,660	Oct. 23	25	294
Cigarettes.....	B. L. Livingston.....	10,523	Aug. 14	24	606
Cigarette-paper.....	L. Lacroix, Fils.....	10,095	Mar. 13	23	942
Cigarette-paper.....	May Brothers.....	10,198	Apr. 17	23	1450
Cigarettes and cut tobacco.....	A. Sanderson.....	10,636	Oct. 16	25	196
Cigarettes and cut tobacco.....	Sanderson & Co.....	10,627	Oct. 9	25	98
Cigarettes and cut tobacco.....	Sanderson & Co.....	10,664	Oct. 23	25	294
Cigarettes and smoking-tobacco.....	Compagnie Laferme.....	10,182	Apr. 10	23	1340
Cigarettes, cigars, and smoking and chewing tobacco.....	Goodwin & Co.....	10,802	Dec. 25	25	1194
Cigars.....	Austin, Nichols & Co.....	10,685	Oct. 50	25	398
Cigars.....	M. Entenza.....	10,491	Aug. 7	24	500
Cigars.....	F. Garcia, Bro. & Co.....	10,025	Feb. 6	23	440
Cigars.....	A. Gordon.....	10,147	Mar. 27	23	1126
Cigars.....	A. Gordon.....	10,492	Aug. 7	24	500
Cigars.....	J. D. Loomis.....	10,510	Aug. 14	24	606
Cigars.....	Lozano, Pendas & Co.....	9,937	Jan. 9	23	96
Cigars.....	Lozano, Pendas & Co.....	10,457	July 24	24	306
Cigars.....	H. Lutner.....	10,530	Aug. 21	24	708
Cigars.....	L. Marx.....	10,143	Mar. 27	23	1126
Cigars.....	L. Marx.....	10,760	Dec. 4	25	886
Cigars.....	L. Marx.....	10,761	Dec. 4	25	886
Cigars.....	J. W. Perez.....	10,477	July 31	24	394
Cigars.....	A. Richtering & Co.....	10,791	Dec. 18	25	1082



*Alphabetical list of trade-marks—Continued.*

Title.	Name.	No.	Date.	Official Gazette.	
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Cigars.	Robbins & Ellicott.	10,808	Dec. 25	25	1194
Cigars.	J. Sauer	10,049	Feb. 13	23	544
Cigars.	C. B. Smith, Jr. & Co.	10,496	Aug. 7	24	500
Cigars.	Y. P. Stone	10,792	Dec. 18	25	1082
Cigars.	Taylor Manufacturing Company.	10,705	Nov. 6	25	506
Cigars.	C. A. Yale	10,029	Feb. 6	23	440
Cigars and smoking and chewing tobacco.	Chamberlin, Dewstoe & Co.	10,679	Oct. 30	25	398
Cigars and tobacco	S. W. Allen and J. E. Dunning	10,175	Apr. 10	23	1340
Cigars, cigarettes, and all manufactured tobacco	L. Miller	10,194	Apr. 17	23	1450
Cigars, cigarettes, and chewing and smoking tobacco.	Bloch Brothers	10,595	Sept. 25	24	1180
Cigars, cigarettes, and smoking-tobacco	S. Jacoby & Co.	10,262	May 8	23	1736
Cigars, cigarettes, and smoking-tobacco	H. M. Morris	10,554	Aug. 28	24	802
Cigars, cigarettes, and smoking-tobacco.	Towle, Carle & Co.	10,060	Feb. 20	23	634
Cigars, cigarettes, and snuff.	M. Strasser & Co.	9,948	Jan. 9	23	96
Cigars, cigarettes, chewing and smoking tobacco	Hirschl & Bendheim	10,378	June 26	23	2416
Cigars, cigarettes, smoking and chewing tobacco	Hirschl & Bendheim	10,700	Nov. 6	25	506
Cigars, cigarettes, smoking and chewing tobacco	H. Holzner	9,930	Jan. 2	23	2
Cigars, cigarettes, smoking and chewing tobacco	S. Jacoby & Co.	10,493	Aug. 7	24	500
Cigars, cigarettes, smoking and chewing tobacco	Siegel Brothers	10,673	Oct. 23	25	294
Cigars, cigarettes, smoking and chewing tobacco, and snuff.	S. Belmont & Son	10,318	May 29	23	2036
Cigars, cigarettes, smoking and chewing tobacco, and snuff.	W. R. Johnson, Jr., and C. H. Wray.	10,431	July 17	24	208
Cigars. Havana	M. Irrmann	10,682	Oct. 30	25	398
Cigars. Havana	Scott Bros.	10,404	July 10	24	104
Cigars, plug, fine-cut, and smoking tobacco.	J. B. and D. C. Hitt	10,517	Aug. 14	24	606
Cleaning and polishing jewelry, &c. Preparation for.	E. H. Hartshorn	10,329	June 5	23	2124
Cleaning fabrics. Compound for.	S. D. Franklin	10,613	Oct. 2	25	2
Clocks.	Southern Calendar Clock Company.	10,497	Aug. 7	24	500
Clothing. Boys'	A. Shuman & Co.	10,637	Oct. 16	25	196
Clothing. Boys'	A. Shuman & Co.	10,638	Oct. 16	25	196
Cloths. Cotton and woolen	Pelzer Manufacturing Company	10,561	Aug. 28	24	802
Cocks. Gage.	J. Regester & Sons	10,251	May 1	23	1626
Cod-liver oil.	Ansar, Harford & Co.	9,983	Jan. 30	23	348
Cod-liver-oil cream	A. K. Quinn	9,922	Jan. 2	23	2
Coffee. Roasted	E. Levering & Co.	9,974	Jan. 23	23	274
Coffee. Special brand of.	J. J. Lawrence	10,729	Nov. 20	25	702
Cologne water, essential oils, extracts, essences, tonics, and articles of this class.	West India Manufacturing Company.	10,463	July 24	24	306
Coloring-matter. Red.	I. Levinstein, Campbell & Co.	10,357	June 19	23	2330
Confectionery	A. Slauson & Co.	10,821	Dec. 25	25	1194
Copper ingots, plates, cakes, or bars. Refined	Ansonia Brass and Copper Company.	10,180	Apr. 10	23	1340
Copper ingots, plates, cakes, or bars. Refined	Ansonia Brass and Copper Company.	10,181	Apr. 10	23	1340
Cordial	A. Legrand	9,941	Jan. 9	23	96
Cordial	A. Legrand	9,942	Jan. 9	23	96
Cordial	A. Legrand	10,409	July 10	24	104
Cordial	A. Legrand	10,410	July 10	24	104
Cordial	A. Legrand	10,411	July 10	24	104
Cordial	A. Legrand	10,412	July 10	24	104
Cordial	A. Legrand	10,749	Nov. 27	25	790
Cordial	A. Legrand	10,750	Nov. 27	25	790
Cordial	A. Legrand	10,751	Nov. 27	25	790
Cork-wood.	H. Bucknall & Sons.	10,559	Aug. 28	24	802
Cornets	A. Squire	10,489	Aug. 7	24	500
Corsets	I. W. Birdseye & Co.	10,186	Apr. 17	23	1450
Corsets	I. W. Birdseye & Co.	10,187	Apr. 17	23	1450
Corsets.	J. Bowers	10,744	Nov. 27	25	790
Cosmetic	O. C. Benjamin & Son.	10,336	June 5	23	2124
Cosmetics.	G. L. Burnside.	10,740	Nov. 27	25	790
Cotton drillings and other cotton goods	Appleton Company	10,155	Apr. 10	23	1340
Cotton duck.	Brinckerhoff, Turner & Co.	10,016	Feb. 6	23	440
Cotton duck.	Brinckerhoff, Turner & Co.	10,017	Feb. 6	23	440
Cotton duck.	Brinckerhoff, Turner & Co.	10,018	Feb. 6	23	440
Cotton duck and twines	Gambrell Sons & Co.	10,037	Feb. 13	23	544
Cotton-gins.	Eagle Cotton Gin Company	10,801	Dec. 25	25	1194
Cotton goods	Nashua Manufacturing Company	10,169	Apr. 10	23	1340
Cotton goods. Certain woven.	Mount Vernon Company.	10,522	Aug. 14	24	606
Cotton piece-goods	Amoskeag Manufacturing Company.	10,185	Apr. 17	23	1450
Cotton piece-goods	Brinckerhoff, Turner & Co.	10,019	Feb. 6	23	440
Cotton piece-goods	Langdon Manufacturing Company.	10,137	Mar. 27	23	1126
Cotton sheetings and shirtings	Jackson Company	10,256	May 8	23	1736
Cotton sheetings and shirtings	Jackson Company	10,257	May 8	23	1736
Cotton sheetings, shirtings, and other cotton goods	Appleton Company	10,156	Apr. 10	23	1340
Cotton twine, cod-lines, and carpet-warps.	H. Doyle & Co.	10,632	Oct. 16	25	196
Cotton twine, cod-lines, and carpet-warps.	H. Doyle & Co.	10,633	Oct. 16	25	196
Cotton yarns and braids.	Dollfus-Mieg & Co.	10,631	Oct. 16	25	196
Cough-mixture	Sproat's Syrup of Tar Co.	10,644	Oct. 16	25	196
Cough-sirup	J. R. Williams	10,606	Sept. 25	24	1180
Crackers, biscuits, jumbles, snaps, cakes, wafers, and kindred articles.	Hetfield & Ducker	10,346	June 12	23	2242
Crackers. Butter.	Zeller & Co.	10,776	Dec. 11	25	984
Crayons. Chalk.	Parmenter Crayon Company	10,154	Apr. 3	23	1226
Cure for the opium habit	Erwin, Gayden & Yongue	10,250	May 1	23	1626
Cutlery	G. V. Brecht	10,344	June 12	23	2242
Cutlery and edge-tools	Fones Brothers	10,771	Dec. 11	25	984
Cutlery and edge-tools of every kind	Hale Brothers	10,560	Aug. 28	24	802
Cutting and drilling tools	Morse Twist Drill and Machine Company.	10,389	July 3	24	2
Dates	Gray, Dawes & Co.	10,355	June 19	23	2330
Dentifrice	R. Fingerhut	10,063	Feb. 20	23	634
Dentifrices	Suez, (The Firm of.)	10,473	July 31	24	394
Dentifrices	Suez, (The Firm of.)	10,474	July 31	24	304
Devised entremets.	W. J. Underwood	10,051	Feb. 13	23	544
Diamond-setting	Falkenau, Oppenheimer & Co.	10,721	Nov. 20	25	702
Diphtheria remedy	N. Lacerte.	10,587	Sept. 18	24	1094

*Alphabetical list of trade-marks—Continued.*

Title.	Name.	No.	Date.	Official Gazette.	
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Door-checks. Pneumatic .....	Norton Door Check and Spring Company.	10,589	Sept. 18	24	1094
Dress-shields .....	I. A. Canfield Company.	10,253	May 8	23	1736
Drilling-machines .....	D. Slate.	9,938	Jan. 9	23	96
Drugs and chemicals .....	Burroughs, Wellcome & Co.	9,934	Jan. 9	33	95
Drugs and chemicals .....	Burroughs, Wellcome & Co.	9,935	Jan. 9	23	95
Drugs and chemicals .....	C. Lowe & Co.	10,104	Mar. 13	23	942
Dry-goods. Certain .....	Burke, Walker & Co.	10,469	July 31	24	394
Dyes .....	F. A. Ransom.	10,283	May 22	23	1930
Dyes .....	Wells, Richardson & Co.	10,072	Feb. 27	23	744
Dyes for tissues .....	A. Meunier & Co.	9,981	Jan. 23	23	274
Dyspepsia. Remedy for .....	J. S. Hall & Co.	10,308	May 29	23	2036
Earthenware, iron-stone china, black luster, and fancy-colored stoneware.	Edge, Malkin & Co.	10,710	Nov. 13	25	604
Edge-tools. Certain .....	Collins Company.	9,958	Jan. 16	23	196
Edge tools. Certain .....	Les Fils de Peugeot Frères.	10,375	June 26	23	2416
Electric machines. Dynamo and magneto .....	J. B. Tibbits.	10,275	May 15	23	1836
Electro-plated wares .....	W. Wilson & Son.	9,950	Jan. 9	23	96
End-gates. Wagon .....	H. H. Perkins.	10,140	Mar. 27	23	1126
Extracts of tropical fruits. Compounded .....	G. Simmonds.	10,799	Dec. 18	25	1062
Fencing. Barbed-wire .....	Thorn Wire Hedge Company.	10,233	May 1	23	1626
Fertilizers .....	Common Sense Fertilizer Company.	10,621	Oct. 9	25	95
Fertilizers .....	I. E. & L. S. Hoopes.	9,959	Jan. 16	23	196
Fertilizers .....	I. E. & L. S. Hoopes.	9,960	Jan. 16	23	196
Fertilizers .....	Jarvis & Hooper.	10,507	Aug. 14	24	606
Fertilizers .....	Imperial Guano Company.	10,057	Feb. 20	23	634
Fertilizers .....	Patapsco Guano Company.	10,230	May 1	23	1626
Fertilizers .....	Patapsco Guano Company.	10,231	May 1	23	1626
Files .....	C. F. Butcher.	10,422	July 17	24	208
Files, edge-tools, razors, and cutlery .....	C. F. Butcher.	10,596	Sept. 25	24	1160
Files, edge-tools, razors, and cutlery .....	C. F. Butcher.	10,597	Sept. 25	24	1160
Filters. Domestic .....	Stoddard Lock Company.	10,149	Mar. 27	23	1126
Filters. Water- .....	McBride & Co.	10,312	May 29	23	2036
Fire-works .....	Unexcelled Fireworks Company.	10,814	Dec. 25	25	1194
Fish-hooks .....	R. Harrison, Bartleet & Co.	10,135	Mar. 27	23	1126
Fish-hooks and fishing-tackle .....	R. Harrison, Bartleet & Co.	10,189	Apr. 17	23	1450
Fish. Various preparations and compounds of .....	H. Reessing.	10,284	May 22	23	1930
Flour .....	J. Amos & Sons.	10,080	Mar. 6	23	834
Flour .....	J. Amos & Sons.	10,081	Mar. 6	23	834
Flour .....	J. Amos & Sons.	10,082	Mar. 6	23	834
Flour .....	J. Amos & Sons.	10,083	Mar. 6	23	834
Flour .....	J. Amos & Sons.	10,084	Mar. 6	23	834
Flour .....	J. Amos & Sons.	10,133	Mar. 27	23	1126
Flour .....	Barbour & Hamilton.	10,364	June 26	23	2415
Flour .....	Barbour & Hamilton.	10,565	Sept. 4	24	903
Flour .....	T. G. Bush & Co.	10,398	July 3	24	2
Flour .....	D. De Castro & Co.	9,999	Jan. 30	23	348
Flour .....	Fitzsimmons & Kreider.	10,506	Aug. 14	24	606
Flour .....	J. F. Imbs & Co.	10,255	May 8	23	1736
Flour .....	Joseph & Anderson.	10,455	July 24	24	306
Flour .....	Joseph & Anderson.	10,456	July 24	24	306
Flour .....	W. & A. Leaman.	10,184	Apr. 10	23	1340
Flour .....	B. R. Pegram, Jr.	10,042	Feb. 13	23	544
Flour .....	B. R. Pegram, Jr.	10,043	Feb. 13	23	544
Flour .....	B. R. Pegram, Jr.	10,044	Feb. 13	23	544
Flour .....	B. R. Pegram, Jr.	10,045	Feb. 13	23	544
Flour .....	B. R. Pegram, Jr.	10,046	Feb. 13	23	544
Flour .....	B. R. Pegram, Jr.	10,047	Feb. 13	23	544
Flour .....	Tellado, Giberga & Co.	10,714	Nov. 13	25	604
Flour .....	Tellado, Giberga & Co.	10,715	Nov. 13	25	604
Flour .....	Van Gundy, Constant & Co.	10,718	Nov. 13	25	604
Flour. Buck-wheat .....	H. A. & H. D. Bogardus.	10,287	May 22	23	1930
Flour. Patent-process .....	W. M. Galt & Co.	10,313	May 29	23	2036
Flour. Patent-process .....	W. M. Galt & Co.	10,314	May 29	23	2036
Flour. Wheat .....	H. C. Cole & Co.	10,598	Sept. 25	24	1180
Flour. Wheat .....	H. C. Cole & Co.	10,599	Sept. 25	24	1180
Flour. Wheat .....	H. C. Cole & Co.	10,600	Sept. 25	24	1180
Flour. Wheat .....	H. B. Crosby & Son.	10,112	Mar. 13	23	942
Flour. Wheat .....	E. S. Gilmore.	10,036	Feb. 13	23	544
Flour. Wheat .....	Kelley & Lysle.	10,484	Aug. 7	24	500
Flour. Wheat .....	Kelley & Lysle.	10,521	Aug. 14	24	606
Flour. Wheat .....	Lawton Brothers.	10,058	Feb. 20	23	634
Flour. Wheat .....	S. O. Ryder.	9,964	Jan. 16	23	196
Flour. Wheat .....	E. O. Stanard & Co.	9,947	Jan. 9	23	96
Flour. Wheat .....	E. O. Stanard & Co.	10,397	July 3	24	2
Flour. Wheat .....	E. O. Stanard & Co.	10,443	July 17	24	208
Food for invalids and infants. Prepared .....	G. Mellin.	8,806	Dec. 25	25	1194
Forgings and articles made therefrom. Drop-garters.	Williams & Diamond.	10,235	May 1	23	1626
Gin .....	L. D. Minor and C. J. Haley.	10,388	July 3	24	2
Gin .....	Adams, Taylor & Co.	10,030	Feb. 13	23	544
Gin .....	H. Bohlen & Co.	9,920	Jan. 2	23	2
Gin .....	J. De Kuyper & Son.	10,490	Aug. 7	24	500
Gin, rum, brandy, whisky, and foreign and domestic wines.	J. Miller & Co.	10,488	Aug. 7	24	500
Glass table-ware and fancy articles .....	F. S. Shirley.	10,011	Jan. 30	23	348
Glucose .....	Glen Cove Manufacturing Company.	10,373	June 26	23	2416
Glucose .....	Glen Cove Manufacturing Company.	10,374	June 26	23	2416
Glucose .....	Glen Cove Manufacturing Company.	10,482	Aug. 7	24	500
Glucose .....	Glen Cove Manufacturing Company.	10,483	Aug. 7	24	500
Glue .....	B. Cannon & Co.	10,279	May 22	23	1930
Glue .....	E. Cannon & Sons.	10,289	May 22	23	1930
Glue. Machine- .....	C. H. and E. A. J. Manneck.	10,722	Nov. 20	25	702
Grease-extractors .....	J. Wiweko.	10,794	Dec. 18	25	1082
Gum. Chewing- .....	S. Coleman.	10,649	Oct. 23	25	294
Hair-elixir .....	W. Lasson.	10,617	Oct. 2	25	2



*Alphabetical list of trade-marks—Continued.*

Title.	Name.	No.	Date.	Official Gazette.	
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Hair preparation	J. C. Ayer Company	10,692	Nov. 6	25	506
Hair-renewer. Vegetable Sicilian	J. C. Ayer Company	10,558	Aug. 28	24	802
Hair restorer and invigorator	B. J. Kendall & Co	10,569	Sept. 4	24	904
Hair-restoratives	J. A. Shattuck	9,966	Jan. 16	23	196
Hair waves	M. E. Thompson	10,768	Dec. 4	25	886
Ham, bacon, and lard	H. Denny & Sons	9,979	Jan. 23	23	274
Ham, bacon, and lard	H. Denny & Sons	10,290	May 23	23	1930
Ham, bacon, and lard	H. Denny & Sons	10,601	Sept. 25	24	1180
Hamburg edgings, Swiss embroideries, and like fabrics	M. Guggenheim's Sons	10,367	June 26	23	2416
Hardware. Saddlery	North & Judd Manufacturing Company	10,762	Dec. 4	25	886
Harmonicas	W. Tonk & Bro	10,541	Aug. 21	24	708
Healing-balm for chapped hands	A. J. Kaercher	10,796	Dec. 18	25	1082
Hermetically-sealed vegetables, fruits, oysters, fish, meats, &c.	F. H. Siewerd & Bro	10,195	Apr. 17	23	1450
Hoes	Iowa Farming Tool Company	10,726	Nov. 20	25	702
Hop substitute	P. Müller	10,199	Apr. 17	23	1450
Horse-powers	M. Harder	10,225	May 1	23	1626
Horseshoe-nails	Anusible Horse Nail Company	10,676	Oct. 30	25	398
Hosiery	G. Hecker und Soehne	10,354	June 19	23	2330
Hydrocarbon fluid	Hopkins and Milnor	10,254	May 8	23	1736
Implements. Certain agricultural	Collins Company	10,006	Jan. 30	23	348
Ink. Writing	Carter, Dinsmore & Co	10,099	Mar. 13	23	942
Ink. Writing	Carter, Dinsmore & Co	10,101	Mar. 13	23	942
Inks. Lithographic	R. Mayer & Co	9,988	Jan. 30	23	348
Insulated electric conductors	Ansonia Brass and Copper Company	10,720	Nov. 20	25	702
Iron and steel. Sheet	Republic Iron Works	10,790	Dec. 18	25	1082
Isinglass. American	A. Loos	10,730	Nov. 20	25	702
Ivory. Zylonite	American Zylonite Company	10,564	Sept. 4	24	903
Knit woolen goods. Filled	C. E. Wakeman & Co	10,362	June 19	23	2330
Knives, forks, and spoons	L. F. Dunn	10,765	Dec. 4	25	886
Lace goods	A. G. Jennings & Sons	10,238	May 1	23	1626
Lamp-chimneys	G. A. Macbeth & Co	10,653	Oct. 23	25	294
Lamp-chimneys and lantern-globes	G. A. Macbeth & Co	10,652	Oct. 23	25	294
Lard	J. Agostini	10,655	Oct. 23	25	294
Lard	Chamberlain, Roe & Co	10,656	Oct. 23	25	294
Lard	Chamberlain, Roe & Co	10,657	Oct. 23	25	294
Lard	G. P. Napheys & Son	10,678	Feb. 27	23	744
Lard-packages	Menacho, Puig & Co	10,040	Feb. 13	23	544
Lard-packages	Menacho, Puig & Co	10,041	Feb. 13	23	544
Lard-packages	Menacho, Puig & Co	10,065	Feb. 20	23	634
Lard. Refined	N. K. Fairbank & Co	10,162	Apr. 10	23	1340
Lard. Refined	N. K. Fairbank & Co	10,163	Apr. 10	23	1340
Laxative	F. B. Kilmer and J. C. Higgins	10,309	May 29	23	2036
Leather. Certain kinds and articles of	Page Belting Company	10,348	June 12	23	2242
Leather. Harness	Woelfel & Linke	9,927	Jan. 2	23	2
Leather. Kid	A. H. Reitlinger	10,550	Aug. 28	24	802
Lemons and oranges	A. Minaldi & Co	9,923	Jan. 2	23	2
Licorice-paste	D. V. Arguimbau	10,109	Mar. 13	23	942
Licorice-paste	D. V. Arguimbau	10,111	Mar. 13	23	942
Licorice-paste in sticks	D. V. Arguimbau	10,110	Mar. 13	23	942
Lime-juice. Various preparations of	L. Rose & Co	9,965	Jan. 16	23	196
Liniment	C. F. Barnes	10,407	July 10	24	104
Liniment	J. W. Billington	10,146	Mar. 27	23	1126
Liniment	F. E. Copp	10,519	Aug. 14	24	606
Liniment	M. C. Corbitt	10,609	Oct. 2	25	2
Liniment	S. M. Gaylord	10,125	Mar. 20	23	1036
Liniment	Hamlin's Wizard Oil Company	10,141	Mar. 27	23	1126
Liniment	W. J. Nelson	10,215	Apr. 24	23	1532
Liniment	P. G. Schuh	10,514	Aug. 14	24	606
Liniment for external and internal use	C. A. Vogeler Company	10,719	Nov. 13	25	604
Liniment for internal and external use	C. A. Vogeler Company	10,116	Mar. 13	23	942
Liniment for man and beast	J. Quinlan	10,590	Sept. 18	24	1094
Liniment. Horse	P. P. Mesler & Co	10,139	Mar. 27	23	1126
Liniment. Oil	J. H. Hess & Co	10,766	Dec. 4	25	886
Liniment to be used externally for the destruction of all kinds of parasites on stock and poultry and for healing the wounds caused by the same	T. L. Miller	10,476	July 31	24	394
Liquors and cordials	A. V. Ardura	10,675	Oct. 30	25	398
Liquors. Certain table	J. Berger	10,445	July 17	24	208
Lithogen and silicate paints, and preparations composed more or less of ground silic, as coverings for metals and wood	Bridgeport Wood Finishing Company	10,123	Mar. 20	23	1036
Lozenges	T. Keating	9,987	Jan. 30	23	348
Lozenges	A. Slanson & Co	10,809	Dec. 25	25	1194
Lozenges	A. Slanson & Co	10,810	Dec. 25	25	1194
Lozenges	A. Slanson & Co	10,811	Dec. 25	25	1194
Lozenges	A. Slanson & Co	10,819	Dec. 25	25	1194
Lozenges	A. Slanson & Co	10,820	Dec. 25	25	1194
Lubricants	Leib Lubricating Company	10,113	Mar. 13	23	942
Lubricants or oils for journal-bearings	Johns, Thompson & Co	9,939	Jan. 9	23	96
Lubricating compound	Bliven & Carrington	10,223	May 1	23	1626
Lubricating material	R. K. Remington	10,438	July 17	24	208
Lumber in logs, boards, and staves	A. Brown	10,417	July 10	24	104
Malt extract	Loeflund & Co	10,219	Apr. 24	23	1532
Malt liquors	H. Clausen & Son Brewing Company	10,370	June 26	23	2416
Matches. Safety	Vulcan Tändsticksfabriks Aktiebolaget	10,351	June 12	23	2242
Meat extract	R. W. Anderson	10,571	Sept. 4	24	904
Meats. Certain cured	E. S. Kibbe and C. P. Robinson	9,951	Jan. 9	23	96
Medical and chemical preparations	W. H. Woodcock	10,580	Sept. 11	24	998
Medical and chemical preparations for the treatment and cure of human diseases	Déclat Manufacturing Company	10,337	June 5	23	2124
Medical appliances. Certain electric	G. J. Baker	10,413	July 10	24	104
Medical capsules	J. Ferré	10,742	Nov. 27	25	790
Medical compound. Certain	J. M. Baker	10,707	Nov. 13	25	604

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Title.	Name.	No.	Date.	Official Gazette.	
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Medical compound. Certain .....	World's Dispensary Medical Association.	10,191	Apr. 17	23	1450
Medical compound for diseases of the skin .....	P. A. Andreae .....	10,067	Feb. 27	23	744
Medical compound for the cure of pain and inflammation .....	H. R. Stevens .....	10,221	Apr. 24	23	1532
Medical compound for the cure of pain and inflammation .....	H. R. Stevens .....	10,222	Apr. 24	23	1532
Medical preparations. Certain .....	J. C. Ayer Company .....	10,556	Aug. 28	24	802
Medical preparations for horses. Certain .....	J. R. Williams .....	10,518	Aug. 14	24	606
Medical preparations for the cure of diseases of the genital organs.	J. Ferré .....	10,743	Nov. 27	25	790
Medical remedy for the diseases of women .....	J. S. Hall & Co. ....	10,307	May 29	23	2036
Medical tea .....	A. Sicre .....	10,106	Mar. 13	23	942
Medicinal and other uses. Certain composition of petroleum and mustard-seed oil for .....	G. F. Senter .....	10,563	Aug. 28	24	802
Medicinal compound for the cure of scrofula and the like diseases.	H. R. Stevenson .....	10,468	July 24	24	306
Medicinal preparation .....	G. L. Beck .....	10,260	May 8	23	1736
Medicinal preparation .....	Tilden & Co. ....	10,504	Aug. 14	24	606
Medicinal preparation for external and internal pain .....	W. M. Pitts .....	10,088	Mar. 6	23	834
Medicinal preparation for external and internal use .....	C. B. Colwell .....	10,302	May 22	23	1930
Medicinal preparation for horses, cattle, and other animals. Certain .....	S. E. Tompkins .....	10,128	Mar. 20	23	1036
Medicinal preparation known as wheat, lime, and rye .....	Cook & Bernheimer .....	10,640	Oct. 16	25	196
Medicinal preparations .....	Dr. D. Jayne & Son .....	10,553	Aug. 28	24	802
Medicinal preparations. Homeopathic .....	C. T. Hurlburt .....	10,725	Nov. 20	25	702
Medicinal specific for neuralgia .....	Allen & Hanburys .....	10,342	June 12	23	2242
Medicinal substance .....	E. C. Colgan & Co .....	10,206	Apr. 24	23	1532
Medicated toilet compound .....	A. Simonson .....	10,774	Dec. 11	25	984
Medicine. Cathartic .....	Francis Brothers .....	10,261	May 8	23	1736
Medicine. Certain proprietary .....	C. G. Garrison .....	10,538	Aug. 21	24	708
Medicine. Certain proprietary .....	R. K. Graham .....	10,641	Oct. 16	25	196
Medicine. Certain proprietary .....	C. A. Higgins .....	10,681	Oct. 30	25	398
Medicine. Certain proprietary .....	National Herbal Cure Company .....	10,549	Aug. 28	24	802
Medicine. Certain proprietary .....	H. H. Warner .....	10,645	Oct. 16	25	196
Medicine. Certain proprietary .....	P. M. Way .....	10,690	Oct. 30	25	398
Medicine. Cholera .....	Duffield & Moll .....	10,584	Sept. 18	24	1094
Medicine containing sarsaparilla. Proprietary .....	J. C. Ayer Company .....	10,694	Nov. 6	25	506
Medicine. Cough .....	F. S. Stevens .....	10,327	June 5	23	2124
Medicine for affections of the lungs and throat. Proprietary .....	J. C. Ayer Company .....	10,693	Nov. 6	25	506
Medicine for constipation .....	C. L. Topliff .....	10,793	Dec. 18	25	1082
Medicine for external and internal use .....	C. A. Vogeler Company .....	10,325	June 5	23	2123
Medicine for malarial diseases. Proprietary .....	J. C. Ayer Company .....	10,691	Nov. 6	25	506
Medicine for nervous and other diseases .....	G. W. Bible .....	10,319	May 29	23	2036
Medicine for neuralgia, rheumatism, gout, and kindred diseases.	H. Berbenich .....	10,699	Nov. 6	25	506
Medicine for the cure of coughs, colds, and diseases of the throat and lungs.	S. R. Scoggins .....	9,982	Jan. 23	23	274
Medicine for the cure of pulmonary and throat diseases .....	A. R. Mettee .....	9,980	Jan. 23	23	274
Medicine for the prevention and cure of chills and fever and malarial diseases.	A. Kirkpatrick & Co. ....	10,500	Aug. 14	24	605
Medicine for the treatment of the diseases of the genital organs.	J. Ferré .....	10,741	Nov. 27	25	790
Medicine in the form of pills. Proprietary .....	J. C. Ayer Company .....	10,698	Nov. 6	25	506
Medicine. Proprietary .....	F. F. Berger .....	10,478	Aug. 7	24	499
Medicine. Proprietary .....	Craig Kidney Cure Co .....	10,188	Apr. 17	23	1450
Medicine. Proprietary .....	L. B. Hubbell .....	9,962	Jan. 16	23	196
Medicine. Proprietary .....	H. A. Ingham .....	10,196	Apr. 17	23	1450
Medicine. Proprietary .....	H. A. Ingham .....	10,210	Apr. 24	23	1532
Medicine. Proprietary .....	E. H. Kaerccross .....	10,520	Aug. 14	24	606
Medicine. Proprietary .....	S. T. W. Sanford & Sons .....	10,368	June 26	23	2416
Medicine. Proprietary .....	R. E. Sellers & Co .....	10,643	Oct. 16	25	196
Medicine. Sheep .....	C. E. Williams & Co .....	10,646	Oct. 16	25	196
Medicines. Certain proprietary fluid .....	J. C. Mendenhall .....	10,651	Oct. 23	25	294
Medicines. Chill, fever, and ague .....	W. J. W. Kerr & Son .....	10,754	Dec. 4	25	886
Metal. Pigs of Babbitt .....	Granular Metal Company .....	10,614	Oct. 2	25	2
Milk. Condensed .....	New York Condensed Milk Company .....	10,511	Aug. 14	24	606
Milk. Condensed .....	New York Condensed Milk Company .....	10,512	Aug. 14	24	606
Milk. Condensed or concentrated .....	H. Y. Canfield .....	10,746	Nov. 27	25	790
Mineral water .....	B. Stern & Co .....	10,696	Nov. 6	25	506
Mineral water and natural spring waters.	Lights & Brother .....	10,486	Aug. 7	24	500
Mineral waters .....	J. L. Lockwood .....	10,432	July 17	24	208
Mineral waters. Artificial .....	C. Matthes .....	10,798	Dec. 18	25	1082
Mineral waters. Natural .....	F. Hollender .....	10,179	Apr. 10	23	1340
Mineral waters. Natural .....	H. Löhr .....	10,168	Apr. 10	23	1340
Mineral waters. Natural .....	Luyties Brothers .....	10,487	Aug. 7	24	500
Mirrors .....	P. Wiederer .....	10,089	Mar. 6	23	834
Mixtures. Anti-rheumatic .....	S. J. Imperatori .....	10,472	July 31	24	394
Molded articles to resemble glass, such as tiles, plaques, hearths, table-tops, &c.	E. Rosenzi .....	10,381	June 26	23	2416
Moldings. Ornamental .....	Fillmann & Co. ....	10,408	July 10	24	104
Moth and insect exterminator .....	H. S. Danziger .....	10,033	Feb. 13	23	544
Mucilage .....	Carter, Dinsmore & Co .....	10,100	Mar. 13	23	942
Mucilage .....	Carter, Dinsmore & Co .....	10,102	Mar. 13	23	942
Musical instruments .....	J. H. Foote .....	10,552	Aug. 28	24	802
Musical instruments. Certain .....	P. Goumas & Co .....	10,366	June 26	23	2416
Mustard .....	Wolff & Reussing .....	10,108	Mar. 13	23	942
Needles .....	T. H. Harper .....	10,166	Apr. 10	23	1340
Needles. Sewing .....	J. Smith & Son .....	9,931	Jan. 2	23	2
Needles. Sewing .....	J. Smith & Son .....	10,066	Feb. 20	23	634
Nets .....	A. G. Jennings & Sons .....	10,395	July 3	24	2
Nets and lace goods .....	A. G. Jennings & Sons .....	10,239	May 1	23	1626
Nets and lace goods .....	A. G. Jennings & Sons .....	10,240	May 1	23	1626
Nets and other reticulated fabrics. Hair .....	A. G. Jennings & Sons .....	10,241	May 1	23	1626
Nets and other reticulated fabrics. Hair .....	A. G. Jennings & Sons .....	10,566	Sept. 4	24	904
Nets and other reticulated fabrics. Hair .....	A. G. Jennings & Sons .....	10,567	Sept. 4	24	904



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Nets and other reticulated fabrics. Hair.....	A. G. Jennings & Sons .....	10,568	Sept. 4	24	904
Nets and reticulated fabrics. Hair.....	A. G. Jennings & Sons .....	10,727	Nov. 20	25	702
Oars, sweeps, sculls, and handspikes.....	New York Boat Oar Company .....	10,467	July 24	24	306
Oil. Burning.....	Red C Oil Manufacturing Company.....	9,952	Jan. 9	23	96
Oil. Cod-liver.....	T. P. Hogg .....	10,228	May 1	23	1626
Oil-finish.....	R. M. Breinig .....	10,462	July 10	24	104
Oil. Illuminating.....	Coombs, Crosby & Eddy .....	9,970	Jan. 23	23	274
Oil. Lubricating.....	Johns, Thompson Company .....	10,797	Dec. 18	25	1082
Oil. Petroleum or kerosene.....	Tillmann & Bendel .....	10,392	July 3	24	2
Oil. Refined petroleum.....	Chester Oil Company .....	10,236	May 1	23	1626
Oils. Lubricating.....	Bliven & Carrington .....	10,103	Mar. 13	23	942
Oils. Lubricating.....	Brooks Oil Company .....	10,013	Feb. 6	23	440
Oils. Lubricating.....	Leib Lubricating Company .....	10,114	Mar. 13	23	942
Oils, pigments, varnishes, driers, primers, and the like.....	R. M. Breinig .....	10,353	June 19	23	2330
Oils to prevent rust, tarnish, or verdigris.....	Hopkins, Russell & Co. ....	10,070	Feb. 27	23	744
Optical goods. Certain.....	J. B. Jacquemin Frères.....	10,430	July 17	24	208
Organs. Reed.....	J. Bellak .....	9,967	Jan. 16	23	196
Organs. Reed.....	J. Bellak .....	10,061	Feb. 20	23	634
Organs. Reed.....	J. Bellak .....	10,062	Feb. 20	23	634
Overalls, shirts, underwear, pants, suspenders, and collars.....	H. Exstein & Co .....	10,268	May 15	23	1836
Overalls, shirts, underwear, pants, suspenders, and collars.....	H. Exstein & Co .....	10,269	May 15	23	1836
Oxygen and inhaler. Compound.....	G. R. Starkey and G. E. Palen.....	10,449	July 17	24	208
Oysters.....	J. W. Boyle .....	10,708	Nov. 13	25	604
Ozone-water. Concentrated.....	Chemical Ozone Manufacturing Company.....	9,968	Jan. 16	23	196
Paint. Fire and water proof.....	H. E. Rowe .....	10,461	July 24	24	306
Paint. Roofing.....	A. F. and G. W. Hawthorn .....	10,136	Mar. 27	23	1126
Paints and dyes.....	A. M. Meincke .....	10,009	Jan. 30	23	348
Paints and oils.....	Mound City Paint & Color Company.....	10,243	May 1	23	1626
Paints, wood-fillers, clays, ochers, &c.....	Saint Louis Paint Manufacturing Company.....	10,048	Feb. 13	23	544
Paper and envelopes of all kinds. Writing.....	Z. Crane, Jr., & Bro .....	10,650	Oct. 23	25	294
Paper boxes.....	G. W. Plumly & Son .....	10,654	Oct. 23	25	294
Paper pads.....	Coats & Evans .....	10,608	Oct. 2	25	2
Paper. Wrapping.....	J. A. Dushane .....	9,985	Jan. 30	23	348
Paper. Writing.....	Blanchet Frères et Kléber .....	10,415	July 10	24	104
Paper. Writing.....	Blanchet Frères et Kléber .....	10,416	July 10	24	104
Paper. Writing.....	Carter, Rice & Co. Corporation .....	10,800	Dec. 25	25	1194
Parasols and umbrellas.....	F. Revel, Père & Fils .....	10,376	June 26	23	2416
Pencils. Lead.....	Gilbert & Co .....	10,782	Dec. 18	25	1082
Pencils. Lead.....	Gilbert & Co .....	10,783	Dec. 18	25	1082
Pens. Metallic.....	Esterbrook Steel Pen Manufacturing Company.....	10,157	Apr. 10	23	1340
Pens. Metallic.....	Esterbrook Steel Pen Manufacturing Company.....	10,158	Apr. 10	23	1340
Pens. Metallic.....	Esterbrook Steel Pen Manufacturing Company.....	10,159	Apr. 10	23	1340
Pens. Metallic.....	Esterbrook Steel Pen Manufacturing Company.....	10,160	Apr. 10	23	1340
Pens. Metallic.....	Esterbrook Steel Pen Manufacturing Company.....	10,161	Apr. 10	23	1340
Pens. Metallic.....	Esterbrook Steel Pen Manufacturing Company.....	10,603	Sept. 25	24	1180
Pens. Metallic.....	Esterbrook Steel Pen Manufacturing Company.....	10,604	Sept. 25	24	1180
Pens. Steel.....	J. Gillott & Sons .....	10,426	July 17	24	208
Pens. Steel.....	J. Gillott & Sons .....	10,427	July 17	24	208
Pens. Steel.....	J. Gillott & Sons .....	10,428	July 17	24	208
Pens. Steel.....	J. Gillott & Sons .....	10,429	July 17	24	208
Perfumery.....	H. Tetlow & Bro .....	10,107	Mar. 13	23	942
Perfumery and perfumed articles for the toilet.....	Piesse & Lubin .....	10,807	Dec. 25	25	1194
Perfumery and toilet articles.....	F. Prof & Co .....	10,419	July 10	24	104
Perfumery and toilet articles.....	West India Manufacturing Company.....	10,126	Mar. 20	23	1036
Perfumery and toilet articles.....	West India Manufacturing Company.....	10,127	Mar. 20	23	1036
Perfumery, toilet-powder, and cosmetics.....	Lazell, Marsh & Gardiner.....	10,702	Nov. 6	25	506
Perfumery and toilet preparations.....	West India Manufacturing Company.....	10,053	Feb. 13	23	544
Perfumery and toilet preparations.....	West India Manufacturing Company.....	10,054	Feb. 13	23	544
Perfumery and toilet preparations.....	West India Manufacturing Company.....	10,055	Feb. 13	23	544
Perfumery, creams, dentifrice, hair-oils, and analogous articles used in toilet preparations.....	A. Raynaud.....	10,352	June 12	23	2242
Petroleum. Refined.....	Mayer Brothers & Co .....	10,577	Sept. 11	24	998
Petroleum. Refined.....	Meissner, Ackermann & Co .....	10,387	July 3	24	2
Phenol.....	H. Clostre .....	9,996	Jan. 30	23	348
Pianos. Diminutive upright.....	G. Steck .....	10,674	Oct. 23	25	204
Picks and other adz-eye tools.....	Washoe Manufacturing Company.....	10,775	Dec. 11	25	984
Pickles, vinegar, sauces, catsups, prepared horse-radish, prepared mustard, preserves, jellies, marmalades, jams, and fruit-butters.....	F. & J. Heinz .....	10,119	Mar. 20	23	1036
Pills.....	J. C. Ayer Company .....	10,557	Aug. 28	24	802
Pills.....	Elmair & Co .....	10,451	July 24	24	306
Pills.....	P. Neustaedter & Co .....	9,973	Jan. 23	23	274
Pills. Liver.....	J. W. Angell .....	10,015	Feb. 6	23	440
Pins.....	Plume & Atwood Manufacturing Company.....	10,436	July 17	24	208
Pins.....	Plume & Atwood Manufacturing Company.....	10,437	July 17	24	208
Pins, rings, chains, bracelets, brooches, drops, &c.....	F. S. Draper .....	10,770	Dec. 11	25	984
Pipes. Corn-cob.....	H. Tibbe, Son & Co .....	9,975	Jan. 23	23	274
Plaster. Curative.....	G. L. Burnside .....	10,709	Nov. 13	25	604

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Plastic material composed in part of pyroxyline.....	Celluloid Manufacturing Company..	9,971	Jan. 23	23	274
Plows and analogous implements .....	Collins Company .....	9,953	Jan. 16	23	195
Plows and analogous implements .....	Collins Company .....	9,957	Jan. 16	23	196
Pomades .....	R. Prud'homme .....	10,349	June 12	23	2242
Pomatum, scented liquids, powders, hair-oils, and cosmetics .....	Soubiran & Co .....	10,341	June 5	23	2124
Pop-corn. Sugar-coated .....	G. E. Clark .....	10,735	Nov. 20	25	702
Porcelain, earthenware, and glassware .....	Haviland & Co .....	10,525	Aug. 21	24	707
Porcelain, earthenware, and glassware .....	Haviland & Co .....	10,526	Aug. 21	24	707
Porcelain, earthenware, and glassware .....	Haviland & Co .....	10,527	Aug. 21	24	708
Porcelain, earthenware, and glassware .....	Haviland & Co .....	10,528	Aug. 21	24	708
Porcelain-ware .....	A. Hamann .....	10,282	May 22	23	1930
Pottery of all kinds .....	J. Wedgewood & Sons .....	10,537	Aug. 21	24	708
Pottery of every description .....	Mintons .....	10,588	Sept. 18	24	1094
Powder. Sporting .....	W. R. Burkhard .....	10,767	Dec. 18	25	1082
Preparation for softening and beautifying the hands and face .....	J. F. Stevenson .....	10,022	Feb. 6	23	440
Preparation to promote digestion in infants and children .....	C. F. Barnes .....	10,414	July 10	24	104
Preservative. Food .....	Hines' Preserving Company .....	10,208	Apr. 24	23	1532
Preservatives. Food .....	Humiston Food Preserving Com- pany.	10,203	Apr. 17	23	1450
Preservatives. Food .....	Humiston Food Preserving Com- pany.	10,204	Apr. 17	23	1450
Preservatives. Food .....	Humiston Food Preserving Com- pany.	10,291	May 22	23	1930
Preservatives. Food .....	Humiston Food Preserving Com- pany.	10,292	May 22	23	1930
Preservatives. Food .....	Humiston Food Preserving Com- pany.	10,293	May 22	23	1930
Preservatives. Food .....	Humiston Food Preserving Com- pany.	10,294	May 22	23	1930
Preservatives. Food .....	Humiston Food Preserving Com- pany.	10,295	May 22	23	1930
Preservatives. Food .....	Humiston Food Preserving Com- pany.	10,296	May 22	23	1930
Preservatives. Food .....	Humiston Food Preserving Com- pany.	10,297	May 22	23	1930
Preservatives. Food .....	Humiston Food Preserving Com- pany.	10,298	May 22	23	1930
Preservatives. Food .....	Humiston Food Preserving Com- pany.	10,299	May 22	23	1930
Preservative for animal and vegetable substances .....	C. G. Am Ende .....	10,647	Oct. 23	25	294
Preservatives for animal and vegetable substances. Chemi- cal .....	C. G. Am Ende .....	10,607	Oct. 2	25	2
Preserved fruits, jellies, jams, and canned vegetables .....	Tillmann & Bendel .....	10,390	July 3	24	2
Printing-presses .....	Babcock Printing Press Manufac- turing Company.	10,205	Apr. 24	23	1532
Prints. Cotton .....	Coffin, Altemus & Co .....	9,978	Jan. 23	23	274
Pulley-blocks .....	H. Loud .....	10,683	Oct. 30	25	398
Railway-rails and railway-fastenings .....	St. Louis Bolt and Iron Company .....	10,079	Mar. 6	23	834
Razors .....	F. Ascheuer .....	10,665	Oct. 23	25	294
Razors .....	C. F. Butcher .....	10,423	July 17	24	208
Razors .....	H. Sears & Co .....	9,946	Jan. 9	23	96
Reapers. Single-wheel .....	McCormick Harvesting Machine Company.	10,704	Nov. 6	25	506
Remedies containing cresylic or carbolic acid for diseases of animals .....	J. P. Barnett .....	10,343	June 12	23	2242
Remedies in both dry and liquid form for the cure of internal and external diseases .....	World's Medicine Company of Buf- falo, New York.	10,286	May 22	23	1930
Remedies. Internal .....	Swift Specific Company .....	10,144	Mar. 27	23	1126
Remedies. Internal .....	W. A. Taylor .....	10,503	Aug. 14	24	606
Remedy for catarrh .....	C. F. Barnes .....	10,406	July 10	24	104
Remedy for catarrh, cold in the head and throat .....	H. F. Roberson .....	10,360	June 19	23	2330
Remedy for chills, neuralgia, &c .....	C. F. Simmons .....	10,562	Aug. 28	24	802
Remedy for consumption .....	E. T. Hazeltine .....	10,471	July 31	24	394
Remedy for diphtheria .....	R. Amthor .....	10,804	Dec. 25	25	1194
Remedy for diseases of the liver .....	J. J. & W. H. Tobin .....	10,350	June 12	23	2242
Remedy for dyspepsia and indigestion .....	R. King .....	10,073	Feb. 27	23	744
Remedy for epilepsy .....	H. F. Schweer .....	10,755	Dec. 4	25	886
Remedy for external and internal pain .....	E. B. Dodge .....	9,972	Jan. 23	23	274
Remedy for external and internal use .....	W. H. Brearley .....	10,165	Apr. 10	23	1340
Remedy for kidney and urogenital diseases .....	E. H. Kaerccross .....	10,356	June 19	23	2330
Remedy for private diseases .....	F. Stearns & Co .....	10,756	Dec. 4	25	886
Remedy for rheumatism and other diseases and injuries .....	Kenyon & Powles .....	10,642	Oct. 16	25	196
Remedy for toothache .....	O. P. Macalaster .....	10,091	Mar. 6	23	834
Resaws, molding-machines, planers, &c .....	J. S. Graham & Co .....	10,547	Aug. 28	24	802
Ribbons. Silk and velvet .....	C. F. Homer .....	10,420	July 10	24	104
Ribbons. Taffeta .....	Oberteuffer, Abegg & Daeniker .....	10,738	Nov. 27	25	790
Ribbons. Velvet .....	E. Mommer .....	10,747	Nov. 27	25	790
Ribbons with satin edges. Taffeta .....	Oberteuffer, Abegg & Daeniker .....	10,713	Nov. 13	25	604
Roller-mills, centrifugal reels, and bolting-cloths .....	L. B. Fiechter Manufacturing Com- pany.	10,611	Oct. 2	25	2
Rubber compound used for steam-packing and like purposes. India .....	J. H. Cheever .....	10,345	June 12	23	2242
Rubber goods and boots and shoes. Cement for .....	Mulford, Cary & Conklin .....	10,737	Nov. 27	25	790
Rum, brandy, whisky, gin, and foreign and domestic wines .....	Cushing Process Company .....	10,551	Aug. 28	24	802
Salts for preserving and curing animal and vegetable food. Chemical .....	C. E. Calm .....	10,288	May 22	23	1930
Salves and plasters .....	Chase & Budlong .....	10,499	Aug. 14	24	605
Sash-balances .....	T. Morton .....	10,246	May 1	23	1626
Sashes, scarfs, and trimmings .....	J. N. Stearns & Co .....	10,232	May 1	23	1626
Sauce .....	Goodall, Backhouse & Co .....	10,174	Apr. 10	23	1340
Sauces. Table .....	W. H. Raitton .....	10,716	Nov. 13	25	604
Saws .....	Simonds Manufacturing Company .....	10,050	Feb. 13	23	544
Saws. Buck .....	J. B. Smith Company .....	9,933	Jan. 9	23	95



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Saws having insertible teeth	J. E. Emerson	10,795	Dec. 18	25	1082
Scales	Fulton Gravity Scale Company	10,035	Feb. 13	23	544
Sedative preparation or compound	H. S. Evans	10,281	May 22	23	1930
Shade-rollers. Spring-balance	D. E. Kempster	9,969	Jan. 16	23	196
Shears and scissors	Elyria Shear Company	10,494	Aug. 7	24	500
Shears and scissors	Elyria Shear Company	10,495	Aug. 7	24	500
Sheep-dip	Louisville Leaf Tobacco Company	10,026	Feb. 6	23	440
Sheet-metal	Republic Iron Works	10,767	Dec. 4	25	886
Sheet-metal utensils and articles. Enameled	Lalanc & Grosjean Manufacturing Company.	10,322	May 29	23	2036
Shingles	W. Meyer & Bro	10,396	July 3	24	2
Shirts	J. L. Libby & Co.	10,150	Mar. 27	23	1126
Shirts, collars, cuffs, and underwear	H. T. Miller & Co.	10,434	July 17	24	208
Shoe-thread	Hadley Company	10,470	July 31	24	394
Shoes. Preparation for cleaning, dressing, and polishing ladies'	Lustro Company	9,963	Jan. 16	23	196
Shovels, scoops, and spades	Groom Shovel Company	10,516	Aug. 14	24	606
Silk goods. Dress	Shaen & Fithian	10,247	May 1	23	1626
Silk piece-goods	P. Dorgeval	10,068	Feb. 27	23	744
Silk piece-goods	H. L. Gargan	10,056	Feb. 20	23	634
Silks. Black and colored	Shaen & Fithian	10,736	Nov. 20	25	702
Silks, velvets, ribbons, and dress-goods	Passavant & Co.	10,331	June 5	23	2124
Silver-polish	W. E. Dumbam	10,634	Oct. 16	25	196
Silver-ware. Sterling	W. Wilson & Son	9,949	Jan. 9	23	96
Skins. Salted sheep	B. Cannon & Co.	10,278	May 22	23	1930
Sleds and sleighs	B. F. & H. L. Sweet	9,992	Jan. 30	23	348
Slippers, boots, and shoes. Felt	A. Dolge	10,365	June 26	23	2416
Snuff, cigars, cigarettes, fine-cut chewing, plug, and smoking tobacco.	Spaulding & Merrick	10,441	July 17	24	208
Snuff, cigars, cigarettes, fine-cut chewing, plug, and smoking tobacco.	Spaulding & Merrick	10,442	July 17	24	208
Soap. Hard	Summit City Soap Company	10,276	May 15	23	1836
Soap. Hard	S. Winger	10,672	Oct. 23	25	294
Soap in bars or cakes	G. E. Marsh & Co	10,625	Oct. 9	25	98
Soap in bars or cakes	G. E. Marsh & Co	10,626	Oct. 9	25	98
Soap in cakes or bars	G. E. Marsh & Co	10,711	Nov. 13	25	604
Soap. Laundry	Colgate & Co	10,014	Feb. 6	23	440
Soap. Laundry	Davis Bro. & Co	10,207	Apr. 24	23	1532
Soap. Laundry and toilet	Lantz Brothers & Co.	10,218	Apr. 24	23	1532
Soap. Laundry and toilet	Lantz Bros. & Co.	10,273	May 15	23	1836
Soap. Laundry and toilet	C. Lipps	10,403	July 10	24	104
Soap. Laundry and toilet	Schultz & Co.	9,990	Jan. 30	23	348
Soap. Laundry and toilet	Schultz & Co.	10,324	May 29	23	2036
Soap-powder	Kendall Manufacturing Company	10,212	Apr. 24	23	1532
Soap. Solidified	H. H. Wheeler, H. Tomb, and G. S. Yingling.	10,706	Nov. 6	25	506
Soap. Toilet	J. S. Kirk & Co.	10,695	Nov. 6	25	506
Soap. Toilet and laundry	Olds & Co.	10,763	Dec. 4	25	886
Soap. White bar	W. G. Crane	10,610	Oct. 2	25	2
Soaps, perfumery, toilet preparations, and glycerine	J. S. Kirk & Co.	10,616	Oct. 2	25	2
Soda and soda-ash. Caustic	Mort, Liddell & Co.	10,167	Apr. 10	23	1340
Soda, saleratus, and baking-powder. Baking	J. Dwight & Co.	9,921	Jan. 2	23	2
Soda, saleratus, and baking-powder. Baking	J. Dwight & Co.	10,118	Mar. 20	23	1036
Spades, shovels, and scoops	O. Ames & Sons	10,620	Oct. 9	25	98
Specific cure for piles	E. F. Hubbs	10,448	July 17	24	208
Specific for neuralgia and rheumatism	A. A. Mellier	10,433	July 17	24	208
Specific for neuralgia, headache, and the like diseases	Twitchell, Champlin & Co	10,444	July 17	24	208
Specific for the respiratory organs	F. Hiller, Jr.	10,209	Apr. 24	23	1532
Spectacles and eyeglasses	A. K. Hawkes	10,805	Dec. 25	25	1194
Spices. Ground or powdered	J. A. Jones	10,624	Oct. 9	25	98
Starch	Electric Lustre Starch Co.	10,371	June 26	23	2416
Starch	A. A. Hovey	10,320	May 29	23	2036
Starch	A. A. Hovey	10,321	May 29	23	2036
Starch	C. W. B. Weber	10,498	Aug. 7	24	500
Steam-boiler-scale solvents	H. J. Mark	10,242	May 1	23	1626
Steam-boilers. Composition for removing and preventing incrustation in	Hann & Co.	10,237	May 1	23	1626
Steam-boilers. Compound for preventing the incrustation of	E. J. Hoffman and W. H. Ransom	10,227	May 1	23	1626
Steam-engines	Straight Line Engine Company	10,248	May 1	23	1626
Steel. Bar, plate, and various other kinds of	S. Osborn & Co	10,460	July 24	24	306
Steel. Soft-center	J. L. Pfan, Jr.	10,170	Apr. 10	23	1340
Stomachic	J. Ebel	10,090	Mar. 6	23	834
Stones or brilliants. Artificial	E. E. Kipling	10,385	July 3	24	2
Stones or brilliants. Artificial	E. E. Kipling	10,386	July 3	24	2
Stove-polish	H. A. Bartlett	10,216	Apr. 24	23	1532
Stove-polish. Water-proof	B. F. Myers, J. W. Hayford, and G. S. Yingling.	10,772	Dec. 11	25	984
Stoves	J. E. Forbes & Co	10,328	June 5	23	2124
Stoves and furnaces. Heating and cooking	Peninsular Stove Company	10,059	Feb. 20	23	634
Stoves. Certain preparation for cleaning and polishing	Lustro Company	10,064	Feb. 20	23	634
Stoves, ranges, and heaters generally	Michigan Stove Company	10,007	Jan. 30	23	348
Stoves, ranges, and heaters generally	Michigan Stove Company	10,008	Jan. 30	23	348
Stoves, ranges, furnaces, and heaters. Cooking	C. Rathbone	10,764	Dec. 4	25	886
Surgical instruments and appliances	Déclat Manufacturing Company	10,424	July 17	24	208
Surgical instruments and appliances. Certain	H. S. Evans	10,394	July 3	24	2
Syringes. Elastic-bulb	J. Davol	10,034	Feb. 13	23	544
Tackle or pulley blocks	Bagnall & Lond.	10,648	Oct. 23	25	294
Tanning extracts. Vegetable	I. & I. Miller & Co., and Millerton, Upton, and Mortimer.	9,944	Jan. 9	23	96
Teas	Catherwood & Co.	9,994	Jan. 30	23	348
Teas	J. H. Catherwood & Co.	10,031	Feb. 13	23	544
Teas	J. H. Catherwood & Co.	10,032	Feb. 13	23	544
Teas	Fraser, Farley & Varnum	10,724	Nov. 20	25	702
Teas	E. A. Schoyer & Co.	10,010	Jan. 30	23	348

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Teas. Formosa oolong	T. T. Barr & Co	10,369	June 26	23	2416
Teas. Mixed	C. D. Kenny	10,485	Aug. 7	24	500
Teeth. Articles used in the manufacture of artificial	F. W. Seabury	10,605	Sept. 25	24	1180
Thrashers and separators	M. Harder	10,226	May 1	23	1626
Thread and yarn. Knitting and embroidery	H. E. Frankenberg	10,124	Mar. 20	23	1036
Thread. Linen	P. Vrau & Co	10,515	Aug. 14	24	606
Thread. Package of	Clark Thread Company	10,023	Feb. 6	23	440
Thread, twine, and cord	Ross, Turner & Co	10,361	June 19	23	2330
Time-indicators. Mechanism used as electrical	Time Telegraph Company	9,977	Jan. 23	23	274
Tinware. Certain articles of	G. D. Winchell Manufacturing Company	10,815	Dec. 25	25	1194
Tobacco	Pfingst, Doerhoefer & Co	10,028	Feb. 6	23	440
Tobacco	A. Tinsley Tobacco Manufacturing Company	10,249	May 1	23	1626
Tobacco	A. Tinsley Tobacco Manufacturing Company	10,570	Sept. 4	24	904
Tobacco. All kinds and classes of manufactured	T. A. Pace and R. F. Sizer	10,071	Feb. 27	23	744
Tobacco. All kinds of chewing and smoking	Garr Bros	10,453	July 24	24	306
Tobacco. All manufactured	Spaulding & Merrick	10,462	July 24	24	306
Tobacco and cigarettes. Smoking and chewing	E. G. Steane	10,172	Apr. 10	23	1340
Tobacco and cigars. Chewing	Leland, Smith & Co	10,731	Nov. 20	25	702
Tobacco and cigars. Manufactured	T. C. Williams & Co	10,758	Dec. 4	25	886
Tobacco. Chewing	P. H. Hanes & Co	10,271	May 15	23	1836
Tobacco. Chewing	P. H. Hanes & Co	10,272	May 15	23	1836
Tobacco. Chewing	Winfree & Loyd	10,543	Aug. 21	24	708
Tobacco. Chewing and smoking	Berry Bros	10,677	Oct. 30	25	398
Tobacco, cigars, and cigarettes. Chewing and smoking	Globe Tobacco Company	10,338	June 5	23	2124
Tobacco, cigars, and cigarettes. Chewing and smoking	Goodwin & Co	10,200	Apr. 17	23	1450
Tobacco, cigars, and cigarettes. Cut smoking	American Eagle Tobacco Company	10,803	Dec. 25	25	1194
Tobacco, cigars, and cigarettes. Cut smoking and chewing	American Eagle Tobacco Company	10,779	Dec. 18	25	1082
Tobacco, cigars, and cigarettes. Cut smoking and chewing	American Eagle Tobacco Company	10,780	Dec. 18	25	1082
Tobacco, cigars, and cigarettes. Fine-cut and plug chewing and smoking	G. H. Spear	10,259	May 8	23	1736
Tobacco, cigars, and cigarettes. Fine-cut chewing, plug, and smoking	R. Hamilton	10,464	July 24	24	306
Tobacco, cigars, and cigarettes. Fine-cut, plug chewing, and smoking	B. Leidersdorf & Co	10,005	Jan. 30	23	348
Tobacco, cigars, and cigarettes. Smoking	Goodwin & Co	10,201	Apr. 17	23	1450
Tobacco, cigars, and cigarettes. Smoking and chewing	Globe Tobacco Company	10,659	Oct. 23	25	294
Tobacco. Composition of	J. J. Lawrence	10,193	Apr. 17	23	1450
Tobacco. Cut smoking and chewing	American Eagle Tobacco Company	10,778	Dec. 18	25	1082
Tobacco. Fine-cut, plug, and smoking	R. Hamilton	10,454	July 24	24	306
Tobacco. Havana leaf	G. Salomon & Bros	10,591	Sept. 18	24	1094
Tobacco. Leaf	M. H. Clark & Bro	10,546	Aug. 28	24	802
Tobacco. Leaf	F. Garcia, Bro. & Co	10,086	Mar. 6	23	834
Tobacco. Manufactured	A. Tinsley Tobacco Manufacturing Company	10,277	May 22	23	1930
Tobacco. Manufactured and unmanufactured	Buchanan & Lyall	9,929	Jan. 2	23	2
Tobacco. Manufactured and unmanufactured	E. Hoffman & Son	10,202	Apr. 17	23	1450
Tobacco. Manufactured chewing	Hornthal & Deiches	10,399	July 3	24	2
Tobacco. Plug	Berry Bros	10,524	Aug. 21	24	707
Tobacco. Plug	J. H. Harris' Sons	10,666	Oct. 23	25	294
Tobacco. Plug	J. H. Harris' Sons	10,667	Oct. 23	25	294
Tobacco. Plug	J. H. Harris' Sons	10,668	Oct. 23	25	294
Tobacco. Plug	J. H. Harris' Sons	10,669	Oct. 23	25	294
Tobacco. Plug	J. H. Harris' Sons	10,670	Oct. 23	25	294
Tobacco. Plug	J. H. Harris' Sons	10,724	Dec. 18	25	1082
Tobacco. Plug	Larus & Bro	10,039	Feb. 13	23	544
Tobacco. Plug	R. A. Patterson & Co	10,096	Mar. 13	23	942
Tobacco. Plug	S. W. Venable & Co	10,575	Sept. 4	24	904
Tobacco. Plug	Winfree & Loyd	10,542	Aug. 21	24	708
Tobacco. Plug	Winfree & Loyd	10,544	Aug. 21	24	708
Tobacco. Plug and smoking	G. S. Schwartz & Co	10,382	June 26	23	2416
Tobacco. Plug chewing	C. W. Allen	10,421	July 17	24	208
Tobacco. Plug chewing and smoking	G. D. Bow	10,134	Mar. 27	23	1126
Tobacco. Plug chewing and smoking	H. Scales	10,440	July 17	24	208
Tobacco. Plug chewing and smoking	T. L. Vaughn	10,697	Nov. 6	25	506
Tobacco. Plug, twist, and smoking	A. M. Lyon & Co	10,629	Oct. 16	25	196
Tobacco. Smoking	J. B. Pace Tobacco Co	10,788	Dec. 18	25	1082
Tobacco. Smoking	B. Leidersdorf & Co	10,003	Jan. 30	23	348
Tobacco. Smoking and chewing	C. W. Allen	10,475	July 31	24	394
Tobacco. Smoking, and smoking and chewing	G. W. Gail & Ax	10,817	Dec. 25	25	1194
Tobacco. Smoking, plug, and fine-cut	L. B. Babcock	10,816	Dec. 25	25	1194
Tobacco, snuff, and cigarettes. Smoking and chewing	H. Wilkens & Co	10,734	Nov. 20	25	702
Tobacco, snuff, and cigarettes. Smoking and chewing	H. Wilkens & Co	10,739	Nov. 27	25	790
Toilet articles. Certain	H. S. Evans	10,425	July 17	24	208
Toilet preparation	J. E. Espey	10,024	Feb. 6	23	440
Toilet preparation	C. W. Holmes	10,069	Feb. 27	23	744
Toilet preparations and articles. Certain	J. S. Kirk & Co	10,701	Nov. 6	25	506
Tonic	C. J. Lincoln and E. L. Brown	10,323	May 29	23	2036
Tools and implements for agricultural and mechanical purposes	H. W. Peabody & Co	10,661	Oct. 23	25	294
Tools. Certain earth-working	Collins Company	9,934	Jan. 16	23	195
Tools. Certain earth-working	Collins Company	9,935	Jan. 16	23	195
Tools. Certain earth-working	Collins Company	9,956	Jan. 16	23	195
Tools or implements for agricultural and mechanical purposes	H. W. Peabody & Co	9,989	Jan. 30	23	342
Tools. Saddle and harness	C. S. Osborne & Co	9,976	Jan. 23	23	274
Tooth-picks	E. L. Marshall	10,548	Aug. 28	24	802
Tooth-powder	R. S. Thomson	10,619	Oct. 2	25	2
Toy goblets. Wooden	Hawley & Hoops	10,142	Mar. 27	23	1126
Truss. Hernial	I. B. Seeley & Co	9,924	Jan. 2	23	2
Tubing. Metal	E. C. Converse	10,759	Dec. 4	25	886
Tubing. Metal	E. C. Converse	10,781	Dec. 18	25	1082
Tubing (of rubber or gas-tight composition)	Union Tubing Company	10,115	Mar. 13	23	942



*Alphabetical list of trade-marks—Continued.*

Title.	Name.	No.	Date.	Official Gazette.	
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Twine. Seine.....	W. J. Hooper & Son .....	10,339	June 5	23	2124
Varnishes .....	Lewis, Bedell & Co. ....	10,138	Mar. 27	23	1126
Velveteen .....	Megroz, Portier, Grose & Co. ....	10,379	June 26	23	2416
Velveteen .....	Sbaen & Christie .....	9,991	Jan. 30	23	343
Velvets .....	J. B. David .....	10,479	Aug. 7	24	499
Velvets .....	J. B. David .....	10,480	Aug. 7	24	500
Velvets, satins, and silk goods .....	Passavant & Co. ....	10,148	Mar. 27	23	1136
Velvets, velveteens, velvetas, plushes, and similar goods. ....	Shaen & Fithian .....	10,122	Mar. 20	23	1036
Vermine-destroyer .....	K. Simmon .....	9,926	Jan. 2	23	2
Vermouth .....	Noilly, Prat & Co. ....	10,786	Dec. 18	25	1082
Vinegar made of wine. Certain .....	Pacific Vinegar Works .....	10,435	July 17	24	208
Wagons, phaetons, buggies, sleighs, and like vehicles. Farn and spring .....	Fish Bros. & Co. ....	10,612	Oct. 2	25	2
Washing-powder .....	Benk Manufacturing Company .....	10,252	May 8	23	1736
Watch-cases. Rolled-gold-plate.....	Dueber Watch Case Manufacturing Company. ....	10,377	June 26	23	2416
Watches .....	J. Fahys & Co. ....	10,372	June 26	23	2416
Watches .....	A. Schwob .....	10,301	May 22	23	1930
Watches .....	A. Schwob .....	10,592	Sept. 18	24	1094
Watches .....	A. Schwob .....	10,593	Sept. 18	24	1094
Watches .....	A. Schwob .....	10,594	Sept. 18	24	1094
Watches .....	L. Strasburger & Co. ....	10,315	May 29	23	2036
Water-proof clothing .....	D. Jannopoulo .....	9,940	Jan. 9	23	96
Water-proof jackets, pants, and coats .....	H. M. Sawyer .....	10,105	Mar. 13	23	942
Whalebone .....	B. Seligman .....	10,097	Mar. 13	23	942
Wheat. Whole winter.....	D. Brainard .....	10,753	Dec. 4	25	885
Whisky .....	J. Cotter .....	9,997	Jan. 30	23	348
Whisky .....	A. Halliday & Co. ....	10,020	Feb. 6	23	440
Whisky .....	Iglehart & O'Donnell .....	10,094	Mar. 6	23	834
Whisky .....	F. E. Kelly .....	10,244	May 1	23	1626
Whisky .....	Lang, Bernheimer & Co. ....	10,310	May 29	23	2036
Whisky .....	Meyer Brothers & Co. ....	10,245	May 1	23	1626
Whisky .....	H. Snyder, Jr. ....	10,777	Dec. 11	25	984
Whisky. Rye .....	E. Walters & Co. ....	9,932	Jan. 2	23	2
Whisky. Rye and other .....	Cardeza, Gilliams & Co. ....	10,529	Aug. 21	24	703
Wild cherry, rock, and rye. ....	I. C. Schafer .....	10,171	Apr. 10	23	1340
Wind and reed instruments, violins, and guitars .....	C. Bruno & Son .....	9,993	Jan. 30	23	348
Wine. Champagne.....	C. Arnould & Heidelberger .....	10,447	July 17	24	208
Wine. Champagne.....	J. Bollinger .....	10,678	Oct. 30	25	398
Wine. Champagne.....	Deutz & Geldermann .....	10,266	May 15	23	1836
Wine. Champagne.....	Deutz & Geldermann .....	10,267	May 15	23	1836
Wine. Champagne.....	Heidseick & Co. ....	10,075	Feb. 27	23	744
Wine. Champagne.....	Krug & Co. ....	10,508	Aug. 14	24	606
Wine. Champagne.....	Krug & Co. ....	10,509	Aug. 14	24	606
Wine. Champagne.....	P. Lenk & Co. ....	10,220	Apr. 24	23	1532
Wine. Champagne.....	G. H. Mumm & Co. ....	14,513	Aug. 14	24	606
Wine. Champagne.....	T. Roederer & Co. ....	10,532	Aug. 21	24	708
Wine. Champagne.....	T. Roederer & Co. ....	10,533	Aug. 21	24	708
Wine. Champagne.....	T. Roederer & Co. ....	10,534	Aug. 21	24	708
Wine. Ferrated hygienic.....	C. H. & J. Price .....	10,732	Nov. 20	25	702
Wines .....	Luyties Brothers .....	10,539	Aug. 21	24	708
Wines and brandies. Hungarian .....	L. Reich .....	10,317	May 29	23	2036
Wines. Bottled .....	L. Parisette .....	10,330	June 5	23	2124
Wines. Champagne.....	Bouché, Fils .....	10,581	Sept. 18	24	1094
Wines. Champagne.....	Bouché, Fils .....	10,582	Sept. 18	24	1094
Wines. Champagne.....	Bouché Fils .....	10,630	Oct. 16	25	196
Wines. Hungarian .....	L. Reich .....	10,316	May 29	23	2036
Wines. Sparkling .....	Chandon & Co. ....	9,995	Jan. 30	23	348
Wire fabric for beds, chairs, settees, &c. Woven.....	Hartford Woven Wire Mattress Company. ....	10,217	Apr. 24	23	1532
Woolen dress-goods for women and children .....	Megroz, Portier, Grose & Co. ....	10,380	June 26	23	2416
Woolen dress-goods .....	Megroz, Portier, Grose & Co. ....	10,540	Aug. 21	24	708
Wonn-dressings .....	C. G. Am Ende .....	10,145	Mar. 27	23	1126
Writing-fluid .....	Carter, Dinsmore & Co. ....	10,098	Mar. 13	23	942
Yarns. Cotton and half-woolen .....	C. A. Tetzner & Sohn .....	10,401	July 3	24	2
Yeast. Compressed .....	Gaff, Fleischmann & Co. ....	10,000	Jan. 30	23	348
Yeast. Compressed .....	Gaff, Fleischmann & Co. ....	10,001	Jan. 30	23	348





# ALPHABETICAL LIST OF LABELS.

Title.	Name.	No.	Date.	Official Gazette.	
				Volume.	Page.
"A. B. C. Alpaca Braid".....	C. G. Hubert.....	3,227	May 22	23	1930
"A. C. Wyl's Diamond Patent Flour".....	A. C. Wyl.....	3,743	Dec. 4	25	886
"A Cap for Oyster Cans".....	S. A. Mullikin.....	2,913	Jan. 16	23	196
"A Cigar Label".....	Schumacher & Ettlinger.....	2,904	Jan. 9	23	96
"A Cigar Label".....	Schumacher & Ettlinger.....	3,042	Mar. 6	23	834
"A Cigar Label".....	Schumacher & Ettlinger.....	3,043	Mar. 6	23	834
"A Cigar Label".....	Schumacher & Ettlinger.....	3,044	Mar. 6	23	834
"A Cigar Label".....	Schumacher & Ettlinger.....	3,045	Mar. 6	23	834
"A Cigar Label".....	Schumacher & Ettlinger.....	3,046	Mar. 6	23	834
"A Cigar Label".....	Schumacher & Ettlinger.....	3,047	Mar. 6	23	834
"A four (4) leafed Clover." (for Medical Compounds)	Pemberton, Iverson & Denison	3,166	Apr. 24	23	1532
"A New Brand" (for Ribbons)	J. Ryle.....	3,292	June 12	23	2242
"A Suro Thing for Syphilis in all its Forms"	G. K. Elder.....	3,542	Sept. 25	24	1180
"Aerated Poland Water" (for Poland Mineral Spring Water)	H. Ricker & Sons.....	3,274	June 5	23	2124
"Air Chamber" (for Fabric woven of Asbestos, &c)	H. W. Johns Manufacturing Company.	3,491	Sept. 4	24	904
"Alaska Catarrh Compound"	J. Callahan.....	3,100	Mar. 27	23	1126
"Allard's Black Oil." (for a "Remedy for Man or Beast")	Allard & Burt.....	3,326	July 3	24	4
"Alcock's Porous Plaster, Brandreth's Pills"	Porons Plaster Company.....	3,381	July 17	24	208
"Allen's Oriental Balm" (for a Cosmetic).....	G. L. Burnside.....	3,415	Aug. 7	24	500
"Alter Schweden General"	P. W. Gilbert.....	3,072	Mar. 13	23	942
"Ambrosial Peach and Honey"	Marsh, Clark & Co.....	3,642	Oct. 30	25	398
"American Cocktail." (for Beverages)	Cook & Bernheimer.....	3,279	June 12	23	2242
"American Dyspepthera"	C. S. Allen.....	3,085	Mar. 20	23	1036
"American Stilton" (for Cheese)	M. Cooper.....	3,540	Sept. 25	24	1180
"American Sweet Oil"	Buxton, Heins & Co.....	3,159	Apr. 24	23	1532
"Amity." (for Coffee)	C. Fink and A. Nasse.....	3,444	Aug. 14	24	606
"Angel Food" (for a Certain Brand of Flour)	Minor & Brown.....	3,595	Oct. 16	25	196
"Antidotine" (for a Medicine).....	E. Veeman.....	3,462	Aug. 21	24	708
"Anti Malarial Bitters"	S. O. McKennan.....	2,935	Jan. 30	23	348
"Anti-Monopoly Match"	Miller Match Co.....	3,476	Aug. 28	24	802
"A. O. U. W." (for Cigars)	Harris Brothers.....	3,417	Aug. 7	24	500
"Apres Dejeuner" (for Manufactured Tobacco)	Thomas & Bro.....	3,552	Sept. 25	24	1180
"Apres Diner" (for Manufactured Tobacco)	Thomas & Bro.....	3,553	Sept. 25	24	1180
"Apres Souper" (for Cigars)	Thomas & Bro.....	3,411	July 31	24	392
"Arlington Mills," (for Woolen or Worsted Dress Goods)	Arlington Mills.....	3,458	Aug. 21	24	708
"Arnica Tooth Soap"	C. H. Strong.....	3,107	Mar. 27	23	1136
"Ashes of Roses" (For Cigars)	C. A. Yale Cigar Manufacturing Company.	2,987	Feb. 13	23	544
"Ashley's Tonic and Constipation Cure"	J. J. Ashley.....	3,086	Mar. 20	23	1036
"Asthma Conqueror"	J. E. Webb.....	3,500	Sept. 4	24	904
"Athens" (for Silver-Plated Goods)	W. Rogers.....	3,493	Sept. 4	24	904
"Aunt Abby's Mince Meat"	W. M. Shoemaker.....	3,721	Nov. 27	25	790
"Autocrat of the Breakfast Table." (for Coffee Pots)	Lalance & Grosjean Manufacturing Company.	3,287	June 12	23	2242
"Automatic" (for School Furniture)	Union School Furniture Company ..	3,554	Sept. 25	24	1180
"Auxiliator," (for a Hair Preparation)	P. Westphal.....	2,908	Jan. 9	23	96
"B B B" (for Cigars)	Beitman Bros.....	3,170	May 1	23	1626
"B. B. B. Botanic Blood Balm"	J. F. Dromgoole and L. M. Gillam ..	3,388	July 24	24	306
"B's Boot Protector"	Jones, Edwards & Co.....	3,179	May 1	23	1626
"Badger State." (for Cheese)	C. E. Udell.....	3,234	May 22	23	1930
"Base Balls"	Warner Bros.....	3,199	May 8	23	1736
"Base Balls"	Warner Bros.....	3,200	May 8	23	1736
"Bassett's Lock Marker"	M. H. Bassett.....	3,704	Nov. 27	25	790
"Baxter's Adjustable "S" Wrench"	Greene, Tweed & Co.....	3,163	Apr. 24	23	1532
"Baxter's Diagonal Wrench"	Greene, Tweed & Co.....	3,162	Apr. 24	23	1532
"Beech Fork" (for Whisky)	Brown, Thompson & Co.....	3,171	May 1	23	1626
"Belle of Buffalo" (for Flour)	G. Urban & Co.....	3,498	Sept. 4	24	904
"Bell's Adhesive and Water-Proof Belt Oil"	A. Q. Southwick.....	2,983	Feb. 13	23	544
"Best's New Process Amalgam." (For Dental Amalgam).	A. H. Best.....	2,988	Feb. 20	23	634
"Bewley & Draper Dublin Ginger Ale"	Bewley & Draper.....	3,099	Mar. 27	23	1126
"Big Find" (for Cigars)	Rankin & Sherrick.....	3,270	June 5	23	2124
"Bishop's Bird Dainties" (for Food for Birds)	H. Bishop.....	3,250	June 5	23	2124
"Black Lustre Stove Polish Paste"	A. Roessler.....	3,437	Aug. 14	24	606
"Black O. N. T." (For Thread)	Clark Thread Company.....	2,951	Feb. 6	23	440
"Blaker's Rheumatic Relief"	G. C. Blaker.....	2,918	Jan. 16	23	196
"Bluing" (for Bluing)	G. A. Conant.....	3,447	Aug. 21	24	708
"Bob 'Link" (for Smoking and Chewing Tobacco)	Fitzpatrick & Draper.....	3,637	Oct. 30	25	398
"Bohemian Smoking Tobacco"	Gradle & Strotz.....	3,728	Dec. 4	25	886
"Boiler Lagging" (for Fabric woven of Asbestos, &c)	H. W. Johns Manufacturing Company.	3,490	Sept. 4	24	904
"Bonkocine." (For Medicine).....	L. B. Tyson.....	2,986	Feb. 13	23	544
"Boonkamp Magen-Bitter"	R. Sternsdorff & Co.....	3,131	Apr. 10	23	1340
"Boonkamp of Maag-Bitter"	H. Fink & Boelter.....	3,236	May 29	23	2036
"Boonkamp of Maag-Bitter"	R. Sternsdorff & Co.....	3,215	May 15	23	1836
"Boonkamp of Maag-Bitter" (for a Tonic Beverage).....	H. Underberg-Albrecht.....	3,567	Oct. 2	25	2
"Bowker's Government Standard Solution For testing Vinegar Acetic Acid, &c."	H. L. Bowker.....	3,056	Mar. 13	23	942
"Bradbury & Co's. Hog Cholera Preventative"	H. E. Twitchell.....	3,345	July 3	24	2
"Braunschweiger" (for Malt Liqueurs)	H. R. Gogreve.....	2,921	Jan. 16	23	196
"Brazilian Balm" (for a Remedy)	B. F. Jackson.....	3,530	Sept. 18	24	1094

*Alphabetical list of labels—Continued.*

Title.	Name.	No.	Date.	Official Gazette.	
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"Brighton Sance," (for Table Sance)	T. Austin & Sons	3,601	Oct. 23	25	294
"Brilliantine for the Eyes"	G. W. Kelley	3,124	Apr. 10	23	1340
"Brill's Sperminole Sewing Machine Oil"	W. H. Brill	2,950	Feb. 6	23	440
"Britannia" (for a Medicine)	C. W. Stayner	3,664	Nov. 6	25	506
"British White Oil for Man and Beast"	L. A. Jeffreys	3,714	Nov. 27	25	790
"Britton's Cholera Cure"	J. T. Britton & Co.	3,569	Oct. 9	25	98
"Broadway" (for Jewelry)	Fry, Schieber & Co.	3,205	May 15	23	1836
"Bromo Caffeine" (for Medicine)	Kesbey & Mattison	3,318	June 26	23	2416
"Brooks' Waterproof Stamping and Writing Ink"	E. J. Brooks & Co.	3,277	June 12	23	2242
"Brown's Champion Oil Leather Cleaner and Dresser"	C. A. Buchanan and R. J. Lindsay	3,397	July 31	24	394
"Buffalo Brand" (for Meats)	J. Dold & Son	3,146	Apr. 17	23	1450
"Buffalo Sweet Chocolate"	C. Steck & Co.	3,097	Mar. 20	23	1036
"Bunch of Keys" (for Cigars)	Jacoby & Fromer	3,489	Sept. 4	24	904
"Butler" (for Cigars)	Jacoby & Fromer	3,658	Nov. 6	25	506
"Buttered Flour"	P. Thorpe	3,217	May 15	23	1836
"Cabel" (for Cigars)	E. Williams	3,668	Nov. 6	25	506
"Cabinet Grand" (for Organs)	I. D. Lovett	3,228	May 22	23	1930
"Calenduline" (for a Chemical Preparation)	C. S. Halsey	3,591	Oct. 16	25	196
"California Favorite" (for Cigars)	Friend & Co.	3,589	Oct. 16	25	196
"Camp Fire" (For Blankets)	J. R. Phillips	2,961	Feb. 6	23	440
"Canada Linseed Oil"	L. Kipper and W. J. Anderson	3,564	Oct. 2	25	2
"Canned Goods" (for Canned Fruits and Vegetables)	Royal Canning Company	3,421	Aug. 7	24	500
"Canned Goods" (for Canned Fruits and Vegetables)	Royal Canning Company	3,422	Aug. 7	24	500
"Cape Ann Whale Brand" (for Oil Clothing)	Cape Ann Oil Clothing Company	3,115	Apr. 10	23	1340
"Capitol Troche"	M. L. Fornwalt	3,701	Nov. 20	25	702
"Capiscum Oil" (for Liniment)	G. H. Swezey	3,520	Sept. 11	24	998
"Carbolated Sachet, Envelope or Pad" (for Disinfectants)	L. A. Le Mieux	3,151	Apr. 17	23	1450
"Card for Holding Separable Studs & Collar Buttons"	J. E. Lindaner	3,406	July 31	24	394
"Carnation," (for Flour)	Meyer & Bulte	3,434	Aug. 14	24	606
"Cassebeer's Cocoa-Calisaya"	H. A. Cassebeer, Jr.	2,968	Feb. 13	23	544
"Cedrat Cold Cream," (for a Toilet Preparation)	R. D. Tingle	3,789	Dec. 25	25	1194
"Celebrated Farmers Brand Coffee"	C. M. Thomas, Jr.	3,098	Mar. 20	23	1036
"Centerville Drying & Packing Co.," (for Canned Fruits)	J. Hagan	3,350	July 10	24	104
"Chamomile and Rock" (for a Medicinal Preparation)	Cook & Bernheimer	3,609	Oct. 23	25	294
"Chamomile and Rye" (for a Medicinal Preparation)	Cook & Bernheimer	3,611	Oct. 23	25	294
"Chamomile, Rock and Rye" (for a Medicinal Preparation)	Cook & Bernheimer	3,602	Oct. 23	25	294
"Chamomile, Rock and Rye" (for a Medicinal Preparation)	Cook & Bernheimer	3,610	Oct. 23	25	294
"Chamomile, Rye and Rock" (for a Medicinal Preparation)	Cook & Bernheimer	3,612	Oct. 23	25	294
"Champagne Lager Beer"	H. Clausen & Son Brewing Company	3,312	June 26	23	2416
"Chasser Drops," (for a medicine)	J. Rogers	3,104	Mar. 27	23	1126
"Chegwidden's Right-Royal Mustard"	T. C. Chegwidden	2,969	Feb. 13	23	544
"Cheltenham Poultry Food"	W. M. Shoemaker	3,548	Sept. 25	24	1180
"Chemical Parlor Combination," ("For Burning Fluid")	W. W. Austin	2,949	Feb. 6	23	440
"Chicago Cable" (For Cigars)	I. Goldsmith & Bro.	2,973	Feb. 13	23	544
"Chicago and North Western Old Reliable Ry.," (for Cigars)	Weaver Bros	3,413	July 31	24	394
"Chicago Yeast Powder"	Chapman, Smith & Co.	3,006	Feb. 27	23	744
"Chilline" (for a Remedy for Chilblains)	G. L. Forbush	3,749	Dec. 11	25	984
"Chimney" (For Lamp Chimneys)	J. L. Henry & Co.	2,994	Feb. 20	23	634
"Chloride of Lime" (for Disinfectant)	Leggett & Brother	3,470	Aug. 28	24	802
"Choclatina" (for a Beverage)	Pincus Bros	3,599	Oct. 16	25	196
"Choice German Prepared Coffee"	Harding, Britton & Co.	3,769	Dec. 18	25	1082
"Choice Table Nuts Mixed"	F. M. Ironmonger	3,621	Oct. 23	25	294
"Chown's Suro Relief Liniment"	R. Chown	3,144	Apr. 17	23	1450
"Chronic Ulcer Salve"	J. P. Sarsfield	3,040	Mar. 6	23	834
"Cirage Onctueux" (for Blacking)	Oriental Manufacturing Co.	3,597	Oct. 16	25	196
"Cito" ("Catarrh Snuff")	L. S. Fish	3,401	July 31	24	394
"Citra" (For Diptheria and Sore Throat)	L. S. Fish	2,931	Jan. 30	23	348
"City of Chicago" (for Sugar Cured Smoked Hams)	Hagan & Co.	3,259	June 5	23	2124
"Clark's Ague Cure"	M. Clark	3,117	Apr. 10	23	1340
"Clark's O. N. T. Spool Cotton"	G. A. Clark & Brother	3,174	May 1	23	1626
"Cleveland" (for Cigars)	H. F. Rose & Co.	3,105	Mar. 27	23	1126
"Clippon" (for Cigars)	Jacoby & Fromer	3,677	Nov. 13	25	604
"Cloth of America" (for Silk)	H. A. Van Liew	3,235	May 22	23	1930
"Clothes Wringer Soap"	Wilson & Gorman	3,310	June 19	23	2330
"Clothes Wringer Soap"	Wilson & Gorman	3,325	June 26	23	2416
"Clover Bitters"	J. J. Maher & Co.	2,975	Feb. 12	23	544
"Clymer's Celebrated Northern Horse and Cattle Powder"	C. W. Clymer & Co.	3,255	June 5	23	2124
"Cocamoko Bitters"	P. Donaghue	3,002	Feb. 27	23	744
"Combed Shoe Thread"	Hadley Company	3,304	June 19	23	2330
"Combed Shoe Thread"	Hadley Company	3,305	June 19	23	2330
"Combed Shoe Thread"	Hadley Company	3,335	July 3	24	2
"Combination Brand" (For Corn and Tomatoes)	S. H. Cole & Bro.	2,970	Feb. 13	23	544
"Comp. Hydrastis Vaginal Pastiles"	E. B. Bury	3,651	Nov. 6	25	506
"Compound Balsamic Glycerine"	J. Condie	2,928	Jan. 23	23	274
"Compound Extract Copaiba, Cubebs and Iron"	C. E. Morrell	2,892	Jan. 2	23	2
"Consumption. Basford's Aquarian Balm" (for a Medical Preparation)	J. L. Basford	3,703	Nov. 27	25	790
"Coppel Cutlery Co.," (For Cutlery)	Ostheimer Brothers	2,937	Jan. 30	23	348
"Corle Cracker and Confectionery Co., Kansas City"	Corle Cracker and Confectionery Company	3,724	Dec. 4	25	886
"Corn Belt," (for Cigars)	N. H. Cohen	3,723	Dec. 4	25	886
"Corrugated" (for Flour)	Slide Fletcher Holmes Company	3,242	May 29	23	2036
"Cosmaroma," (for a Toilet Liquid)	Pirz & Saward	3,367	July 10	24	104
"Cosmetic Lotion"	L. Friedman	2,972	Feb. 13	23	544
"Coutant's Ague Cure"	G. Coutant	3,373	July 17	24	208
"Cover to Sample Book"	J. H. Lane & Co.	3,140	Apr. 10	23	1340
"Crack Shot" (for Cigars)	W. Walker	3,741	Dec. 4	25	886
"Cream of Beauty" (for a Cosmetic)	M. Latour	3,405	July 31	24	394
"Crisoline" (for a Hair Wash)	C. E. Fougere	3,707	Nov. 27	25	790
"Crocin's Egyptian Magnetic Strengthening Plaster"	C. J. Cronin	3,705	Nov. 27	25	790
"Crown Bucan" (for a Medicine)	Farrington & Co.	3,400	July 31	24	394
"Crystal Water Frosting"	N. Reynolds & Co.	2,941	Jan. 30	23	346
"Cupid M. D" (for Cigars)	Rankin & Sherrick	3,272	June 5	23	2124



## Alphabetical list of labels—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
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"Curaline," (for Petroleum Products and Petroleum and other Oils and Lubricating Compounds.)	D. L. Grant	3,672	Nov. 13	25	604
"Cutamollio," (for the skin)	C. E. Browne	3,114	Apr. 10	23	1340
"D. D. Meader's Salve"	D. D. Meader	2,995	Feb. 20	23	634
"Dairy Queen" (for Smoking and Chewing Tobacco, Snuff and Cigarettes.)	H. Wilkens & Co.	3,687	Nov. 13	25	604
"Daisy Soap"	Ohio Candle Company	3,078	Mar. 13	23	942
"Dandelion Bitters"	H. E. Peters	3,396	July 24	24	306
"Dandelion Liver Pellets"	H. E. Peters	3,395	July 24	24	306
"Danhof's Infallible Liver and Kidney Remedy"	J. J. Danhof	3,348	July 10	24	104
"Dare's Indian Pulmonic Syrup"	J. B. Dare	3,256	June 5	23	2124
"Dawson's Neuralgic Cure"	H. N. Dawson	3,188	May 8	23	1736
"Dealbarium" (for a fluid, removing spots & stains)	J. H. Tucker	3,109	Mar. 27	23	1126
"Delizia di Roma" (for a Cosmetic)	E. M. Hoey	3,576	Oct. 9	25	98
"Dental amalgam"	A. H. Best	2,988	Feb. 20	23	634
"Dentaline," (for Dentifrice)	J. Smith	3,759	Dec. 11	25	984
"Deschutes Mohn Oel," (for Poppy-Seed Oil)	A. Gruning	3,297	June 19	23	2330
"Diamond Blue Label" (for Rosegrant's Patent, Chloride of Lime.)	C. Van Brunt	3,385	July 17	24	208
"Digestine" (for a Medicine)	A. Bedford and W. M. Rawson	3,779	Dec. 25	25	1194
"Digestro"	J. N. Solomons	3,048	Mar. 6	23	834
"Diphtheria Gargle"	G. L. Kemp	3,034	Mar. 6	23	834
"Directions to Fire-Escape"	E. H. Howard	3,074	Mar. 13	23	942
"Doloricide" (for a Medicine)	J. H. Wright	3,440	Aug. 14	24	606
"Dorick's Salvo"	D. White	3,134	Apr. 10	23	1340
"Double Eagle" (for Baking Powder)	E. Metzner	3,737	Dec. 4	25	886
"Double Strength Baking Powder"	K. P. Jones	3,165	Apr. 24	23	1532
"Dr. A. A. Mann's Cream of Life Pills"	A. M. Mann and E. S. Steward	3,545	Sept. 25	24	1180
"Dr. Al. Watts' Purifier," (for a Disinfectant)	A. Watts	3,761	Dec. 11	25	984
"Dr. Ballo's Hustena" (For Medicinal Preparation)	C. F. With	3,053	Mar. 6	23	834
"Dr. Bass' Vegetable Liver Pills"	W. T. Sanders & Co	3,757	Dec. 11	25	984
"Dr. Bull's Cough Candy Drops"	A. C. Meyer & Co.	3,127	Apr. 10	23	1340
"Dr. C. W. G. Schlemm's Wine of Dandelion and Iron"	C. W. G. Schlemm	3,023	Feb. 27	23	744
"Dr. Chevallier's Red Spruce Gum Paste," (for Cough Medicine.)	Laviolette & Nelson	3,288	June 12	23	2242
"Dr. Decker's Shakes and Malaria Cure"	W. F. Decker	3,483	Sept. 4	24	904
"Dr. E. E. Beeman's Worm Destroyer"	G. W. Chandler	3,028	Mar. 6	23	834
"Dr. F. French's Unequaled Blood Purifier and Rheumatic Remedy."	F. French & Son	3,147	Apr. 17	23	1450
"Dr. Feril. Axt's infallible Abolition Tooth Ache Cure"	F. Axt	3,055	Mar. 13	23	942
"Dr. G. H. Tichenor's Antiseptic Refrigerant (for Wounds)"	G. H. Tichenor	3,183	May 1	23	1626
"Dr. Gallagher's Sugar Coated Pills for Rheumatism"	B. F. Gallagher	3,782	Dec. 25	25	1194
"Dr. Green's Blood Purifier"	G. S. Green	3,429	Aug. 14	24	606
"Dr. Gwinn & Baker's Celebrated Curoleum," (for a Medicine)	H. H. Gwinn and J. M. Baker	3,675	Nov. 13	25	604
"Dr. H. A. Ingham's Vegetable Expectorant Nervine Pain Extractor."	H. A. Ingham	3,164	Apr. 24	23	1532
"Dr. Henry J. Sweny's Imperial Hair Balm"	H. J. Sweny	3,370	July 10	24	104
"Dr. Henry's No. 2 Vigor Pills"	W. H. Harrison	3,452	Aug. 21	24	708
"Dr. J. K. Thomas' Medicine for the People"	J. K. Thomas	3,132	Apr. 10	23	1340
"Dr. Jos. Haas' Alternative for Horses and Cattle"	J. Haas	3,301	June 19	23	2330
"Dr. Jos. Haas' Cattle Remedy"	J. Haas	3,299	June 19	23	2330
"Dr. Jos. Haas' Colic Remedy," (for Live Stock)	J. Haas	3,303	June 19	23	2330
"Dr. Jos. Haas' Epizootic Remedy," (for Live Stock)	J. Haas	3,298	June 19	23	2330
"Dr. Jos. Haas' Fever Drops," (for Live Stock)	J. Haas	3,302	June 19	23	2330
"Dr. Jos. Haas' Lung Fever Remedy for Live Stock"	J. Haas	3,300	June 19	23	2330
"Dr. Joslin's Blood Syrup"	B. Joslin	3,122	Apr. 10	23	1340
"Dr. Joslin's Cough Syrup"	B. Joslin	3,121	Apr. 10	23	1340
"Dr. Joslin's Cough Syrup"	B. Joslin	3,123	Apr. 10	23	1340
"Dr. Kilmer's Indian Medicine Jug"	Kilmer & Co	3,563	Oct. 2	25	2
"Dr. Liebig's German Invigorator" (for a Medical Compound.)	A. C. Stoddart	3,494	Sept. 4	24	904
"Dr. Liebig's German Invigorator" (for a Medical Compound.)	A. C. Stoddart	3,495	Sept. 4	24	904
"Dr. Lyon's Powders," (for a Medical Preparation)	G. M. Fiske	3,428	Aug. 14	24	606
"Dr. Merriman's Fragrant Kalliodont" (a Dentifrice)	A. F. Merriman & Son	2,912	Jan. 16	23	196
"Dr. Messner's Indian Herb Tea"	C. A. Schuhr	3,003	Feb. 20	23	634
"Dr. Miles' Great Remedy"	F. L. Miles	3,231	May 22	23	1930
"Dr. Miller's Family Medicine," (for Stomach and Throat Diseases.)	A. Werdmüller	3,294	June 12	23	2242
"Dr. Moore's Fragrant Solace for cleansing and Preserving the Teeth."	T. Moore	3,533	Sept. 18	24	1094
"Dr. Rudd's Celebrated Flux Specific"	J. F. Rudd	3,423	Aug. 7	24	500
"Dr. Rudd's Vegetable Kidney and Rheumatic Cure"	J. F. Rudd	3,211	May 15	23	1836
"Dr. Rudd's Vegetable Liver Relief"	J. F. Rudd	3,275	June 5	23	2124
"Dr. Sanford's Liver Invigorator"	S. T. W. Sanford & Sons	3,368	July 10	24	104
"Dr. Sanford's Liver Invigorator"	S. T. W. Sanford & Sons	3,566	Oct. 2	25	2
"Dr. Sanford's Liver Invigorator," (for a Proprietary Medicine.)	S. T. W. Sanford & Sons	3,343	July 3	24	2
"Dr. Sanford's Liver Invigorator" (for a Proprietary Medicine.)	S. T. W. Sanford & Sons	3,344	July 3	24	2
"Dr. Scheeler's Great German Cure for Consumption, Coughs, Colds, etc."	H. E. Bucklen	2,886	Jan. 2	23	2
"Dr. Schultz' Medicated Cigar"	F. W. Goodwin	3,638	Oct. 30	25	398
"Dr. Schultz' Process Cigars"	F. W. Goodwin	3,751	Dec. 11	25	984
"Dr. Sequard's Vegetable Panacea," (for a Medicine)	M. M. Merrill	3,457	Aug. 21	24	708
"Dr. Seth Arnold's Cough Killer"	Dr. S. Arnold Medical Corporation	2,982	Feb. 13	23	544
"Dr. Seth Hart's Anodyne Cough Syrup"	S. Hart	3,618	Oct. 23	25	294
"Dr. Seth Hart's Napoleon Cure" (for a Medical Preparation.)	S. Hart	3,237	May 29	23	2036
"Dr. Thorp's Balsam of Life"	T. C. Thorp	3,143	Apr. 10	23	1340
"Dr. Thurman's Embrocation"	W. S. P. Thurman	3,473	Aug. 28	24	802
"Dr. Von Senden's Celebrated Fennel Honey Extract"	T. Hinrichs	3,732	Dec. 4	25	886
"Dr. W. W. Clark's Oil of Arnica"	W. W. Clark	3,586	Oct. 16	25	196

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Title.	Name.	No.	Date.	Official Gazette.	
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"Dr. W. W. Scott's Ague and Fever Mixture".....	J. E. Scott.....	3,581	Oct. 9	25	98
"Dr. West's O. K. Bitters".....	J. H. West.....	2,907	Jan. 9	23	96
"Dr. Whitesel's Blood Specific".....	R. K. Dyas.....	3,636	Oct. 30	25	398
"Dr. Whitesel's Calisaya Bitters".....	R. K. Dyas.....	3,177	May 1	23	1626
"Dr. Whitesel's Calisaya Bitters".....	R. K. Dyas.....	3,633	Oct. 30	25	398
"Dr. Whitesel's German Cough Syrup".....	R. K. Dyas.....	3,176	May 1	23	1626
"Dr. Whitesel's German Cough Syrup".....	R. K. Dyas.....	3,634	Oct. 30	25	398
"Dr. Whitesel's German Liniment".....	R. K. Dyas.....	3,635	Oct. 30	25	398
"Dr. Wm. Crow's Cure for Rheumatism".....	C. F. Williams and J. F. Payne.....	3,249	May 29	23	2036
"Dr. Wilson's Anti-Bilious Cathartic Cordial".....	Francis Bros.....	3,031	Mar. 6	23	834
"Dresoline," (for Leather-Dressing).....	C. E. Browne.....	3,113	Apr. 10	23	1340
"Drew's Yeast Powder".....	F. L. Hooper & Co.....	3,676	Nov. 13	25	604
"Druid Oil" (for Liniment).....	T. McGowan.....	3,456	Aug. 21	24	708
"Drummer Cut Plug" (for Chewing and Smoking Tobacco).....	Gradle & Strotz.....	3,729	Dec. 4	25	886
"Dubec" (for Cigarettes).....	L. Ginter.....	3,488	Sept. 4	24	904
"Duchess of Devonshire" (for Cigars).....	Jacoby & Fromer.....	3,356	July 10	24	104
"Duplicate" (for Manufactured Tobacco).....	A. B. Wells.....	3,629	Oct. 23	25	294
"Duplicate" (for Manufactured Tobacco).....	A. B. Wells.....	3,630	Oct. 23	25	294
"Duratus" (for Petroleum Products and Petroleum and other Oils and Lubricating Compounds.).....	D. L. Grant.....	3,673	Nov. 13	25	604
"Duryeas' Diamond Crystal Glucose".....	Glen Cove Manufacturing Company.....	3,333	July 3	24	2
"Duryeas' Diamond X Glucose".....	Glen Cove Manufacturing Company.....	3,332	July 3	24	2
"Duryeas' Diamond XX Glucose".....	Glen Cove Manufacturing Company.....	3,334	July 3	24	2
"Duryeas' Diamond XXX Glucose".....	Glen Cove Manufacturing Company.....	3,331	July 3	24	2
"Dutch Worm Syrup".....	C. B. Mathis.....	3,716	Nov. 27	25	790
"Early York" (for Cigars).....	G. K. Vincent and M. Burchard.....	3,412	July 31	24	394
"East India Pale Ale".....	H. Clausen & Son Brewing Company.....	3,253	June 5	23	2124
"Eclipse," (For Cigars).....	H. F. Rose.....	2,943	Jan. 30	23	348
"Egyptian Boy," (for Dry Goods).....	J. H. Lane & Co.....	3,192	May 8	23	1736
"Ebijos" (For Hardware).....	E. F. Billhuber.....	2,989	Feb. 20	23	634
"El Arabe" (for Cigars).....	Ghio & Rovira.....	3,613	Oct. 23	25	294
"El Coro," (for Cigars).....	B. Vega.....	3,293	June 12	23	2242
"Elastic Asphalt Paint".....	N. B. Hayes and C. F. Hopkins.....	3,261	June 5	23	2124
"Elastic Motion Sewing Machine".....	J. H. Whitney.....	3,742	Dec. 4	25	886
"Elastic Motion Sewing Machine Company".....	Elastic Motion Sewing Machine Company.....	3,726	Dec. 4	25	886
"Elder Hook's Healing Balm," (for a Salve).....	J. G. Hook.....	3,392	July 24	24	306
"Eli" (for Manufactured Tobacco).....	A. B. Wells.....	3,686	Nov. 13	25	604
"Elite" (for Cigars).....	Grommes & Ullrich.....	3,402	July 31	24	394
"Elixir of Tamarack and Wild Cherry".....	R. Drake.....	3,257	June 5	23	2124
"Ellis' Nerve Tonic".....	J. W. Ellis.....	3,281	June 12	23	2242
"Emerick's Hobby Old-Fashioned Honesty" ("for Cigars, Cigarettes and Smoking Tobacco.").....	J. T. Emerick.....	3,258	June 5	23	2124
"Emmett," "Dot's me," (for Cigars).....	Weaver Bros.....	3,414	July 31	24	394
"Engrossing Ink".....	C. M. Higgins.....	3,033	Mar. 6	23	834
"Ecocene" (for Illuminating Oil).....	Standard Oil Company.....	3,519	Sept. 11	24	998
"Essence Eucalypti" (for a Medicinal Preparation).....	S. M. Burroughs.....	3,573	Oct. 9	25	98
"Eternal Ink".....	C. M. Higgins.....	3,032	Mar. 6	23	834
"Eucalyptia" (for a Medicinal Preparation).....	S. M. Burroughs.....	3,572	Oct. 9	25	98
"Eucalyptin" (for a Medicinal Preparation).....	S. M. Burroughs.....	3,571	Oct. 9	25	98
"Eureka Coal Economizer".....	F. E. McAllister.....	2,977	Feb. 13	23	544
"Eureka Hoof Ointment".....	Rehrig & Koons.....	3,438	Aug. 14	24	606
"Eureka Salve".....	Campbell & Co.....	3,251	June 5	23	2124
"Euretta Cloth" (for Dry Goods).....	J. H. Lane & Co.....	3,678	Nov. 13	25	604
"Ewing's Cherubs" (for Cigars).....	Jacoby & Fromer.....	3,656	Nov. 6	25	506
"Excelsior Family Medicine".....	C. A. Cheatham.....	3,781	Dec. 25	25	1194
"Excelsior," (For Cleaning and Removing Tarnish from Metallic and other Articles.).....	A. Queman.....	2,962	Feb. 6	23	440
"Excelsior" (for Upholstery and Drapery Trimmings).....	M. O'Brien.....	3,513	Sept. 11	24	998
"Exchange" (for Cigars).....	Wilkowski Brothers.....	3,790	Dec. 25	25	1194
"Extra American Stout".....	H. Clausen & Son Brewing Company.....	3,254	June 5	23	2124
"Extra Coach Painters'" (for Lamp Black).....	L. Martin & Co.....	3,359	July 10	24	104
"Extra Quality" (For Hat Linings).....	F. G. Hanson.....	3,073	Mar. 13	23	942
"Extra Quality" (for Hat Linings).....	F. G. Hanson.....	3,418	Aug. 7	24	500
"Extras" (for Clothing).....	S. Kaufman & Sons.....	3,531	Sept. 18	24	1094
"Family Pius".....	Plume & Atwood Manufacturing Company.....	3,565	Oct. 2	25	2
"Famous" (for Cigars).....	Beitman Bros.....	3,558	Oct. 2	25	2
"Farmer's Favorite" (for Coffee).....	C. Fink and A. Nasse.....	3,445	Aug. 14	24	606
"Farmers' Fertilizer Co".....	Farmers Fertilizer Company.....	3,527	Sept. 18	24	1094
"Farmington Sugar Corn".....	Vaugh, Cothren & Williams.....	3,099	Nov. 20	25	702
"Farrier's Secret" (for a Veterinary Remedy).....	F. I. Smith.....	3,213	May 15	23	1836
"Fascelen" (for a Toilet Lotion).....	D. B. Aitken.....	3,763	Dec. 18	25	1082
"Fast Black O. N. T." (for Thread).....	Clark Thread Company.....	3,204	May 15	23	1836
"Fay's Wonder Soap".....	H. G. Fay.....	3,691	Nov. 20	25	702
"Female Curator," (for Medicine).....	G. W. Stewart.....	3,384	July 17	24	208
"Fern Bitters. The great Dyspepsia and Liver Remedy".....	R. Cassady.....	2,897	Jan. 9	23	96
"Feuchtswanger's Disinfectant".....	L. Feuchtswanger & Co.....	3,389	July 24	24	306
"Finlaw's Dyspepsia and Liver Cure".....	J. P. Finlaw.....	3,449	Aug. 21	24	708
"Finlaw's King of Pain," (for a Medicine).....	J. P. Finlaw.....	3,451	Aug. 21	24	708
"Fish Brothers Wagon Co".....	Fish Bros. & Co.....	3,543	Sept. 25	24	1180
"Fishing Tackle".....	J. Goldsmith & Son.....	3,296	June 19	23	2330
"Fiske's Tissue Paper Label".....	G. C. Fisk.....	3,071	Mar. 13	23	942
"Flat Concave," (For Watch Crystals).....	J. H. Purdy & Stein.....	3,001	Feb. 20	23	634
"Flat Lunette," (For Watch Crystals).....	J. H. Purdy & Stein.....	2,999	Feb. 20	23	634
"Fletcher's Dry Soap".....	E. Fletcher.....	3,768	Dec. 18	25	1082
"Fleur d'Amérique Flour".....	Lyon & Co.....	3,266	June 5	23	2124
"Floral," (for Chemical Fertilizers).....	Farmers Fertilizing Company.....	3,706	Nov. 27	25	790
"Fluid Diastase" (a Medicine).....	W. S. Merrell Chemical Company.....	3,180	May 1	23	1626
"Flying Yankee," (for Cigars).....	Dunbar & Co.....	3,655	Nov. 6	25	506
"Forest Brand, Redwood Packing Co. Los Gatos, Cal.".....	Los Gatos Fruit Packing Company.....	2,959	Feb. 6	23	440
"Fougere's Angelic Dentifrices".....	C. E. Fougere.....	3,708	Nov. 27	25	790
"Fougere's Ready-Made Mustard Plasters".....	C. E. Fougere.....	3,727	Dec. 4	25	886
"Fougere's Ready Mustard Plasters".....	C. E. Fougere.....	3,709	Nov. 27	25	790



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"Fox Mountain," (for Whisky) .....	Brown, Thompson & Co .....	3,172	May 1	23	1626
"Franklin Howes' Charm," (For a Liniment) .....	F. Howes .....	3,015	Feb. 27	23	744
"Fred. C. Edler's Manhattan Animal and Poultry Foods" .....	F. C. Edler .....	3,748	Dec. 11	25	984
"Fred. Stevens' Unfailing Cough Cure" .....	F. S. Stevens .....	3,216	May 15	23	1836
"Fred. Wolfcan's Golden Gate Tonic" .....	F. Wolfcan .....	3,688	Nov. 13	25	604
"French Soap" .....	G. Hasley .....	3,507	Sept. 11	24	998
"Fresh" (for Cigars) .....	Jacoby & Fromer .....	3,357	July 10	21	104
"Fresh Deviled Crabs" .....	McMenamin & Co .....	2,923	Jan. 16	23	196
"Fruit Cream," (For Beverages) .....	Garnotis Bros .....	2,947	Jan. 30	23	348
"Fruitaline" (for a Chemical Compound) .....	M. Nelson .....	3,408	July 31	24	394
"G. B." (for Cigars) .....	Spar Bros .....	3,665	Nov. 6	25	506
"G. & T." (for Cigars) .....	Goldin & Tribbitt .....	3,750	Dec. 11	25	984
"Galvanic Liniment" .....	J. M. Fulton .....	3,561	Oct. 2	25	2
"Galvanic Oil" .....	W. W. Henry & Co .....	3,375	July 17	24	268
"Galvanic Oil" .....	G. W. Neasse & Co .....	3,366	July 10	24	104
"Garfield Malaria Antidote" .....	J. B. Behler .....	3,473	Sept. 4	24	904
"Garnoy, Brown & Co's Regulars," (for Cigars) .....	Garnoy, Brown & Co .....	3,711	Nov. 27	25	990
"Geneva" (For Watch Crystals) .....	J. H. Purdy & Stein .....	2,998	Feb. 20	23	634
"German Complexion or Skin Soap" .....	W. H. Carlsako .....	3,526	Sept. 18	24	1094
"German Cough Remedy" .....	S. M. Cooper .....	3,482	Sept. 4	24	904
"German Red Cross Kidney Cure" .....	E. Van Brocklin .....	3,667	Nov. 6	25	506
"German Stomach Powder" .....	J. J. F. Popp .....	3,419	Aug. 7	25	500
"Germania Tube Ointment" .....	Arnold & Weaver .....	3,744	Dec. 11	25	984
"Germantown," (for Lamp Black) .....	L. Martin & Co .....	3,365	July 10	24	104
"Gerster" (for Dry Goods) .....	Folwell Bro. & Co .....	3,311	June 26	24	2416
"Giant Baking Powder" .....	C. L. Williams .....	3,539	Sept. 18	24	1094
"Giant Cement" (for repairing broken articles) .....	C. L. Williams .....	3,537	Sept. 18	24	1094
"Gilbert S. Graves' Imperial Baking Powder" .....	G. S. Graves .....	3,484	Sept. 4	24	904
"Gingermint" (for Medicine) .....	S. M. Cooper .....	3,481	Sept. 4	24	904
"Glenwood" (for Whisky) .....	J. Lawson & Son .....	3,679	Nov. 13	25	604
"Globe Ointment" .....	C. H. Modisett .....	2,978	Feb. 13	23	544
"Globe Plaster" .....	C. H. Modisett .....	2,960	Feb. 6	23	440
"Glycerine and Rice Face-Powder" .....	H. Loftie .....	3,695	Nov. 20	25	702
"Glycerine Pectina," (for Chapped Hands, Lips, &c) .....	R. E. Smith .....	3,194	May 8	23	1736
"Goddard & Fraser's Amber Enamel," (for Earthen and Other Wares) .....	Goddard & Fraser .....	3,148	Apr. 17	23	1450
"Golden Anchor" (for Liniment) .....	J. W. Jones .....	3,694	Nov. 20	25	702
"Golden Butter Color" .....	D. F. Shull & Co .....	3,080	Mar. 13	23	942
"Golden Grain Whiskey" .....	E. N. Cook & Co .....	3,387	July 24	24	306
"Golden Spike" (for Cigars) .....	A. Decz .....	3,654	Nov. 6	25	506
"Golden Star Spirit" (for Lamp Black) .....	L. Martin & Co .....	3,392	July 10	24	104
"Gov. Glick's Choice," (for Cigars) .....	Tuchman Bros .....	3,168	Mar. 27	23	1126
"Goodwin's Oatmeal Bitters" .....	F. W. Goodwin .....	3,398	July 31	24	394
"20 Grain Mixture Injection" .....	M. J. Breitenbach .....	3,575	Oct. 16	25	156
"Grand Master" (For Cigar Boxes) .....	C. A. Yale .....	3,054	Mar. 6	23	834
"Grand Success," (For Cigars, Cigarettes, and Smoking Tobacco) .....	J. Stahl .....	2,984	Feb. 13	23	544
"Grantee" (for Smoking & Chewing Tobacco) .....	G. W. Gail & Ax .....	3,225	May 22	23	1930
"Granulated" (for Flour) .....	Sidle Fletcher Holmes Company .....	3,244	May 29	23	2036
"Gravity-Sash Locks" .....	Kempshall Manufacturing Company .....	3,319	June 26	23	2416
"Green Seal Baking Powder" .....	Ridenour, Baker & Co .....	3,167	Apr. 24	23	1532
"Greigs' Kaloderma," (for a Proprietary Medicine) .....	O. Griggs .....	3,730	Dec. 4	25	886
"Gutta Percha Court Plaster" .....	C. B. Robbins .....	2,914	Jan. 16	23	196
"H. W. Perry & Co.'s National," (for Plug Tobacco) .....	H. W. Perry & Co .....	3,681	Nov. 13	25	604
"Ha! Ha! Cough Drops" .....	Northup & Penman .....	3,661	Nov. 6	25	506
"Hall's Improved Cough Remedy, Sanguinaria or Blood Root Compound" .....	Hall Chemical Company .....	2,991	Feb. 20	23	634
"Hamburger Cough Syrup" .....	Stauff & Foster .....	3,081	Mar. 13	23	942
"Hammond's Slug Shot" .....	B. Hammond .....	3,260	June 5	23	2124
"Hampton Conch" .....	R. C. Millings .....	3,232	May 22	23	1930
"Harrison's Golden Cologne Water" .....	A. W. Harrison .....	3,731	Dec. 4	25	886
"Hazeline" (for a Medical Preparation) .....	S. M. Burroughs .....	3,570	Oct. 9	25	98
"Headache Drops" .....	L. E. Keeley .....	2,910	Jan. 16	23	196
"Headache Liniment" .....	L. E. Keeley .....	2,911	Jan. 16	23	196
"Headlight Tomatoes" .....	Marshall Canning Company .....	3,594	July 24	24	306
"Heil Anstalt," (for Medicinal Preparations) .....	H. Timms .....	3,684	Nov. 13	25	604
"Heinz's Catsup" .....	F. & J. Heinz .....	2,974	Feb. 13	23	544
"Heinz's Jelly" .....	F. & J. Heinz .....	3,012	Feb. 27	23	744
"Heinz's Radish" .....	F. & J. Heinz .....	3,013	Feb. 27	23	744
"Henderson's School Shoes" .....	C. M. Henderson & Co .....	3,391	July 21	24	306
"Henry's Remedy for Cholera &c" .....	T. H. McNellis .....	3,532	Sept. 18	24	1694
"Hickman's Hair Reviver" .....	Hickman Bros .....	3,149	Apr. 17	23	1450
"Higgins Baking Powder" .....	W. A. Higgins & Co .....	2,932	Jan. 30	23	348
"Higgins' Balsamic Lotion" (for a Medicine) .....	G. E. Higgins .....	3,262	June 5	23	2124
"High Life" (for Cologne) .....	H. J. Gordon .....	3,316	June 26	23	2416
"High Lunette," (For Watch Crystals) .....	J. H. Purdy & Stein .....	3,000	Feb. 20	23	634
"High School Index," (for a Periodical Publication) .....	C. H. J. Douglas .....	3,690	Nov. 20	25	702
"Highland" (For Printed Cotton Fabrics) .....	V. H. Rothschild & Co .....	2,980	Feb. 13	23	544
"Hill's East Indian Manioca," (for a Preparation of Tapioca) .....	R. F. Hill .....	3,752	Dec. 11	25	984
"Hindoo Corn Remover" .....	A. L. Townsley .....	2,985	Feb. 13	23	544
"Hoadley's Blood Orange Pellets" .....	E. J. Hoadley .....	3,337	July 3	24	2
"Hoadley's Cough Drops Label" .....	E. J. Hoadley .....	3,178	May 1	23	1626
"Hoadley's Jamaica Ginger Tablets" .....	E. J. Hoadley .....	3,336	July 3	24	2
"Hoadley's Lime Fruit Tablets" .....	E. J. Hoadley .....	3,338	July 3	24	2
"Hobb's Gout and Rheumatic Remedy" .....	W. H. Short .....	3,024	Feb. 27	23	744
"Holland Universal Stomach Bitters" .....	A. Orth .....	3,103	Mar. 27	23	1126
"Holt's German Cologne" .....	A. Doussan .....	3,161	Apr. 24	23	1532
"Homo," (for Cigars) .....	Wemple & Co .....	3,276	June 5	23	2124
"Home Flour Mills" .....	J. J. De Pombo .....	3,503	Sept. 11	24	998
"Honest Box" (for Laundry Blue) .....	Main Bros. & Co .....	3,378	July 17	24	208
"Honest John Shaker Yeast" .....	H. Taylor .....	3,322	June 26	23	2416
"Honey Bee" (for Plug Tobacco) .....	J. H. Harris' Sons .....	3,615	Oct. 23	25	294
"Hop Oil" .....	O. G. Smith .....	2,905	Jan. 9	23	96
"Hop Pills" .....	G. R. Lyon .....	3,735	Dec. 4	25	886

## Alphabetical list of labels—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
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"Horehound Balsam" (for a Cough Syrup)	F. E. Eaton	3,505	Sept. 11	24	996
"Horn's Telephone Cough Syrup, The Wonder of Cough Syrups."	C. W. Horn	3,355	July 10	24	104
"Horn's Telephone Liniment King of all Liniments"	C. W. Horn	3,263	June 5	23	2124
"Howard Brand" (For Jelly)	F. & J. Heinz	3,014	Feb. 27	23	744
"Hoyt's German Cologne"	E. W. Hoyt & Co	3,770	Dec. 18	25	1082
"Hoyt's Medicated Tar Drops"	Vogeler, Winkelmann & Co	3,050	Mar. 6	23	834
"Husband's Calined Magnesia," (for a Medicine)	T. J. Husband	3,264	June 5	23	2124
"Hygeia" (for Effervescent Beverages)	F. T. King	3,771	Dec. 18	25	1082
"Hygienic Elixir"	R. H. McDonald & Co	3,017	Feb. 27	23	744
"I am the Excelsior Cough Syrup"	C. W. Potter	3,239	May 29	23	2036
"I Sing Lass," (for Isinglass or similar Merchandise)	E. R. T. Williams	3,584	Oct. 9	25	98
"Imperial Anti-Squak Norwegian Tar Felting"	S. L. Merchant & Co	3,717	Nov. 27	25	790
"Imperial Portland Cement"	S. L. Merchant & Co	3,718	Nov. 27	25	790
"Imperial Russian Gut" (for Violin Strings)	J. H. Foote	3,588	Oct. 15	25	196
"Imperial Trimming"	H. Maul & Co	2,946	Jan. 30	23	348
"Improved Coach Painters" (for Lamp Black)	L. Martin & Co	3,361	July 10	24	104
"Indian Diarrhea Cure"	H. A. Fowler	2,971	Feb. 13	23	544
"Ingrain Carpet"	Hood, Bonbright & Co	3,353	July 10	24	104
"Ingrain Carpet"	Hood, Bonbright & Co	3,354	July 10	24	104
"Injection De Mandolena by Dr. Mills"	J. C. Mills	3,407	July 31	24	394
"Insecticide"	J. E. McCambridge	3,077	Mar. 13	23	942
"Invincibles" (For Cigar Boxes)	Jacoby & Fromer	3,016	Feb. 27	23	744
"Iron Cross Brand," (for Groceries)	Meyer Brothers & Co	3,774	Dec. 18	25	1082
"Ives' Catarrh Cream"	F. Ives.	3,076	Mar. 13	23	942
"Ivorne" (for a Liquid Tooth Wash)	M. L. Fornwalt	3,315	June 26	23	2416
"J. Berman's Anointine"	J. Berman	3,088	Mar. 20	23	1036
"J. H. Hamm's Emollient"	J. H. Hamm	3,139	Apr. 10	23	1310
"James Meyer, Jr's, New Inodorons Germicide"	J. Meyer, Jr	3,230	May 22	23	1930
"James Meyer, Jr's, New Inodorons Germicide, Solution of Alumina."	J. Meyer, Jr	3,432	Aug. 14	24	606
"Japanese Oil" (for a Medicated Compound)	Japanese Oil Company	3,639	Oct. 30	25	398
"Jersey Butter Color"	T. L. Corwin	3,175	May 1	23	1626
"Jersey Lily," (For Cigars)	H. Ellis & Co	2,954	Feb. 6	23	440
"Jersey Lily" (For Flour)	Hillyer & Tileston	3,091	Mar. 20	23	1036
"Jet Black O. N. T." (for Thread)	Clark Thread Company	3,203	May 15	23	1836
"John H. Lyon's Precious Ointment"	J. H. Lyon	3,772	Dec. 18	28	1082
"John Yannes Bottle Mark"	J. Yannes	3,650	Oct. 30	25	398
"John's Magic Pain King"	C. A. Fonerden	3,528	Sept. 18	24	1094
"Johnston's Caustic Oil"	A. L. Johnston	3,120	Apr. 10	23	1340
"Joint Cement" (for repairing broken articles)	C. L. Williams	3,538	Sept. 18	24	1094
"Jones' Glycerine Arnica Salve"	S. A. Jones and J. P. Primley	3,671	Nov. 6	25	506
"K. L." (for Bread)	J. J. Weigel	3,475	Aug. 28	24	802
"Kaiser-Sprudel" (for Natural Mineral Water)	Luyties Brothers	3,525	Sept. 18	24	1094
"Kansas City Preserving Co." (for Jellies, Jams, &c)	Forrester & Cook	3,653	Nov. 6	25	506
"Kean's Kidney and Back Plaster"	G. L. Burnside	3,278	June 12	23	2242
"Kemp's Balsam for the Throat & Lungs"	O. F. Woodward	3,158	Apr. 17	23	1450
"King of Liniments"	A. Erikson	3,349	July 10	24	104
"Knickerbocker Subscription Agency," (for a Catalogue)	J. H. Ireland and W. J. Russell	3,786	Dec. 25	25	1194
"Knights of Labor" (for Tobacco)	Wellman & Dwire Tobacco Company.	3,518	Sept. 11	24	998
"Knitting Cotton"	J. M. Pevey	3,682	Nov. 13	25	604
"Kolb's Ossapadentine"	W. B. T. Davis	3,187	May 8	23	1736
"La America" (for Beer)	C. H. Schoch	3,424	Aug. 7	24	500
"La Redentora" (for Flour)	J. J. De Pombo	3,504	Sept. 11	24	998
"Ladies Favorite French Soap"	G. Hasley	3,508	Sept. 11	24	998
"Lady Vere Tooth Powder"	A. M. V. Davenport	3,632	Oct. 30	25	398
"Lassell's All-Healing Balsam"	E. W. Lassell	3,150	Apr. 17	23	1450
"Lavarre's Sure Cure"	G. M. Phillips	2,930	Jan. 23	23	274
"Lavative Tonic Extracts"	Hogeman & Co	2,993	Feb. 20	23	634
"Le Bottillier's Marvelous Catarrh Cure"	A. Le Bottillier	3,522	Sept. 18	24	1094
"Lemon Bloom" (for Prepared Lemon Juice)	J. C. Gamble	3,590	Oct. 16	25	196
"Lena" (for Cigars)	B. Payn's Sons	3,471	Aug. 28	24	802
"Leonard's Selling Tickets" (for Lamps, Pendants, and Chandeliers.)	C. H. Leonard	3,734	Dec. 4	25	886
"Levis Brothers Twins." (for Fine-Cut Tobacco)	Levis Bros	3,736	Dec. 4	25	886
"Linimento Excelsior De Bechtel"	W. H. Bechtel	3,632	Nov. 6	25	506
"Lilt Hop" (For Rheumatic Remedy)	Lilienthal & Bishop	3,093	Mar. 20	23	1036
"Lime and Rye"	Cook & Bernheimer	3,066	Mar. 13	23	942
"Lime and Wheat"	Cook & Bernheimer	3,062	Mar. 13	23	942
"Lime Kiln Club" (for Cigars)	Ithaca Cigar Manufacturing Company.	3,284	June 12	23	2242
"Lime, Rye and Wheat"	Cook & Bernheimer	3,061	Mar. 13	23	942
"Lime, Wheat and Rye"	Cook & Bernheimer	3,049	Mar. 13	23	942
"Liquid Coffee"	Fols & Co	3,137	Apr. 10	23	1310
"Liquid Court Plaster"	H. G. Case & Co	3,057	Mar. 13	23	942
"Liquid Electricity" (For Medicine)	J. Hastings	3,011	Feb. 27	23	744
"Little Blackwood" (for Cigars)	J. Schlauch	3,106	Mar. 27	23	1126
"Little Daisy" (For a Carbonated Beverage)	H. Thornton & Co	2,929	Jan. 30	23	348
"Little Darling" (for Washing Compound)	J. G. Haynes, W. B. Miller, M. E. and I. Bloom.	3,784	Dec. 25	25	1194
"Love Me" (for Cigars)	Goddin & Tribbett	3,712	Nov. 27	25	790
"Lowe's Cresylic Stock Remedy," (for Diseases of Animals)	J. P. Barnett	2,927	Jan. 23	23	274
"Lowe's Jack Rabbit Sheep Dip."	J. P. Barnett	3,087	Mar. 20	23	1036
"Lowrey's Indian Vegetable Chill Pills"	J. T. Lowrey	3,622	Oct. 23	25	294
"Luck," (for Smoking and Cigarette Tobacco)	A. B. Frank & Co	2,888	Jan. 2	23	2
"Lucky Hit," (for Cigars)	Jacoby & Fromer	3,238	May 29	23	2036
"Ludgate & Co." (for Tip Linings of Hats)	F. G. Hanson	3,783	Dec. 25	25	1194
"Lustra Painting & Embroidering," (For Colors for Painting.)	R. H. Bragdon	2,896	Jan. 9	23	96
"Lynch's Celebrated Dyspepsia Cordial"	M. A. Lynch	3,623	Oct. 23	25	294
"M. Poncet's Invaluable Remedy for Small Pox"	M. Poncet	3,019	Feb. 27	23	744
"Macramo Cord"	J. M. Pevey	3,662	Nov. 6	25	506
"Madam Caroline's White Pine Beautifier for the Complexion."	C. L. Collins	3,480	Sept. 4	24	904



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"Madame Lewenberg's Pastilles de Florence" (for the Complexion.)	C. Lewenberg.....	3,358	July 10	24	104
"Madison Dress Styles" (for Dry Goods)	Coffin, Altemus & Co.....	3,767	Dec. 18	25	1982
"Madison Staple Styles" (for Dry Goods)	Coffin, Altemus & Co.....	3,766	Dec. 18	25	1082
"Magic Glove and Clothes Cleaner"	N. W. Griswold.....	3,713	Nov. 27	25	790
"Magnolia" (for Manufactured and Smoking Tobacco)	A. B. Wells.....	3,685	Nov. 13	25	604
"Mandarin Chop" (for Tea)	Cassidy & Co.....	3,186	May 8	23	1736
"Manhattan Blood Guano"	E. F. Cooke.....	3,007	Feb. 27	23	744
"Mann's American Rail-Road Copying Paper"	W. Mann.....	3,039	Mar. 6	23	834
"Mann's Parchment Copying Paper"	W. Mann.....	3,038	Mar. 6	23	834
"Mann's Parchment Paper Copying Books"	W. Mann.....	3,037	Mar. 6	23	834
"Mann's Remedy" (for a Patent Medicine)	D. R. O'Lalor.....	3,289	June 12	23	2942
"Mann's White Commercial Copying Books"	W. Mann.....	3,035	Mar. 6	23	834
"Mann's White Linen Letter Copying Books"	W. Mann.....	3,036	Mar. 6	23	834
"Marion Mills." (For Paper)	S. A. Rudolph's Sons & Co.....	2,963	Feb. 6	23	440
"Marshall Canning Co." (for Canned Corn)	Marshall Canning Company.....	3,431	Aug. 14	24	606
"Mason's Compound Soap"	H. G. Fay.....	3,119	Apr. 10	23	1340
"Mathens & Minick Double Quick Wood Filler"	Mathens & Minick Filler Co.....	3,511	Sept. 11	24	998
"Maud Moller" (for Cigar Boxes)	F. Lewis & Bro.....	3,560	Oct. 2	25	2
"McClelland's Anti-constipation Pills"	J. M. McClelland.....	2,891	Jan. 2	23	2
"McIntosh & Co., U. S. A." (for Shoes, Boots, and Slippers)	McIntosh & Co.....	3,339	July 3	24	2
"Medicinal Temperance Drink"	J. Bard.....	3,557	Oct. 2	25	2
"Medical Wonder"	R. B. Robison.....	3,472	Aug. 28	24	802
"Melange" (for Dry Goods)	Folwell Bro. & Co.....	3,314	June 26	23	2416
"Metallic Tablet and Razor Strop"	G. F. Saunders.....	2,981	Feb. 13	23	544
"Metho-Glycerole of Bismuth and Hydrastia." (for a Medicine.)	Chapman, Green & Co.....	3,442	Aug. 14	24	606
"Mexican Palmae." (for Soap)	B. Z. Taylor & Co.....	3,197	May 8	23	1736
"Meyer's Pine Apple Lemonade"	F. R. Meyer.....	3,267	June 5	23	2124
"Mi Concave." (For Watch Crystals)	J. H. Purdy & Stein.....	2,997	Feb. 20	23	634
"Miner's Comfort" (for Coffee)	C. Fink and A. Nasse.....	3,446	Aug. 14	24	606
"Minnehaha" (for Flour)	Sidle Fletcher Holmes Company.....	3,243	May 29	23	2036
"Mode of Distributing Money Dodgers" (for Blank Books, Stationery, and other like Articles.)	J. S. Rivers.....	3,410	July 31	24	394
"Mohawk Belle" (For Whisky)	Clayton & Webb.....	3,089	Mar. 20	23	1036
"Monopole Turkish Tobacco and Cigarette Manufactory." (for Prepared Tobacco, Cigarettes Especially.)	J. Huppmann.....	3,469	Aug. 28	24	802
"Montgomery Crackers"	T. H. Carr.....	3,574	Oct. 9	25	98
"Moore's Sulphur Dip"	C. E. Williams & Co.....	3,111	Mar. 27	23	1126
"Morning Whiff" (for Cigars)	W. Newman.....	3,435	Aug. 14	24	606
"Morrison & Deprez' Horse and Cattle Powder"	Morrison & Deprez.....	3,018	Feb. 27	23	744
"Morse's Asparagus Kidney Cure"	C. H. Morse.....	3,095	Mar. 20	23	1036
"Morse's Compound Cough Syrup"	C. H. Morse.....	3,459	Aug. 21	24	708
"Moth Proof" (For Carpet Lining Paper)	Haldeman Paper Company.....	2,901	Jan. 9	23	96
"Mother's Friend," (for Pills)	M. J. Smith.....	3,130	Apr. 10	23	1340
"Mountain Valley Springs Co." (for Natural Mineral Water.)	Mountain Valley Springs Company.....	3,268	June 5	23	2124
"Mountain Valley Water" (for Natural Mineral Water)	Mountain Valley Springs Company.....	3,269	June 5	23	2124
"Mrs. Breakwell's Sugar-Coated Anti-Bilious Tonic Pills"	J. and S. J. Breakwell.....	2,966	Feb. 13	23	544
"Mrs. Cary's Compound" (for a Medical Preparation)	S. E. McIntosh.....	3,754	Dec. 11	25	984
"Mrs Day's Baby Cordial"	C. E. Houghtaling and G. E. Ferguson.....	3,510	Sept. 11	24	998
"Mrs Day's Worm Remedy"	C. E. Houghtaling and G. E. Ferguson.....	3,509	Sept. 11	24	998
"Mnellenbach's Compound Balsam of Honey and Toin"	Weismann & Mnellenbach.....	2,945	Jan. 30	23	348
"My Choice Dentifrice"	J. E. Edmundson.....	3,329	July 3	24	2
"My Horse Shoe & Bee Label," (for General Merchandise)	J. N. Kline.....	3,376	July 17	24	208
"My Maryland Bitters"	W. L. Morse.....	2,965	Feb. 6	23	440
"N. K. Brown's Iron and Quinine Bitters"	N. K. Brown.....	2,967	Feb. 13	23	544
"Narrow Gauge Brand, Los Gatos Fruit Packing Co. Los Gatos, Cal."	Los Gatos Fruit Packing Company.....	2,958	Feb. 6	23	440
"Nature's Cure from the Wild Woods," (for a Medical Compound.)	Stevens Manufacturing Company.....	3,308	June 19	23	2330
"Ne Plus Ultra" (for Plug Tobacco)	J. H. Harris' Sons.....	3,616	Oct. 23	25	294
"Ne Plus Ultra Parlor Match"	A. Grafke & Co.....	3,487	Sept. 4	24	904
"Necat" (Poison for Animals)	C. Williams.....	2,899	Jan. 9	23	96
"Neurotoxic," (a Remedy for Neuralgia)	Neurotoxic Manufacturing Company.....	3,306	June 19	23	2330
"Nevajo Ague Cure"	T. A. Wilson.....	3,169	Apr. 24	23	1532
"New York Cigar Factory"	C. A. Bayler.....	3,521	Sept. 18	24	1094
"New Zealand Sheep Dip"	A. H. Swan and R. M. Johnson.....	3,309	June 19	23	2330
"Newton's Evolution Soap"	Newton Brothers & Co.....	3,596	Oct. 16	25	196
"Niagara Spray Cologne"	C. O'Loughlin.....	3,680	Nov. 13	25	604
"Nickel Plate" (for Cigars)	J. Rogan.....	3,157	Apr. 17	23	1450
"Nickle Plate," (for Smoking Tobacco)	H. Breitweiser & Bros.....	3,221	May 22	23	1930
"Nitrogenized Iron"	Chapman, Green & Co.....	3,160	Apr. 24	23	1532
"No. 1 <sup>st</sup> " (For Buck Parses)	B. Dreyfuss.....	3,070	Mar. 13	23	942
"Noelle's Celebrated Peruvian Bitters"	C. Noelle & Co.....	3,775	Dec. 18	25	1082
"Nonporous," (for Leather Belting)	American Oak Leather Company.....	2,885	Jan. 2	23	2
"O. K. Borax Soap"	O. K. Soap Co.....	3,644	Oct. 30	25	308
"O. K. Velvet Ribbon"	R. A. Elsborg.....	2,955	Feb. 6	23	440
"O'Meara's Royal Glue"	J. U. O'Meara.....	2,979	Feb. 13	23	544
"Oake's Balm of Life" (for a Medicine)	J. E. Oakes.....	3,514	Sept. 11	24	998
"Ocatimatus," (for Cigars)	W. D. Newton.....	3,460	Aug. 21	24	708
"Old Dr. Malcolm's Hop Poroused Plaster"	H. M. Gross.....	3,010	Feb. 27	23	744
"Old Forrester Bourbon"	Brown, Thompson & Co.....	3,173	May 1	23	1626
"Old Homestead Wild Cherry Bitters"	G. Scott.....	3,307	June 19	23	2330
"Old Soap"	Cornwall & Brother.....	3,118	Apr. 10	23	1340
"Old Standard," (for Lamp Black)	L. Martin & Co.....	3,560	July 10	24	104
"Old Texan Ointment"	A. Smith.....	3,025	Feb. 27	23	744
"Orange-Leaf" (for a Liniment)	W. L. Maulfair.....	3,696	Nov. 20	25	702
"Oriole Assorted Jellies"	C. G. Summers & Co.....	3,181	May 1	23	1526
"Our Eagle" (for Cigars, Cigarettes, and Smoking Tobacco)	J. Stahl.....	3,461	Aug. 21	24	708
"Our Governor," (For Cigars)	G. T. Warren.....	3,051	Mar. 6	23	834

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"Our Own" (for Saddlery Hardware)	R. S. Luqueer & Co.	3,265	June 5	23	2124
"Oxford Hash" (for Smoking Tobacco)	L. Ginter	3,390	July 24	24	306
"Oxymurin" (For a Remedy)	G. H. Merkel	3,094	Mar. 20	23	1036
"Palmer's Indian Remedy for External and Internal Use"	C. C. Palmer	2,996	Feb. 20	23	634
"Pappoose"	Schumacher & Ettlinger	3,041	Mar. 6	23	834
"Paradise" (for Tobacco)	G. W. Gail & Ax	3,224	May 22	23	1930
"Parker's Tonic"	Hiscox & Co.	3,206	May 15	23	1836
"Parker's Tonic"	Hiscox & Co.	3,207	May 15	23	1836
"Parlor City" (for Cigars)	H. Westcott Son & Co.	3,372	July 10	24	104
"Parnell" (for Cigars)	E. Newburger	3,577	Oct. 9	25	98
"Patrolman" (for Collars and Cuffs)	L. W. Bitting	3,347	July 10	24	104
"Pay Day" (for Plug Tobacco)	J. H. Harris' Sons	3,614	Oct. 23	25	294
"Peacock" (for Cigars)	S. Hornsheim & Bro	3,430	Aug. 14	24	606
"Pearl" (for Flour)	G. Urban & Co.	3,499	Sept. 4	24	904
"Pearl-White Oil," (for Carbon Oil)	I. Davis	3,747	Dec. 11	25	984
"Peek-a-Boo," (for Cigars)	Jacoby & Fromer	3,191	May 8	23	1736
"Peerless Fire Proof Roof Paint"	Dickinson & Allie	3,280	June 12	23	2242
"Peerless Flavoring Extracts"	A. E. Razo	2,853	Jan. 2	23	2
"Peoples Choice," (For Cigars)	M. Ephraim	3,009	Feb. 27	23	744
"Pepsin Bitters"	F. Parker, A. L. Vandewater, and T. G. Talmage.	3,755	Dec. 11	25	984
"Percuro Cough Syrup"	N. D. Toppan	3,027	Feb. 27	23	744
"Perfect Pastry Patent Flour"	Wyly & Greene	3,220	May 15	23	1836
"Persian" (for Flour)	Sidle Fletcher Holmes Company	3,245	May 29	23	2036
"Peterson's Improved Celebrated Medicated Soap Liniment"	C. W. England	3,725	Dec. 4	25	886
"Petrolatum, U. S. P." (For a Medicinal Preparation)	E. F. Houghton & Co	2,933	Jan. 30	23	348
"Phillips' Opalite" (for a Filler)	C. C. Phillips	3,598	Oct. 16	25	196
"Pickit's Purifying Syrup" (for a Medicine).	J. B. Pickit	3,516	Sept. 11	24	998
"Pick's Magic Mixture" (for a Medicine).	J. I. Plass	3,534	Sept. 18	24	1094
"Pickwick Club" (for Cigars)	Grommes & Ullrich	3,403	July 31	24	394
"Piedra Brazil" (for Razor Hones).	T. A. Kochs	3,286	June 12	23	2242
"Pildoras del Doctor Carey"	Carey & Co	3,780	Dec. 25	25	1194
"Pilla-Solvane" (for a Hair Solvent)	A. H. Wilcox	3,324	June 26	23	2416
"Pillow Inhaler"	J. W. Snyder	3,195	May 8	23	1736
"Pillules for the People"	I. Bidaman	3,185	May 8	23	1736
"Pint English" (for Celery Sauce)	F. & J. Heinz	3,317	June 26	23	2416
"Pioneer Coffee Settler"	J. H. Robinson Medical Manufacturing Company.	3,342	July 3	24	2
"Pioneer's Pride," (for Coffee)	C. Fink and A. Nasse	3,443	Aug. 14	24	606
"Pleasant Mountain Sugar Corn Oriental Brand"	H. F. Webb	2,917	Jan. 16	23	1994
"Pluck" (for Manufactured Tobacco)	A. B. Wells	3,536	Sept. 18	24	1096
"Poke" (For Head Coverings)	Rogers & Co	3,002	Feb. 20	23	634
"Poland Water," (for Poland Mineral Spring Water)	H. Ricker & Sons	3,273	June 5	23	2124
"Polar Belt Dressing"	A. Q. Southwick	3,004	Feb. 20	23	634
"Potts' Great Southern Worm Circles"	S. T. Potts	3,579	Oct. 9	25	98
"Potts' Long Leaf Liniment"	S. T. Potts	3,580	Oct. 9	25	98
"Potts' Will Cure Liniment"	S. T. Potts	3,578	Oct. 9	25	98
"Powers' Specific"	E. C. Powers.	3,155	Apr. 17	23	1450
"Premium Trunk Brand" (for Coffee)	F. Sutton & Co.	3,182	May 1	23	1626
"Pride of the State" (for Flour)	Meyer & Bulte	3,592	Oct. 16	25	196
"Primley's Iron and Wahoo Tonic"	S. A. Jones and J. P. Primley	3,669	Nov. 6	25	506
"Primley's Speedy Cure for Coughs and Colds"	S. A. Jones and J. P. Primley	3,670	Nov. 6	25	506
"Professor Harry Robinson's Specific Lotion"	H. Robinson	3,756	Dec. 11	25	984
"Progress" (for Cigars)	F. Gaertner	3,189	May 8	23	1736
"Prussian Heave Powders"	G. Phipps	3,380	July 17	24	208
"Purity" (for Petroleum Products and Petroleum and other Oils and Lubricating Compounds.)	D. L. Grant	3,674	Nov. 13	25	604
"Purity, The New Disinfectant"	E. P. Bingham and C. E. Bennison	2,895	Jan. 9	23	96
"Putnam Phalanx" (for Cigars)	W. B. Drake	3,541	Sept. 25	24	1180
"Pyrophosphated Iron Water"	C. L. Koppeler	3,125	Apr. 10	23	1340
"Queen of the Forest," (for Medicine)	J. P. Finlaw	3,450	Aug. 21	24	708
"Quigley's Consumption and Asthma Cure"	W. G. Quigley	3,193	May 8	23	1736
"Quinine Cigars"	Jacoby & Fromer	3,285	June 12	23	2242
"Ramon's Genuine Nerve and Bone Oil"	Spencer & Brown	3,740	Dec. 4	25	886
"Ranchero," (for Smoking and Cigarette Tobacco).	A. B. Frank & Co	2,889	Jan. 2	23	2
"Randall's Pocket Case of Homœopathic Medicines for Travelers and Families"	L. P. Randall	3,420	Aug. 7	24	500
"Raymond's Pectoral Plaster"	G. T. Raymond	3,021	Feb. 27	23	744
"Ready Rising" (for Wheat, Corn, and Buckwheat Flour)	H. B. Cathers.	3,559	Oct. 2	25	2
"Red Liniment"	W. S. Taylor.	3,323	June 26	23	2416
"Red Seal White Lead"	W. Waterall & Co	3,084	Mar. 13	23	942
"Reduced Tax" (for Cigars)	H. Dirksen	3,222	May 22	23	1930
"Reidy's Scratch Ointment"	P. A. Reidy	3,321	June 26	23	2416
"Rejuvenator," (for Cigars)	Sackett, Wilhelms & Betzig	3,697	Nov. 20	25	702
"Restein's Indicator," (for Checks, Notes, Drafts, &c).	J. Restein	3,290	June 12	23	2242
"Restein's Indicator No. 2," (for Checks, Notes, Drafts, &c).	J. Restein	3,291	June 12	23	2242
"Retzer's Brown Salvo"	E. D. Retzer	2,925	Jan. 16	23	196
9143 "Rheumatic Cure"	C. H. Hammit	3,529	Sept. 18	24	1094
"Rheumatic Syrup"	J. Foster, Jr.	3,223	May 22	23	1930
"Rhine Wine"	Luyties Brothers.	3,453	Aug. 21	24	708
"Richardson's Cough Cure"	A. M. Richardson	2,942	Jan. 30	23	348
"Ridgway's Ache Liniment"	S. Ridgway	3,341	July 3	24	2
"Rock and Chamomile" (for a Medicinal Preparation).	Cook & Bernheimer	3,607	Oct. 23	25	294
"Rock, Chamomile and Rye" (for a Medicinal Preparation)	Cook & Bernheimer	3,608	Oct. 23	25	294
"Rock, Rye and Chamomile" (for a Medicinal Preparation)	Cook & Bernheimer	3,603	Oct. 23	25	294
"Roman Art Colors"	F. R. Evans	3,102	Mar. 27	23	1126
"Root and Herb Remedy"	C. A. Thomas	3,600	Oct. 16	25	196
"Ror-To-Pi-Co-Inc," (for a Medicine)	C. E. Lloyd	3,208	May 15	23	1836
"Rosendale Hydraulic Cement"	New York and Rosendale Cement Company.	3,512	Sept. 11	24	998
"Rowley's Rough on Rheumatism"	R. E. Rowley	3,628	Oct. 23	25	294
"Rye and Chamomile" (for a Medicinal Preparation)	Cook & Bernheimer	3,604	Oct. 23	25	294
"Rye and Limo"	Cook & Bernheimer	3,058	Mar. 13	23	942
"Rye and Wheat"	Cook & Bernheimer	3,065	Mar. 13	23	942



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"Rye, Chamomile and Rock" (for a Medicinal Preparation)	Cook & Bernheimer	3,606	Oct. 23	25	294
"Rye, Lime and Wheat"	Cook & Bernheimer	3,059	Mar. 13	23	942
"Rye, Rock and Chamomile" (for a Medicinal Preparation)	Cook & Bernheimer	3,605	Oct. 23	25	294
"Rye, Wheat and Lime"	Cook & Bernheimer	3,064	Mar. 13	23	942
"S. H. Sublett's Laundry and Toilet Soap"	S. H. Sublett.	3,168	Apr. 24	23	1532
"Sachs, Pruden & Co.'s Famous Ginger Ale"	Sachs, Pruden & Co.	3,022	Feb. 27	23	744
"Safe Antidote for Intoxication"	F. M. Welles	3,762	Dec. 11	25	984
"Saint Anne's Cough and Consumption Cure"	Brothers McCulloch	3,773	Dec. 18	25	1082
"Säkerhets-Tandstickor." (for Matches)	A. W. Winckler	3,346	July 3	24	2
"Salvation Oil" (for Liniment)	A. C. Meyer	3,229	May 22	23	1930
"Samostz's Hypnotique, The Great Texas Cough Remedy"	O. Samostz.	3,141	Apr. 10	23	1340
"Sanative Salve"	Campbell & Co.	3,252	June 5	23	2124
"Sarsaparillian Hygienic Wine"	B. F. Raymond	3,020	Feb. 27	23	744
"Sarsaparillian Hygienic Wine Puzzle"	B. F. Raymond	3,663	Nov. 6	25	506
"Satin Gloss," (for Lamp Black)	L. Martin & Co.	3,363	July 10	24	104
"Schroeder's Corn Solvent"	F. L. Hooper & Co.	3,226	May 22	23	1930
"Scott's Asthma and Lung Cure"	A. J. Scott	3,241	May 29	23	2036
"Scott's Egyptian Cream" (for a toilet preparation)	M. A. Scott	3,547	Sept. 25	24	1180
"Scratch Ointment"	J. Shorten, Jr.	3,382	July 17	24	208
"Seal of Kentucky," (For Whisky)	F. T. Kuehne	2,934	Jan. 30	23	348
"Seal of Virginia" (for Tobacco and Cigars)	H. Wilkens & Co.	3,722	Nov. 27	25	790
"Select" (For Beer)	P. Best Brewing Company.	3,079	Mar. 13	23	942
"Self-Fastening" (for Tags)	G. N. Bucks	3,765	Dec. 18	25	1082
"Sentence-Builder or Dissected Cards"	J. R. Webb	3,699	Nov. 20	25	702
"Separable Buttons and Studs"	J. E. Lindaner	3,641	Oct. 30	25	988
"Seth's Pile Cure"	C. Spalding	3,369	July 10	24	104
"Shoe Button"	M. M. Rhodes & Sons	3,626	Oct. 23	25	294
"Shoemakers' and Tanners' Friendly Dressing and Blacking."	M. M. Rhodes & Sons	3,627	Oct. 23	25	294
	E. J. Moore	3,719	Nov. 27	25	790
"Sibley's Improved" (for Anchor Steam Boiler Compound)	C. M. Sibley	3,582	Oct. 9	25	98
"Sicilian Balsam Liniment"	J. Scaglione & Co.	3,240	May 29	23	2036
"Sign Painters" (for Lamp Black)	L. Martin & Co.	3,364	July 10	24	104
"Signal Service Boot"	Stevenson & Slingluff	3,196	May 8	23	1736
"Silver Dollar" (for Tobacco)	Wellman & Dwire Tobacco Company.	3,517	Sept. 11	24	998
"Silver King" (for a preparation for Polishing Metals)	G. Kraft, E. B. Jones, and H. Egerton.	3,733	Dec. 4	25	886
"Simpson's Uterine Suppositories"	W. T. Ross	3,436	Aug. 14	24	606
"Smith Martin Centrifugal." (for Flour Bolting Machines)	G. T. Smith Middlings Purifier Company.	3,214	May 15	23	1836
"Smith's Hair Beautifier"	M. H. Smith	3,129	Apr. 10	23	1340
"Snag" (For Cigar Boxes)	A. J. Pierce	2,940	Jan. 30	23	348
"Solera Whiskies"	Luyties Brothers.	3,524	Sept. 18	24	1094
"Solution Ferrous Malate"	American Pharmaceutical Manufacturing Company.	2,938	Jan. 30	23	348
"Sour Mash Toddy," (for Spirituous Liquors)	H. R. Gogreve	2,922	Jan. 16	23	196
"Special Absorbent Toweling"	G. S. Brown	2,919	Jan. 16	23	196
"Speer Brand Tomato"	Marshall Canning Company	3,393	July 24	24	306
"Speicher's Dandruff Cure"	Speicher Dandruff Cure Co.	3,777	Dec. 18	25	1082
"Spread Eagle," (for Retail Clothing)	Wemple & Co.	3,219	May 15	23	1836
"St. Bernard," (for Vegetable Pills)	P. Neustaedter & Co.	2,924	Jan. 16	23	196
"St. Jacob's Bitters"	J. Falke	3,282	June 12	23	2242
"St. Jacobs Pills"	P. Warren	3,110	Mar. 27	23	1126
"St. Jacobs Tonic"	St. Jacobs Bitters Company	3,404	July 31	24	394
"St. Patrick's Pills"	Chamberlain & Co.	3,116	Apr. 10	23	1340
"Stanard's Eagle Steam Extra Roller Process"	E. O. Stanard & Co.	2,915	Jan. 16	23	196
"Stanard's Roller Process Royal Patent"	E. O. Stanard & Co.	2,916	Jan. 16	23	196
"Standard Java," (for Cigars)	Jacoby & Fromer	3,659	Nov. 6	25	506
"Stay's Rheumatic Liniment"	W. H. Stay	3,353	July 17	24	208
"Steinau's Asthma Cure"	J. Steinau	3,049	Mar. 6	23	834
"Sterling" (for Flour)	Minor & Brown	3,594	Oct. 16	25	196
"Sterrett's Infallible Butternut Pills, Cathartic and Tonic"	J. Matthias and A. Sterrett.	3,643	Oct. 30	25	998
"Stinard's Original Chocolate Cacaoanut Tea Rolls"	W. H. Stinard	3,246	May 29	23	2036
"Sublime" (for Ribbons)	Kohn, Adler & Co.	3,753	Dec. 11	25	984
"Sun Flower" (for Baking Powder)	Fahnestock Baking Powder Company.	3,030	Mar. 6	23	834
"Sunsmile" (For a Medicinal Preparation)	Cook & Bernheimer	3,090	Mar. 20	23	1036
"Superior French Furniture Polish"	E. P. and F. C. Whitcomb.	3,555	Sept. 25	24	1180
"Sussex" (for Table Sauce)	F. M. Whiteman.	3,386	July 17	24	208
"Sutherland's Rheumatine"	Rheumatine Manufacturing Company.	3,156	Apr. 17	23	1450
"Swedish Corn Remover"	M. Lindblad	2,926	Jan. 16	23	196
"Sweetheart's Best Borax Soap"	Sweetheart Soap Co.	3,648	Oct. 30	25	398
"Sweetwater Valley Roller Process" (for Flour Sacks)	Sweetwater Mill Co.	3,549	Sept. 25	24	1180
"Swift's Specific"	Swift Specific Company	3,142	Apr. 10	23	1340
"Swiss Balsam"	G. Holdstein	3,465	Aug. 21	24	708
"Swiss Infallible Tetter Cure"	J. N. Portman & Co.	3,720	Nov. 27	25	790
"Syrups Malti Compositus" (for a Medical Preparation)	R. Fingerhut.	3,374	July 17	24	208
"T. E. Richey's Anti-Malarial Pills"	T. E. Richey	3,210	May 15	23	1836
"Tantalus" (for Cigars)	Sackett, Wilhelms & Betzig	3,788	Dec. 25	25	1194
"Tarine" (for Pads for Exterminating Insects)	G. W. E. Manahan	3,209	May 15	23	1836
"Tarine" (for Toilet Paper)	M. E. Manahan	3,544	Sept. 25	24	1180
"Taylor's Sucker State Liniment"	W. B. Taylor, Sr.	3,198	May 8	23	1736
"Tenney's Compound Vegetable Cough Syrup"	F. H. Tenney	3,683	Nov. 13	25	604
"Texas Fire Weed Ague & Neuralgia Pills"	A. Gorton	2,990	Feb. 20	23	634
"The A. B. C. of the Prudent Housewife." (for Soap)	Gross Bros.	3,692	Nov. 20	25	702
"The American" (For Compressed Yeast)	American Compressed Yeast Company.	2,906	Jan. 9	23	96
"The American Wonder—America's Tree of Life and Knowledge" (for a Medicine.)	L. B. Greenslade	3,506	Sept. 11	24	998
"The Australian (Eucalyptus Globulus) Anti-Periodic or Fever & Ague Tonic."	F. M. McRae	3,126	Apr. 10	23	1340
"The Bell Ticket" (for Cotton Fabrics)	Grinnell Manufacturing Corporation.	3,486	Sept. 4	24	904

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Title.	Name.	No.	Date.	Official Gazette.	
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"The Best Matches".....	Utica Match Company.....	3,649	Oct. 30	25	398
"The Black Ground, Rock Candy, Label".....	J. H. Barker & Co.....	3,427	Aug. 14	24	606
"The Blue Seal Label of Philadelphia," (for Cigars)	F. Turner.....	3,466	Aug. 21	24	708
"The Boss" (For Wheelbarrows)	Whitney & Co.....	2,964	Feb. 6	23	440
"The Chief" (for Cigars).....	H. Coan.....	3,101	Mar. 27	23	1126
"The Correct Invoice Label".....	E. S. Widup.....	3,201	May 8	23	1736
"The Crown of all" (for Soap).....	J. Seibert.....	3,738	Dec. 4	25	886
"The Dude's Choice Perfumes".....	L. C. Paul.....	3,515	Sept. 11	24	998
"The Duffers," (for Cigars).....	Jacoby & Fromer.....	3,657	Nov. 6	25	506
"The Electric Corn Cure".....	J. C. Boullée.....	3,311	June 26	23	2416
"The Eclegm Consumption Cure".....	C. Piers.....	3,320	June 26	23	2416
"The Eureka Pile Ointment".....	M. S. Corey.....	3,575	Oct. 9	25	98
"The Family Physician" (for a Medical Compound)	J. T. Houchens.....	3,619	Oct. 23	25	294
"The Gay Line of Information," ("For Packages of Food")	D. Gay.....	2,956	Feb. 6	23	440
"The Ladies' Drops," (for a Medical Compound)	H. Schroeder.....	3,212	May 15	23	1836
"The Golden Drops of Borneo," (For Chronic Coughs and Consumption.)	T. Chagnon & Co.....	2,898	Jan. 9	23	96
"The Grand," (for Cigars).....	Jacoby & Fromer.....	3,660	Nov. 6	25	506
"The Great American Compounded Oil of Gaultheria" (for a Medical Compound.)	E. H. Bell.....	3,764	Dec. 18	25	1082
"The Great Five" (for Cigars).....	Rankin & Sherrick.....	3,647	Oct. 30	25	398
"The Grinnell Ticket" (for Cotton Fabrics)	Grinnell Manufacturing Corporation.....	3,485	Sept. 4	24	904
"The Ladies' Friend" (for a Medical Compound)	E. E. Brinkman.....	3,295	June 19	23	2330
"The Life of Leather," (for a Preparation for Preserving Leather.)	J. Sankey.....	3,666	Nov. 6	25	506
"The Light of the World" (for Patterns for a Picture).....	G. D. Nichols.....	3,409	July 31	24	394
"The Lily on the Hudson" (for Perfumery).....	M. Michaelis & Son.....	3,433	Aug. 14	24	606
"The Lion Brand" (for Evaporated Milk)	Ahlstrom & Thomson.....	3,136	Apr. 10	23	1340
"The Little Sampson," (for a Medicine)	J. L. Basford.....	3,467	Aug. 28	24	802
"The Mascot Tobacco Cigarette".....	Pinski Brothers.....	3,128	Apr. 10	23	1340
"The Merchant's Stock Label," (For Woven Fibrous Goods)	G. A. Curtice.....	2,900	Jan. 9	23	96
"The New Board of Trade, Chicago" (for Cigars)	Tallman & Sanborn.....	3,550	Sept. 25	24	1180
"The New Chicago Board of Trade" (for Cigars)	I. Goldsmith & Bro.....	3,562	Oct. 2	25	2
"The New P. O. D." (for Cigars)	C. Abner.....	3,112	Apr. 10	23	1340
"The North Western Traveling Men's Association" (for Cigars.)	Weaver Bros.....	3,371	July 10	24	104
"The Old English Veterinary Medicine".....	A. J. Kelly.....	3,640	Oct. 30	25	398
"The only Durable Wall Finish Alabastine".....	Alabastine Company.....	2,909	Jan. 16	23	196
"The Oriental Coffee".....	Great Atlantic and Pacific Tea Company.....	3,439	Aug. 14	24	606
"The Oyster Shucker's Friend" (for a Medicine)	Schultze & Bro.....	3,776	Dec. 18	25	1082
"The Palace," (for Cigars)	C. F. Gall.....	3,710	Nov. 27	25	790
"The Peleg White Proprietary Company, New York, U. S." (for Plasters.)	P. White Proprietary Company.....	3,646	Oct. 30	25	398
"The Pivot Corset".....	C. N. Chadwick.....	3,327	July 3	24	2
"The Public Benefactor," (for Whisky)	H. Snyder.....	3,760	Dec. 11	25	984
"The Rising Sun Shoe Blacking".....	Oriental Manufacturing Company.....	3,492	Sept. 4	24	904
"The Scienco Carpet Sweeper".....	G. W. Zeigler.....	3,464	Aug. 21	24	708
"The Senator" (for Cigars).....	F. Glahn.....	3,138	Apr. 10	23	1340
"The Sentinel" (for Plug Tobacco)	J. H. Harris' Sons.....	3,617	Oct. 23	25	294
"The Seven Long-Haired Sutherland Sisters' Hair Restorer"	H. Bailey.....	3,184	May 8	23	1736
"The Warren Cigar".....	G. T. Warren.....	3,052	Mar. 6	23	834
"The Washingtons".....	Rankin & Sherrick.....	3,758	Dec. 11	25	984
"The When Cigar".....	A. E. Rauch.....	3,340	July 3	24	2
"The Wonderful Creole Blood Purifier," (For Medicine)	D. C. Oliver.....	2,936	Jan. 30	23	348
"The World Imperial Catarrh Cream".....	W. H. Ross.....	3,096	Mar. 20	23	1036
"The World Imperial Throat Tonic".....	W. H. Ross.....	3,233	May 23	23	1930
"Theophile Roederer & Co. Extra Dry" (for Champagne-Wine.)	T. Roederer & Co.....	3,478	Aug. 28	24	802
"Thin Mi-Concave Watch Glasses".....	J. H. Purdy.....	3,702	Nov. 20	25	702
"Thistle" (for Liniment)	J. Mitchell.....	3,379	July 17	24	208
"Tioga" (for Silks and Silk Ribbons)	W. Itschner & Co.....	3,501	Sept. 4	24	904
"Titsworth's Sure Cure for Malaria".....	Vail Brothers.....	3,218	May 15	23	1236
"Tokalon" (for a Hair Restorative)	R. B. Robison.....	3,535	Sept. 18	24	1034
"Tonawanda Mills" (For Piece Dry Goods)	Emlen & Cope.....	3,029	Mar. 6	23	834
"Tooker's Castilian Laxative".....	W. W. Tooker and B. F. Huntting.....	3,026	Feb. 27	23	744
"Toothache and Neuralgic Paste or Mass".....	W. J. Mandeville.....	2,976	Feb. 13	23	544
"Toujours" (for Manufactured Tobacco)	Thomas & Bro.....	3,551	Sept. 25	24	1180
"Triangle Brand," (for Extracts and Essences)	G. B. Darley.....	3,448	Aug. 21	24	708
"Triumph Brand" (for Canned Goods)	G. Herold.....	3,351	July 10	24	104
"Triumph Pills".....	R. B. Robison.....	3,546	Sept. 25	24	1180
"Try Angle Cigar".....	C. M. Angle.....	3,556	Oct. 2	25	2
"Try Summerford's Kornease".....	L. Stout.....	2,894	Jan. 2	23	2
"Turkish Liniment".....	E. S. Lyndon.....	3,715	Nov. 27	25	790
"Turkish Tobacco & Cigarette Manufactory, Monopole"	J. von Huppmann.....	3,075	Mar. 13	23	942
"Two Kings," (for Tobacco)	Snow, Ingham & Co.....	2,890	Jan. 2	23	2
"Two Sours" (for Cigars).....	Rankin & Sherrick.....	3,271	June 5	23	2124
"Uncle Josh's Rheumatic Cure".....	M. L. Eustis.....	2,929	Jan. 23	23	274
"Uncle Sam's Nerve and Bone Liniment".....	Emmert Proprietary Company.....	3,416	Aug. 7	24	504
"Union Line" (for Cigars)	Hirschhorn & Bendheim.....	3,352	July 10	24	104
"Union Made Package," (for use on Barrels, Kegs & all kinds of Coopersage.)	Cooper's Local Assembly, No. 1742, Knights of Labor.....	2,920	Jan. 16	23	196
"Union Tubing".....	Union Tubing Company.....	3,082	Mar. 13	23	942
"Union Veteran Corps Insignia".....	Union Veteran Corps.....	3,474	Aug. 28	24	802
"Unxld," (For Prepared Flour)	D. Jewell & Son.....	2,902	Jan. 9	23	96
"Urban's Best" (for Flour)	G. Urban & Co.....	3,497	Sept. 4	24	904
"Urban's White Moss Rose" (for Flour)	G. Urban & Co.....	3,496	Sept. 4	24	904
"Vail's Extracts".....	I. T. Kellogg.....	2,957	Feb. 6	23	440
"Valentine Hassmer's Lung & Cough Syrup".....	V. Hassmer.....	2,992	Feb. 20	23	634
"Van's Magic Oil" (for a Medicine)	N. G. Vanderlinde.....	3,133	Apr. 10	23	1340
"Vegetable & Mineral Compound," (For Burning Fluid)	H. P. Ellis.....	2,953	Feb. 6	23	440
"Veritas Bordeaux," (for Wines)	Luytens Brothers.....	3,455	Aug. 21	24	708
"Victor Ointment".....	Ausman & Witherstine.....	3,426	Aug. 14	24	606
"Victor Syrup," (for a Medical Remedy)	Ausman & Witherstine.....	3,425	Aug. 14	24	606
"Vienna Baking Powder".....	W. L. Pearson.....	3,645	Oct. 30	25	398



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"View of our Vineyard" (for Wine Vinegar) .....	Pacific Vinegar Works.....	3,625	Oct. 23	25	294
"Vigoo" (for a Hair Tonic) .....	F. H. Edmunds.....	3,587	Oct. 16	25	196
"Vins Fins de Bordeaux" (for Wines) .....	Luyties Brothers.....	3,454	Aug. 21	24	708
"Vins Fins de Bourgogne" (for Wines) .....	Luyties Brothers.....	3,523	Sept. 13	24	1094
"Virgil," (for Cigars) .....	V. S. Wright.....	3,202	May 8	23	1736
"Vitaline" (for a medicine) .....	H. J. Whittier.....	3,135	Apr. 10	23	1340
"Von Tagans Alaxino The Great German Remedy for the Liver, Kidneys, Stomach, Blood and Heart Affections." .....	Wooster, Adams & Co.....	3,005	Feb. 20	23	634
"W. A. Allen's Improved Bundle Kindling Wood" .....	W. A. Allen.....	3,745	Dec. 11	25	984
"W. A. Allen's Improved Bundle Kindling Wood" .....	W. A. Allen.....	3,746	Dec. 11	25	984
"Ware's Common Sense Suspensory Bandage" .....	C. F. Ware.....	3,441	Aug. 14	24	606
"Water-Proof Oil Blacking" .....	G. M. Hyde.....	3,092	Mar. 20	23	1036
"Waterproof Drawing Ink" .....	C. M. Higgins.....	3,693	Nov. 20	25	702
"Waterproof Preservative Blacking" .....	J. A. and L. N. Van Keuren.....	3,083	Mar. 13	23	942
"Watt's Peptonized Soda Mint Pellets" .....	H. C. Watt.....	3,568	Oct. 2	25	2
"Wear Resisters" (for Boots & Shoes) .....	J. B. Lewis.....	3,377	July 17	24	208
"Weaver's Pride" (for Carpet Warp) .....	Smith & De Witt.....	3,583	Oct. 9	25	98
"Wellington Crystal Polish" .....	H. A. Page.....	3,154	Apr. 17	23	1450
"Wellington Mills Standard Flexible Cabinet Glass Paper" .....	H. A. Page.....	3,152	Apr. 17	23	1450
"Wellington Mills Standard Flexible Cabinet Glass Paper" .....	H. A. Page.....	3,153	Apr. 17	23	1450
"West Indian Copying Paper" .....	H. Hafner.....	3,190	May 8	23	1736
"Western Union" (for Cigars) .....	G. Fuchs.....	3,330	July 3	24	2
"Wheat and Lime" .....	Cook & Bernheimer.....	3,063	Mar. 13	23	942
"Wheat and Rye" .....	Cook & Bernheimer.....	3,067	Mar. 13	23	942
"Wheat, Beef and Iron" .....	C. O. Rano.....	2,903	Jan. 9	23	96
"Wheat, Lime and Rye" .....	Cook & Bernheimer.....	3,068	Mar. 13	23	942
"Wheat, Rye and Lime" .....	Cook & Bernheimer.....	3,060	Mar. 13	23	942
"Wheatino" (for a Medicine) .....	Dowie & Moise.....	3,328	July 3	24	2
"Wheeler's Pulmonary Balsam" .....	Webster & Churchill.....	3,247	May 29	23	2036
"Wheeler's Sarsaparilla" .....	Webster & Churchill.....	3,248	May 29	23	2036
"Whisky and Beef," (Rye Whisky and Beef Broth) .....	C. O. Rano.....	2,948	Jan. 30	23	348
"Whist Cards," (for Playing Cards) .....	Fireside Card Company.....	2,887	Jan. 2	23	2
"White O. N. T." (For Thread) .....	Clark Thread Company.....	2,952	Feb. 6	23	440
"White Crane," (for Flour) .....	Huber & Wack Milling and Live Stock Company.....	3,468	Aug. 28	24	802
"White Rose Brand," (for Lard) .....	J. Dold & Son.....	3,145	Apr. 17	23	1450
"White Swan" (for Flour) .....	Meyer & Bulte.....	3,624	Oct. 23	25	294
"White Swan" (for Flour) .....	Minor & Brown.....	3,593	Oct. 16	25	196
"Whiting's Magic" (for Marking Ink) .....	F. A. Whiting.....	3,631	Oct. 23	25	294
"Whiting's Process Drawing Ink" .....	F. A. Whiting.....	3,700	Nov. 20	25	702
"William Tucks Anti Costive Pills" .....	W. H. Tuck.....	3,778	Dec. 18	25	1082
"Wilson's Cough Annihilator" .....	F. H. Wilson.....	3,502	Sept. 4	24	904
"Wine" .....	H. M. Upham.....	2,944	Jan. 30	23	348
"World's Shoe House," (for Boots and Shoes) .....	W. G. Hoover.....	3,283	June 12	23	2242
"Writing Paper" .....	H. W. Southworth.....	3,739	Dec. 4	25	886
"Xanthine," (for Hair Restorative) .....	E. F. Hunt and S. L. Pellet.....	3,785	Dec. 25	25	1194
"Yates's Rocky Mountain Vegetable Compound" .....	O. Yates and C. Sabershausen.....	3,689	Nov. 13	25	604
"Yo Olden Time Coffee" .....	J. W. Hounston & Co.....	3,620	Oct. 23	25	294
"Yo Philadelphia Club Whisky" .....	Nathan Brothers.....	3,767	Dec. 25	25	1194
"Yerba-Santa" (for a Medicine) .....	Farrington & Co.....	3,399	July 31	24	394
"Young's German Botanic Bitters" .....	F. H. Young & Co.....	3,463	Aug. 21	24	708
"Zingari, The Gypsy Queen's Secret" (for Ointment) .....	E. E. Murray & Co.....	3,477	Aug. 28	24	802

## DISCLAIMERS.

Invention.	Patentee.	No. of patent.	Date of patent.	Disclaimer filed.	Official Gazette.	
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Air-brake. Locomotive .....	George Westinghouse, Jr.....	144,005	Oct. 28, 1873	Feb. 3, 1883	23	544
Boot or shoe sole .....	John D. Stoddard.....	252,152	Jan. 10, 1882	May 4, 1883	23	1836
Bottle-stopper .....	Charles G. Hutchinson. (Reissue).....	8,755	June 17, 1879	June 18, 1883	23	2416
Car-spring .....	Albert Hebbard. (Reissue).....	4,670	Dec. 12, 1871	Mar. 9, 1883	23	1036
Filtering saccharine solutions, &c. ....	Paul Casamajor.....	270,634	Jan. 16, 1883	Dec. 7, 1883	25	1082
Glycerine from fatty-matter. Extracting .....	Victor Litzelmann.....	267,753	Nov. 21, 1882	Dec. 26, 1882	23	2
Hat .....	George Mallory.....	74,392	Feb. 11, 1868	Oct. 3, 1883	25	98
Hod-elevator .....	Jesse Powers. (Reissue).....	10,052	Mar. 7, 1882	Oct. 27, 1883	25	586
Lamp. Electric .....	Charles F. Brush. (Reissue).....	8,713	May 20, 1879	Apr. 6, 1883	23	1450
Screw-conveyer .....	Townner K. Webster and J. Chivill.....	276,103	Apr. 17, 1883	June 13, 1883	23	2330
Screw. Drive .....	David F. Fetter. (Reissue).....	8,121	Mar. 12, 1878	Apr. 6, 1883	23	1450
Shade-pull .....	Charles F. Pease.....	280,507	July 3, 1883	July 14, 1883	24	306
Shoe .....	George H. Bass.....	252,715	Jan. 24, 1882	Dec. 12, 1883	25	1082
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Soldering-iron .....	Jabez A. Bostwick. (Reissue).....	8,466	Oct. 29, 1878	Sept. 25, 1883	25	2
Vault-cover .....	Theodore Sharts.....	138,204	Apr. 22, 1873	Apr. 17, 1883	23	1532
Wagon for unloading coal .....	John H. Wood. (Reissue).....	9,368	Aug. 31, 1880	Sept. 14, 1883	24	1180
Water-closet of railways .....	Alonzo Bell.....	175,909	Apr. 11, 1876	June 14, 1883	23	2330











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